UNITED STATES MARINE CORPS
Marine Corps Base, Camp Lejeune

Range and Training Regulations
(BO 3570.1C)

Standing Operating Procedures for Range Control

Range Control Division
Base S-3
Marine Corps Base
PSC Box 20004
Camp Lejeune, NC 28542-0004
BASE ORDER 3570.1C

From: Commanding Officer
To: Distribution List

Subj: STANDING OPERATING PROCEDURES FOR RANGE CONTROL OPERATIONS (SHORT TITLE: RANGE CONTROL SOP)

Ref: (a) MCO 3570.1B/DA PAM 385-63

Encl: (1) LOCATOR SHEET

1. Situation. To publish a directive covering the requirements, instructions and procedures governing the use of all training facilities, live fire ranges, airspace and ground maneuver areas and water areas within and adjacent to Marine Corps Base (MCB), Camp Lejeune (CamLej) under the jurisdiction of the Commanding Officer Marine Corps Base. All facilities referenced in this Standard Operating Procedures are associated directly with live fire ranges, training facilities and training areas and do not include academic or applied instruction facilities within established cantonment areas.

2. Cancellation. BO P3570.1B

3. Mission

   a. Range Control provides operationally ready training ranges, facilities, and maneuver areas to operational forces, formal schools of Training and Education Command, and other DOD, Federal, State, and local agencies while ensuring safe, efficient use, and management of all training facilities aboard MCB Camp Lejeune.

   b. Summary of Revision. This manual contains substantial revisions and should be completely reviewed by all units/commands assigned to Camp Lejeune.

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited
4. Execution

a. Commander’s Intent. The intent of the Range Control SOP is to provide a document for all using units/commands with information and operating procedures for all training facilities, live fire ranges, airspace, ground maneuver areas, and water areas to be used in a safe, efficient manner, preserving life, equipment, and natural resources aboard MCB Camp Lejeune, NC.

b. Subordinate Element Missions. Organizational unit Commanders training aboard MCB Camp Lejeune are to be guided by reference (a) and this manual. All units are encouraged to submit recommendations concerning training improvements or changes to the Commanding Officer, Base S-3 (Operations and Training (O&T)) through the O&T Web site, by using ICE, or through written communication. Occasionally or as necessary, Range Control will release Range Advisory Messages to clarify or update this SOP.

c. Coordinating Instructions

(1) In the event the instructions contained in this document conflict with those issued by higher authority; higher authority shall take precedence. The Commanding Officer will be notified of such conflicts; questions of interpretation will be referred to the Director, Range Control for resolution.

(2) Punitive Effect

a. Violations of this manual may be punishable in accordance with the Uniform Code of Military Justice for all military personnel and may be the basis for appropriate disciplinary actions with respect to government civilian employees. All other civilian violations could be punishable by the appropriate law enforcement agencies.

b. This Order prohibits the use of alcohol and controlled substances in the training complex, and prohibits any individual under the influence of alcohol or controlled substances entrance into the training complex. Consumption of alcohol during special military functions in the field like Mess and Warrior Nights will require a Special Range Request to Commanding Officer, MCB Camp Lejeune (Base S-3) at least 30 working days in advance of the event. Requests for underage drinking at these events will be submitted to MCB Camp Lejeune Adjutant. Amplifying information and guidance is available in MARADMIN 266/07.

c. This Order ensures that ammunition and explosives not expended during training are returned to the ammunitions supply
point (ASP), in the original packaging, when firing is completed or as directed by local policy.

(3) This Order ensures that an aggressive education program on the dangers of dud ammunition and other unexploded ordnance (UXO) items is implemented.

5. Administration and Logistics

a. This SOP has been reviewed, coordinated, and approved by the Commanding Generals of II Marine Expeditionary Force (II MEF), 2d Marine Division (2D MarDiv), 2d Marine Aircraft Wing (2d MAW), 2d Marine Logistics Group (2d MLG), and the Marine Corps Forces Special Operations Command (MARSOC), as well as and the Commanding Officers of the USCG Joint Maritime Training Center (JMTC), MCAS New River (MCAS NR), School of Infantry (East) (SOI-E), Marine Corps Engineer School (MCES) and Marine Corps Combat Service Support School (MCCSSS). It has also been coordinated with the Range and Training Area Management Branch (RTAM), Training and Education Command (T&E), Quantico, VA and with CG Marine Corps Installations East (MCIEAST).

b. Information contained in this Base Order may be disclosed on an oral, visual, or documentary basis, as approved by the MCIEAST/MC Base Designated Disclosure Authority (DDA). Disclosure must be in accordance with the policies, and procedures of current regulations, SECNAVINST 5510.34A, the Navy Foreign Disclosure Manual, NDP-1, and MCO 5510.20A. MCIEAST/MC Base is the delegated authority to approve or deny foreign visits by foreign personnel to U.S. Government facilities in accordance with the policies of this letter and the Navy Foreign Disclosure Manual (including Part II, Chapter 8)

6. Command and Signal

a. Command. This Order is applicable to all commands, organizations, units and activities authorized to use the training facilities, live fire ranges, airspace, and ground maneuver training areas and water areas controlled by the Commanding Officer, MCB, Camp Lejeune.

b. Signal. This Order is effective the date signed.

D. Q. LECCE

DISTRIBUTION: A-1 plus
LOCATOR SHEET

Subj:  STANDING OPERATING PROCEDURES FOR RANGE CONTROL OPERATIONS (SHORT TITLE: RANGE CONTROL SOP)

Location:  _______________________________________________

(Indicate the location(s) of the copy(ies) of this Order.)
RECORD OF CHANGES

Log completed change action as indicated.

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Chapter 1

General Instructions

1. Purpose and Scope

   a. This Standing Operating Procedure (SOP) prescribes the regulations, general information and precautions to be taken in the firing of U.S. military, approved foreign and civilian issued weapons or, the use of live ammunition, simunitions, non-lethal weapons devices, energy producing weapons/equipment (LASERS), pyrotechnics, training devices and explosives; also the use of all live fire ranges, mortar positions, gun positions, training towers, training/maneuver areas, airspace, tactical and administrative landing and drop zones, water drop zones, waterways/water sectors, beaches, and other training facilities such as the Military Operations in Urban Terrain (MOUT) Complex, Combat Town, Mobile MOUT, Training Tanks/Pools, Modular Amphibious Egress Trainer (MAET), HMMWV Egress Assistance Trainer (HEAT). All facilities referenced in this SOP are associated directly with live fire ranges, training areas, and training facilities and do not include academic or applied instructions facilities located within the established cantonment areas of MC Base.

   b. The primary purpose of this manual/SOP is to maximize safe and realistic training opportunities and provide a source of general information to the using units and commands. Nothing contained in these regulations will be construed as permitting live fire, or other training activity that endangers life, property, and/or equipment.

   c. The safety regulations, as prescribed by this order and the current MCO 3570.1B and DA PAM 385-63 are applicable to firing ammunition for training and target practice. Where conflicts occur with instructions contained in Field and Technical Manuals, Marine Corps Manuals and unit standard operating procedures; the provisions of the current MCO 3570.1B/DA PAM 385-63 will take precedence.

2. Camp Lejeune Overview

   a. The mission of Marine Corps Base, Camp Lejeune (MCB, CamLej) is to provide training and logistic support for Active and Reserve Components and to provide mobilization and deployment support to these units during exercises and contingencies. Accomplishment of this mission requires
operation and maintenance of Base training and support facilities; provision of a wide range of municipal services to include security, housing, education, medical care and recreation for Marines, Sailors, retired service members, Civilian Marines, and family members who make up the Camp Lejeune military community; and the management and preservation of our natural resources and environmental integrity.

b. Camp Lejeune is the largest Marine Corps expeditionary training base on the East coast of the United States, housing approximately 47,000 Marines and Sailors serving in the major commands aboard the Base. Camp Lejeune geographically encompasses the onshore, near shore, and surf areas in and adjacent to the Atlantic Ocean, the New River, and the complex’s boundaries. The Range and Training Complex includes:

(1) 11 nm of oceanside coastline, including 2.4 nm of amphibious landing beach, 1.6 nm of recreational beach, 4 nm of buffer/impact area beach and 3 nm of special use area.

(2) 246 square miles of land area with over 98,000 acres of usable training area.

(3) 80 live fire ranges. This number is subject to change.

(4) A MOUT Facility with 33 Buildings, an Urban Training Facility (Mobile MOUT) with 69 buildings/structures and a Combat Town with 14 older buildings and 48 structures/containers.

(5) Shallow ocean areas (less than 100 fathoms) in Onslow Bay for amphibious training and riverine training areas in the New River and Atlantic Intracoastal Waterway (AIWW).

(6) 200 square miles of Special Use Airspace, restricted for military use from sea level to 17,999 feet.

(7) Three dugged impact areas that support munitions from 5.56 mm to 155mm delivered by direct fire, indirect fire, Fixed Wing Close Air Support (FWCAS), Rotary Wing Close Air Support (RW CAS) and Naval Gunfire.

(8) 48 Tactical Landing Zones, 12 Ground and 5 Water Drop Zones, 28 Gun Positions, 8 Mortar Positions and 8 Observation Posts.
(9) An LHD Training Site for helicopter and tilt rotor pilot training and an Air Field Seizure Facility, with a mock airport and 2 runways. Camp Lejeune also controls Marine Corps Outlying Field (MCOLF) Oak Grove with 3 additional runways.

c. The topography lacks hilly or mountainous terrain but the training area is densely vegetated with pine forest, heavy undergrowth, dotted pocosin swamps and wetlands. The vegetation, climate, growing season and high water table combine to present several unique training challenges.

d. The Eastern North Carolina Coastal area has a temperate climate with relatively mild winters, hot humid summers, and precipitation throughout the year. The average annual rainfall is over 50 inches, and snow, although rare, does fall occasionally on the area. Climate is influenced by the Atlantic Ocean and the Gulf Stream, as weather patterns and temperatures are slightly different from areas farther inland. The Base is occasionally affected by tropical storms and hurricanes during the period from June through November each year. The average annual temperature is near 62 °F with high summer temperatures near 90 °F and low winter temperatures near 45 °F. Humidity plays a major factor during the hot summer months with average summer temperatures increased by 5-10 °F. The weather is not suitable for flying on an average of 40 days per year due to ceiling and visibility issues.

e. Camp Lejeune has over 98,000 acres dedicated to maneuver, live-fire, amphibious, and tactical training. The following is a list and description of the range assets at Camp Lejeune:

(1) Training/Maneuver Areas. Camp Lejeune has 87 designated training/maneuver areas in and around the live-fire ranges and impact areas. Scheduling of some training areas can be affected by live-fire operations on the ranges. Training areas are designated alphabetically from “AA” to “SW”. 85 of the 87 training areas are designated as tactical maneuver areas; one area (EB) is designated separately for amphibious exercise support and beach training. Training area EC is the recreational portion of Onslow Beach and typically not scheduled for training. Camp Lejeune also controls MCOLF Oak Grove that includes 7 training areas (Oak Grove OLF, OA, OB, OC, OD, OE and OF), 3 runways, and 2 tactical LZs (Bat and Emu). MCOLF Oak Grove runways and TLZs are for rotary wing aircraft operations only, fixed wing operations are not authorized.
(2) Impact Areas. There are three main impact areas aboard Camp Lejeune: G-10, K-2, and N-1/BT-3.

(a) G-10 Impact Area Ranges. G-10, located east of the New River, supports fixed wing/rotary wing air-to-ground operations, helicopter gunnery exercises, 60mm/81mm/120mm mortar fires, field artillery indirect fires, naval gunfire, infantry weapons, and infantry rocket and missile live fire evolutions. Laser designators can be used within the G-10 Impact Area. Five ranges encircle the G-10 Impact Area: G-3, G-3A, G-6 Company Battle Course (CBC), G-10 Convoy Range (Site 3 and Site 4), G-19A, and G-19B. Each range can support multiple direct and indirect fire weapon systems. Ranges G-3, G-3 50 cal, and G-3 TOW are oriented to support infantry weapons training evolutions with all ordnance impacting in the G-10 Impact Area. The G-6 CBC is a company sized combined arms, live-fire and maneuver attack range. The G-10 Impact Area also includes the Urban Close Air Support Facility (UCAS) site.

(b) K-2 Impact Area Ranges. K-2, located on the western banks of the New River, supports infantry weapons training, mortar fires, field artillery indirect fires, and infantry rocket training. The K-2 Impact Area has 16 live-fire ranges (see Appendix A) oriented around its perimeter. The ranges can support multiple direct and indirect fire weapon systems. These ranges are oriented to support infantry weapon systems and infantry tactics. All ordnance expended at these ranges impact within the K-2 Impact Area. A very large range development plan was started in 2008 and is expected to be completed by the end of 2015 to enhance and replace many of the older K-2 ranges.

(c) N-1/BT-3. N-1/BT-3, located on the southeast corner of Camp Lejeune with a 168-degree direction of fire (seaward), is a live-fire range that can support air-to-ground weapons, ground-to-air Stinger and Avenger fires at E-1 Range, field artillery direct fires at G-7 Range, riverine training at H-1 Range, helicopter gunnery exercises, and machinegun familiarization training at G-5 Range. The H Range, (the Riverine Assault and Waterborne Gunnery Range), is located within N-1/BT-3’s boundaries. Additionally, the G-7 range, which supports field artillery direct fire and infantry weapons training evolutions, orients the fires of all weapon systems and ordnance to impact within the N-1/BT-3 Impact Area.

(3) Engineer Training Areas (ETAs). There are seven ETAs aboard Camp Lejeune: 1, 2, 3, 4, 5, 5A, and 7 (see
Appendix A for locations). The primary function of the ETAs is to provide operational engineering units and Marine Corps Engineer School with facilities to conduct engineer demolition training. Alternative uses of the ETAs are: as an infiltration course at ETA-1; a mechanized assault course and breaching operations range at ETA-2; execution of live-fire breaching exercises at ETA-4; a close quarters battle (CQB) area and MOUT breaching house at ETA-5A; TNT charge equivalency ranges between 15 and 50 lbs per shot are authorized, depending on the ETA and as delineated within the Camp Lejeune Range Regulations. Camp Lejeune also has two separate EOD ranges (EOD-1 and EOD-2) in addition to the ETAs. ETA-6 is not a live fire ETA and has been converted to a Combat Vehicle Operators Training Confidence Course. A very large Range Development Plan for a future engineer training complex that will replace ETA-1, ETA-3, ETA-4 and EOD 1 in the future.

(4) Military Operations in Urban Terrain (MOUT) Facilities and MOUT Assault Courses (MACs). The MOUT complex is located off Lyman Road in the Eastern part of MCB Camp Lejeune (see Appendix H). The MOUT Facility is a 31 building facility focused on training for combat in urban areas. Within the MOUT Facility training area, there are six live-fire assault courses, MAC 1-6, maintained for individual, fire team, and squad level urban training. These ranges provide the opportunity to shoot pistol, M-16, M4, and shotgun ammunition. MAC-1, the Urban Quick Kill Range, is used for basic room entry and clearing. MAC-2, the Search and Kill Range, is used for search and clearance operations. MAC-3, the Live Fire Grenade House, is for live fire room clearing in a SACON (Shock/Bullet absorbing concrete panels) structure. MAC-4, the Cover and Clear range, is primarily a fire team MOUT/urban battle drill facility. MAC-5, Dodge City, is the basic squad MOUT range. MAC 6 is the Enhanced Marksmanship Program range. The MAC-7 is an urban M-203 range. The new Urban Training Facility (Mobile MOUT), located nearby, has 71 buildings (including 5 live fire shoot houses) and is laid out to resemble a middle-eastern village that includes a market area, tunnels, walls, and courtyards, with a firm base and Vehicle Check Point (VCP) nearby. Combat Town, located in the center of MCB Camp Lejeune off Sneads Ferry Road, has 14 older wooden structures, 48 metal containers with compound walls/gates. A forward operating base (FOB) located at LZ Hawk, located just East of Combat Town, has a Vehicle Check Point (VCP)/Personnel Check Point (PCP) to support company size units working in or around Combat Town.
(5) Greater Sandy Run Area (GSRA) Ranges. The five GSRA ranges are located on the western side of Camp Lejeune (see Appendix G). These ranges primarily support Tank, Light Armored Vehicle (LAV), Amphibious Assault Vehicle (AAV), and Infantry platoon training. SR-6 is an automated Infantry Platoon Battle Course range, allowing live fire and maneuver to be combined. SR-7, SR-8, and SR-10 are automated Multi-purpose training ranges. SR-7 is utilized as the LAV/AAV Crew qualification range and LAV/AAV multipurpose mechanized assault range. SR-10 serves as the Tank Crew Qualification Range, supporting individual and tank platoon crew qualifications through Gunnery Table 12. SR-11 is the Baffled Pistol Range and supports individual pistol qualification. Also located within the GSRA is the Camp Davis Airfield Seizure Facility. This facility is comprised of five cinder block shell structures that serve as a mock tower, two mock hangars, a mock maintenance building, and a mock terminal. The facility also includes two A-4 aircraft to simulate ongoing airfield operations. SR-8 is a Multi-Purpose Machinegun (MPMG) Range that will support the M249, M240G/B and the M-2 50 Cal along with the presently issued sniper rifles (7.62mm and .50 cal). This range has 334 Stationary Infantry Targets (SITS) in 10 lanes along with 3 Moving Infantry Targets (MITS).

(6) Stone Bay Ranges. Stone Bay Ranges are located aboard MCB Camp Lejeune on the Western side of the New River off Highway 210. Stone Bay has three 50-target known distance rifle ranges, two pistol ranges and a 1000-yard (Hathcock) sniper range. Pistol and rifle qualification/re-qualification operations are conducted at the Stone Bay Ranges. Weapons Training Battalion (WTBn) maintains and operates these pistol and rifle ranges for annual marksmanship qualification training and familiarization firing. 8 additional ranges at Stone Bay are within the Special Operations Training Group (SOTG) compound, including Stone Bay Dodge City (Urban Sniper Range), 1 and 3 story shoot houses, breacher pit/facilities, climbing walls/towers and a multipurpose range (see Appendix A), that support MARSOC, MEU, and other MEF unit training requirements.

(7) Area F Ranges. There are 8 live-fire ranges and one fast-roping tower within the F Areas located in the Northeastern part of MCB Camp Lejeune. The live-fire ranges include ranges F-2, F-4, F-5, F-25T, F-6, F-11A, F-11B, and F-18/F-18 .50 cal. Ranges F-2 and F-4 are small arms live-fire ranges. Range F-5 is an automated range that allows live-fire and maneuver training. Range F-6 is a hand grenade range. Ranges F-11A serves as a M16A2/M4 “Zero” range and F-11B supports pistol
qualification range. Range F-18/F-18 .50 cal serves as a machinegun field firing range. Range F-17 is not for live fire training; it is a fast roping, climbing and rappelling training area, complete with tower.

(8) **Area D Ranges.** There are four live-fire ranges within the Area D Training Area: D-9, D-29A, D-29B, and D-30. Range D-9 is a Trap and Skeet range and is controlled by MCCS. Ranges D-29A, D-29B, and D-30 serve as pistol qualification and re-qualification ranges located along Julian C. Smith Road.

(9) **Area I Range.** Range I-1, located within the boundaries of the Courthouse Bay sub-area near the Sneads Ferry Gate off Highway 172, serves as a pistol qualification and re-qualification range.

(10) **Area L Range.** Range L-5 is an automated infantry fire team/squad small arms live-fire and maneuver range located within the Area L Training Area.

(11) **Observation Posts, Range Towers, and Observation towers.** There are 8 Observation Posts (OPs), 3 Range Towers, and 1 Forest fire/Observation Tower at Camp Lejeune (see Appendix I for locations). These OPs and towers are used for observation of live-fire and laser operations at each of the impact areas, amphibious operations on the beach area, live-fire and maneuver events at the GSRA and on the F-5, L-5, and Hathcock ranges.

(12) **Helicopter Landing Zones (HLZ).** Camp Lejeune has two types of HLZs. Tactical Landing Zones (TLZs) and Administrative Landing Zones (ALZs). There are 48 TLZs within Camp Lejeune’s boundaries (named after birds) and 28 numerically identified Administrative Landing Zones (ALZs) (see chapter 8 for locations). The TLZs shall be scheduled for external operations, heliborne operations, rappelling, fast rope, and Special Purpose Insertion Extraction (SPIE) rig training. Unscheduled helicopter operations may be made into TLZs after authorization is granted by BLACKBURN and ensuring that the TLZ is not occupied. Oak Grove has two (2) TLZs that can be used and scheduled as required (see chapter 8, for locations).

(13) **Drop Zones (DZ).** Drop Zones (DZs) are TLZs designated for parachute operations. Camp Lejeune has eleven DZs and five additional Water Drop Zones (WDZs). See chapter 8 for locations.
(14) Special Use Airspace (SUA). Camp Lejeune has 4 specific SUA segments designated for control and utilization. All restricted airspace is activated as needed in order to support safe range operations, as designated by Notices to Airmen (NOTAM) at least 48 hours in advance.

(a) R-5303 A/B/C: Surface to 17,999 ft.
(b) R-5304 A/B/C: Surface to 17,999 ft.
(c) R-5306E: Surface to 17,999 ft.
(d) R-5306D: Surface to 17,999 ft.
Figure 1-1.--Camp Lejeune Range Complex

(15) Targets. The numerous automated ranges aboard Camp Lejeune are equipped with the Remote Engagement Target System (RETS); F-5, K-402, K-408, K501, K503, L-5, MOUT Assault Course (MAC) 1 and 2, G-6 CBC (first objective only), SR-6, SR-7, SR-8, and SR-10 (see Appendix A for locations). These RETS ranges offer automated pop-up, stationary, and moving reactionary targets, that can used for infantry, armor, and anti-armor
training. The system offers computer-driven programmed tactical scenarios or can be operated in a manual mode, with group or individual targets raised on command. The Camp Lejeune system also provides small arms sound and muzzle flash simulators to enhance realism. The remaining target and target systems at Camp Lejeune consist of Primary Infantry Target (PIT) targets; (D-29A, D-30, D-29B, B-12, F-11B, I-1, and SR-11, see appendix A for locations), silhouette targets, and empty hulks of retired or captured equipment.

Figure 1-2.--Live Fire Ranges and Surface Danger Zones

3. Safety/Risk Management. Safety is the responsibility of every individual and all unit commanders at all times. Safety and operations must intertwine so that risk management and safety are a part of the planning and execution of all missions, exercises, live fire events and daily evolutions. The key to safe training is the understanding that each and every individual, regardless of rank, is a safety manager. Anyone can call “cease-fire” so that the activity in question may be halted until the unsafe condition has been corrected.
4. Deviations

   a. Requests for deviations from this SOP and the current MCO 3570.1B/DA PAM 385-63 may be granted based on critical mission requirements. Deviations must be approved/signed by the unit’s commander only and endorsed by an 06/Colonel within that units chain of command and the Commanding Officer of MCB Camp Lejeune. See the Range Control web page for some examples of already existing and approved deviations.

   b. Requests for deviations of MCO 3570.1B/DA PAM 385.63 and this SOP will be submitted via the chain of command to the Commanding Officer, MCB Camp Lejeune, (S-3), at least 30 working days in advance of the first day of scheduled training. Deviations will follow the format listed in MCO 3570.1B/DA PAM 385-63 and will be considered on a case-by-case basis. Unit requests for deviations of MCO 3570.1B require the signature of the Commanding Officer and the endorsement of Commanding Officers and the Commanding General in the unit’s chain of command to the Commanding Officer MC Base. Deviations must be renewed and updated annually by the using command.

   c. A completed, reviewed, and signed Operational Risk Management (ORM) Worksheets (see Appendix D) shall accompany all deviation requests. Each sheet must be signed.

   d. Requests for a waiver of Appendix A of this SOP will be considered a Special Range Request (SRR). Procedures for obtaining a SRR are discussed in Chapter 3 and Appendix J of this SOP.

5. Observation of, or Participation in Training by Military Dependents and Civilians

   a. Civilians are not authorized to be on or in any live fire range, training area, waterway, and all training facilities unless explicitly approved by the unit’s chain of command and MCB Range Control. Requests for military dependents or civilians to participate in, or observe training like a John/Jane Wayne Day on a live fire range, facility or training areas aboard MCB, Camp Lejeune shall be submitted as a SRR from the command (can be signed “By direction”) and endorsed via the chain of command to the Commanding Officer, MCB Camp Lejeune, (S-3) at least 30 working days in advance of the event (see Appendix J). The 30 working day requirement provides sufficient time to request and receive authorization from HQMC for dependents or civilians to take part in training evolutions if
required. CMC (PP&O) ALMAR 010-01 (DTG 141514Z Mar 01) applies. The waivers of liability should be kept on hand for at least 4 years due to possible claims against the U.S. Government. Additionally, require all waivers of liability forms be reviewed by the OSJA prior to use by any unit base on the event requiring a waiver of liability.

(1) Requests require the following information:

(a) Unit conducting event.

(b) Organization/background of civilian participants.

(c) Event description, including weapon system(s) and ammunition being fired or observed by the civilians.

(d) Date and time the event will take place.

(e) Location of the event (range, gun position, etc.)

(f) Purpose of the event, reason the civilian visitors are participating (i.e. John/Jane Wayne Day).

(g) Operational Risk Management Worksheets. Each sheet must reviewed and signed by the person who prepared it and signed by the person one level above who reviewed the ORM.

(2) Waiver of Liability. Civilian/Contractors participants must sign a waiver of liability before the event. A copy of the signed waiver of liability must be on site while training is being conducted and kept on file for a minimum of two years by the command/unit. A sample of a Waiver of Liability can be found at the end of this chapter.

b. Training authorized for observation/participation is limited and restricted. Civilians are not authorized to fire crew served weapons (i.e., M240G and M2 .50 cal machineguns and howitzers) or any dud-producing weapons or ammunition. Family members under the age of 18 years old on the date of the event are precluded from participating in any live fire, climbing, and rappelling events. A complete list of prohibited activities is listed in ALMAR 010/01. When incorporating civilians into training, Commanders must establish all safety control measures to ensure civilian activities are conducted safely.
c. Special Events (i.e., Capabilities Exercise (CAPEX)) and other events as directed by the Base Commanding Officer for observation by dependents/civilians will be coordinated by special bulletin/message from MCB S-3 Operations.

6. Quiet Hours. Quiet hours will be in effect from 0001-0600 Monday through Saturday and from 0001-1200 on all Sundays. Quiet hours restrict the firing of all artillery, naval gunfire, mortars, explosives/demolitions, grenade launchers, rockets, missiles, and any other large caliber weapon systems or as directed. In addition, SR-7 is not authorized to go “Hot” from 0001-1200 on all Sundays and must go “Cold” at 2359 each night with all weapon systems to include small arms. SR-10 is not authorized to go “Hot” from 0001-1200 on all Sundays with the tank main gun (120mm) and TOW Missiles but is authorized small arms. SR-6 is not authorized to go “Hot” with rockets (MK-153 Training Practice Ammunition) before 1200 on Sunday also. Demolition training will cease one hour prior to sunset unless approved by Range Control via official letter. Requests to fire restricted weapon systems during quiet hours must be endorsed by the unit’s chain of command and forwarded to the Commanding Officer, MCB, Camp Lejeune (S-3) via Director, Range Control Division for approval at least thirty (30) working days in advance. Requests for other specific quiet hours for change of command ceremonies, retirements, memorial service etc. are requested by the commander of the unit, endorsed by the unit’s chain of command, and forwarded to the Commanding Officer, MCB, Camp Lejeune (S-3, Base Operations). MCB S-3 will release a naval message stating the Quiet Hours to be observed and ranges/gun positions to be placed in a check fire for the time period of the special event.

7. Privately Owned Vehicles (POVs), Weapons, and Alcohol

a. POVs are prohibited on all live-fire ranges, artillery gun positions, all ETAs/EODs, mortar firing positions, landing zones, training areas, all MOUT training complexes/Forward Operating Bases (FOBs) and all tank trails/paved roads. Privately owned recreational vehicles, such as three and four wheeled all terrain vehicles (ATVs), dirt or trail bikes, mountain bikes, dune buggies, go-carts and any regular four-wheeled vehicle are not authorized within any range, training area, or other training facilities. BO 11017.1D authorizes use of four-wheel drive vehicles in the EB training area, when available for recreation and properly signed in the log, with a beach pass from the MCB Game Warden office. Range Control will issue/sign out POV passes to the owner of a POV only as required
on a case by case basis to support day to day activities on a limited time period issue for SNCO and above. E-5 and below must be escorted by a SNCO or above to sign out a Range Control POV pass. Civilian contractors must be escorted by the hosting unit to sign out the POV Pass.

b. Privately owned weapons are not authorized on any range except for designated recreational firing events. Privately owned weapons are not authorized in any training areas unless associated with a scheduled hunting event within that training area.

c. Alcohol is not authorized in any live fire range, training facility or training area. Consumption of alcohol during special military functions in the field like Mess and Warrior Nights will require a Special Range Request to Commanding Officer, MCB Camp Lejeune (Base S-3) at least 30 working days in advance of the event. Requests for underage drinking at these events will be submitted to MCB Camp Lejeune S-1/Adjutant. Amplifying information and guidance is available in MARADMIN 266/07.

8. Addresses/Phone Numbers/Websites. The following list provides the various means of contacting Range Control.

a. Mailing address:

   Commanding Officer
   Attn: Range Control Division (RCD) Bldg 54
   Marine Corps Base
   PSC Box 20004
   Camp Lejeune, NC 28542-0004

b. Plain language message address:

   CO MCB CAMP LEJEUNE NC S3 (AIG 13937)

c. E-Mail addresses:

   (1) Range Control Duty Officer
   blackburnduty@usmc.mil

   (2) Range Scheduling
   lejeunerangescheduling@usmc.mil
d. Web sites:

(1) Range Control Operations Web Site. You must add https://intranet.mcieast.usmc.mil to your Internet Explorer Trusted Sites. In Internet Explorer, go to the Menu Bar and select; Tools, Internet Options, Security Tab. Highlight Trusted Sites, click sites, type in the address https://intranet.mcieast.usmc.mil click add. Go to the http://www.lejeune.usmc.mil website. Click on “MCB Offices & Staff Section” in the left column, then select “Range Control.”

Complex address: (Both Lines).
https://lejeune.mcieast.usmc.mil/OPERATIONS%20AND%20TRAINING/RANGE%20MANGEMENT/RANGE%20CONTROL%20DIVISION/Pages/default.aspx

(2) Automated Heat Stress System (AHSS) Web Site:
http://clion.lejeune.usmc.mil

(3) Weather Buoy (Located in Onslow Bay):

e. Phone numbers (Comm area code 910/DSN prefix 751)

(1) Director, Range Control Division (RCD) 451-3932

(2) Range Control Officer (RCO) 451-1235

(3) RCD Management Support Technician 451-3733
RCD FAX 451-1593

(4) Range Control Operations Officer 451-1236

(5) Range Safety Specialist 451-1240

(6) Range Control Operations Chief 451-5803

(7) Range Control IT Specialist 451-2102

(8) Range Scheduling 451-3065/
3066/4478
Range Scheduling FAX 451-1544

(9) Range Control Duty Officer 451-3064/4449
(BLACKBURN) (Fire Desk Operator)
9. **Applicable Map Sheet**

   a. All Grid Coordinates listed in this SOP (except MCOLF Oak Grove) apply to the Camp Lejeune Military Installation Map, Edition 3-NGA, Series V742S, sheet Camp Lejeune MIM, NSN 7643014255064.

   b. Recommendations/changes to the Camp Lejeune Military Installation Map will be made to the Director, RCD.

   c. The Geographical Information System Office (GIS) is a very important asset available to trainers at all levels. Maps of all types and scales are available thru the Integrated Geographic Information Repository (IGIR). Everyone planning to train aboard MCB Camp Lejeune should access the IGIR website at: [https://gis.lejeune.usmc.mil/igir/default.asp](https://gis.lejeune.usmc.mil/igir/default.asp). The layers of data available in map format are extensive and include aerial photography. GIS products are For Official Use Only.
10. Waiver of Liability and Assumption of Risk Management

UNITED STATES MARINE CORPS

In consideration of the privilege of participating/observing a live-fire exercise at Camp Lejeune, North Carolina, and further recognizing the voluntary nature of my participation in this event, I, the undersigned person, intending to be legally bound, hereby promise to waive for myself, my guardians, heirs, executor, administrators, legal representatives and any other persons on my behalf, any and all rights and claims for damages, demands, and any other actions whatsoever, including those attributable to simple negligence, which I may have against any of the following persons or entities: the United States of America; the Department of Defense; the Department of the Navy; the United States Marine Corps; Marine Corps Base, Camp Lejeune, North Carolina; any and all individuals assigned to or employed by the United States, including but not limited to the Secretary of Defense; the Secretary of the Navy; the Commandant of the Marine Corps; Commanding Officer, Marine Corps Base, Camp Lejeune, North Carolina; in both their official and personal capacities; any medical support personnel assigned thereto; and these persons’ or entities’ representatives, successors, and assigns which said injuries arise out of my participation in the activities comprising the aforesaid event; as well as any use by me of any Marine Corps Base, Camp Lejeune, North Carolina, or government equipment or facilities in conjunction with and furtherance of such participation by me. I FURTHER VERIFY THAT I HAVE FULL KNOWLEDGE OF THE RISKS ASSOCIATED WITH ATTENDING THIS EVENT, AND UNDERSTAND THAT I WILL BE VIEWING A DEMONSTRATION OF MILITARY EQUIPMENT/PERSONNEL ENGAGED IN SIMULATED COMBAT ACTIVITIES, INCLUDING LOW-FLYING AIRCRAFT, HIGH SPEED TANKS, AND EXPLODING ORDNANCE. I EXPRESSLY, KNOWINGLY, AND VOLUNTARILY ASSUME THE RISKS INVOLVED IN THE PLANNED ACTIVITIES INCLUDING TRANSPORTATION TO AND FROM THE EVENT, AND AGREE TO HOLD THE UNITED STATES HARMLESS FOR ANY RESULTING INJURY. I understand that this assumption of risk shall remain in effect until notice of cancellation is received by the Commanding Officer, Marine Corps Base, Camp Lejeune, North Carolina. I understand that, should I decline to execute this agreement, I will not be permitted to attend the live-fire exercise.

(Signature of Witness)  (Signature)  (Date)

(Printed Name)

Signature of Parent/Guardian on behalf of __________________________

(Name of Minor)

Date: _________________________

Please Take Note: This document is available as a PDF and can be requested via e-mail.
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Chapter 2

Responsibilities

1. MCB Camp Lejeune S-3

   a. Plan, coordinate, and supervise the development, modernization, maintenance, and operation of the Marine Corps Base training areas, live fire ranges and training facilities.

   b. Establish assignments and scheduling procedures for the use of all Marine Corps Base ranges, training areas, and training facilities.

   c. Publish appropriate orders, directives and correspondence concerning all training areas, live fire ranges, training facilities, air space, and their required support.

   d. Conduct continuous review of the training complexes to ensure all safety procedures are meeting the established criteria prescribed in current regulations/orders.

   e. Coordinate with the Director, Installation and Environment (I&E) to ensure that the Range Management Plan receives proper planning, programming and budgeting of real property management resources. Participate in MILCON Construction Review Board (MILCRB) and the R1/R2 Minor Construction Review Boards (MCRB) as a voting member.

   f. Program and budget for the new construction, transformation, maintenance, and repair of all training areas, training facilities and live fire ranges, in coordination with Director, I&E and other Base Agencies as required.

   g. Prioritize range projects based on requirements and available funding.

   h. Budget for, requisition, and procure communication equipment to support Range Control Division operations.

   i. Coordinate with the Government External Relationship (GER) Office, Marine Corps Base with all matters dealing with (RCUS) Range Compatible Use Zone Study and (AICUS) Air Installations Compatible Use Zone Study requirements.

2. Director, Range Control Division (RCD)
a. Responsible to the MCB Camp Lejeune S-3 for scheduling, controlling and coordination of all training activities conducted within the Camp Lejeune training complex which also includes MCOLF Oak Grove. Ensure the safety and deconfliction of all operations within the training complex. Supervise, manage, and coordinate operations within Range Control Division to accomplish these assigned missions and tasks.

b. Publish, maintain and update the Range Control SOP (this SOP) and ensure dissemination to all commands and units. Monitor all live fire ranges and training activities to ensure compliance with and to remove the privileges of any person, organization, unit, command, agency, or club that willfully violates this manual/SOP and the Marine Corps Order on Range Safety or other related MC Base and Marine Corps Orders/Policies.

c. Coordinate with Director, I&E and other MC Base departments regarding range noise issues and all training and training facility use that could potentially affect the environment and the surrounding local community.

d. Assist the Installation Safety Office, Explosive Safety Officer, and Base PAO in establishing and implementing a comprehensive range safety and unexploded ordnance awareness educational program as required.

e. Supervise, coordinate, and manage the following Range Control Division sections/departments and resources:

(1) Base EOD Team
(2) Navy Boat Crew
(3) MOUT Collective Training Facilities (All)
(4) CBRN Chamber
(5) Fire Desk Operators (BLACKBURN)
(6) Range Operations
(7) Range Safety
(8) Range Scheduling
(9) Range Inspectors

3. **Director, Training Support Branch (TSB)**
   
   a. Manage and coordinate all contracts associated with range maintenance and range operations as required.
   
   b. Ensure adequate noise monitoring systems are in place at appropriate locations and funded as required.

4. **Director, Range Development Division (RDD)**
   
   a. Responsible for range, training area, and training facility development and modernization which includes, but is not limited to, coordinating designs, award and delivery of construction efforts, initial outfitting, and developing operating procedures in support of all training assets.
   
   b. Continually assess ranges, training areas, and training facilities for ability to meet published training standards and requirements for range maintenance. Make improvements based on assessments and prioritized requests from tenant commands/units as required for Range Maintenance type requirements.
   
   c. Act as the Integrated Geographic Information Repository (IGIR) Working Group liaison to ensure appropriate changes are incorporated into the Base Geographic Information System (GIS) and mapping products.
   
   d. Coordinate the submission of training-related projects to the Environmental Impact Working Group. Ensure action items in National Environmental Protection Act (NEPA) documents are resolved prior to implementation of proposed actions. As the Director, O&T action sponsor to the group, review all requests for Field Exercise Request for Environmental Impact Review (FEREIR) submissions for impacts to the ranges, training areas, training facilities, and other training assets as required.
   
   e. Develop and coordinate with Director, I&E the range modernization plan, incorporating short, mid and long-term range training area and training facility requirements/projects to meet the future requirement. Evaluate changing requirements to the plan and the many organizations assigned to Camp Lejeune to ensure mission objectives are sustained.
f. Maintain historical information on active and inactive ranges, project data, and related files relevant to the installation training complex boundaries.

g. Coordinate the submission of training related new construction requirements (R1/R2/MILCON) with I&E’s Installation Development Division.

5. **Base Range Control Officer (BRCO)**

a. Designated by the Commanding Officer, MCB in writing. Responsible for executing and enforcing those regulations as they pertain to the land, sea, and airspace within the Camp Lejeune training complex at all times.

b. Serve as the central point for scheduling, operational control, range safety, and coordination for all activities conducted within the installation-training complex to ensure safety and unified operations.

c. Approve, control, and monitor personnel access into the training complex for both training and administrative activities. Coordinate the scheduling of all requested training within Camp Lejeune’s air, land, and water spaces.

d. Produce and publish a daily Range Firing Warning and Airspace Utilization Order (Message) and other documents as required of all scheduled training.

e. Publish two weekly documents, Notice to Mariners and Road Closures, via naval message and the Range Control web site.

f. Responsible for range safety throughout the MC Base training complex. Provide impact area layouts, surface danger zones, range design and analysis of special or unique live fire and maneuver training requests by evaluating and applying applicable safety parameters and environmental restrictions. Conduct field safety inspections as required or directed.

g. Recommend range maintenance priorities to Director, Range Control Division/Director Range Development Division.

h. Assist the Installation Safety Office and Base PAO in establishing and implementing a comprehensive range safety and UXO/dud awareness educational program.
i. Assist the Director, RCD with supervising, coordinating and managing the following sections/resources:

(1) Base EOD Team
(2) Navy Boat Crew
(3) MOUT Complex Staff
(4) CBRN Chamber
(5) Fire Desk Operators (BLACKBURN)
(6) Range Operations
(7) Range Safety
(8) Range Scheduling
(9) Range Inspectors

j. Maintain and update files of current, historical, active and inactive usage data of the installation training complex to include known hazards, type of ammunition expended on each range, UXO/dud accumulation and disposal records, and clearance status of temporary, dedicated and high hazard impact areas.

k. Provide a Range Officer in Charge (ROIC)/Range Safety Officer (RSO) and LASER Range Safety Officer (LRSO) Information Safety Briefs to include:

(1) Installation training complex facilities
(2) Installation procedures for opening/closing facilities
(3) Communications requirements
(4) MEDEVAC/CASEVAC procedures
(5) Environmental issues
(6) Safety Training for Range OIC/RSO/Laser Range Safety Officers
(7) Other topics as directed or required.
6. **Fire Desk Operators (BLACKBURN)**

   a. The Range Control, Fire Desk Operators, call sign BLACKBURN, will be manned 24 hours a day in 8 hour shifts, seven days a week to monitor/deconflict training, provide safety guidance and provide emergency assistance to units training aboard Camp Lejeune unless directed.

   b. The Fire Desk Operators (BLACKBURN) will act as the primary point of contact for all current operations. BLACKBURN will coordinate with all training units/commands and will perform a variety of supervisory duties, to include (but not limited to) putting units into hot/cold/checkfire status, recording end-of-training reports, directing range inspectors, advising aircraft of hot ranges, contact MCB CDO and 911 Center when first live fire range goes “HOT” and last live fire range goes “COLD”, controlling airspace and monitoring use of all training areas. Training units must contact and maintain communication at all times with BLACKBURN via 34.70 FM (squelch off). Alternate frequency in the Greater Sandy Run Area (GSRA) is 40.10 FM.

   c. BLACKBURN is the primary means of providing MEDEVAC/CASEVAC assistance to units on live fire ranges, training areas or training facilities. All injuries must be reported to BLACKBURN, even if no assistance is needed or required. BLACKBURN will ensure that all reported injuries are forwarded to the Base Safety Office as required or directed. Unit must provide follow-up reports as required. This will also include Cold Injuries, Heat Injuries like Heat Stress, Heat Exhaustion, and Heat Stroke.

7. **Commanding Officer of Using Unit**

   a. Ensure compliance with this Manual, the current MCO 3570.1B/DA PAM 385-63, other Marine Corps Orders as required, applicable ammunition, weapons, and equipment, MCOs, TMs, FMs, and Marine Corps Warfighting Publications (MCWP), Marine Corps Reference Publications (MCRP) and all other applicable SOPs for safe training and firing for each weapon system, explosives/demolitions within that command/unit. Ensure all Marines/Sailors have received the required training on the weapon systems/ammunition to be employed and that subordinate leaders involved in the live fire training have a working knowledge of and comply with this SOP and other references as required.
b. Conduct Operational Risk Management (ORM) assessment for all training and have a reviewed and command signed copy of the worksheets on the live fire range, training area, training facility, or any high risk training event. Develop control measures and safety procedures for all phases of training. See Appendix D, ORM for examples.

c. Establish and maintain a safety training/certification program to train and qualify all personnel in safety procedures for their specific area of responsibility/assignments. Personnel who have not completed the certification will not be appointed as Range Officers in Charge/Range Safety Officers (ROICs/RSOs) or Laser Range Safety Officers (LRSOs). ROIC/RSO training is required every three years; laser certification is good for four years.

d. Per MCO 5100.8 and NAVMC Directive 5100.1 ensure incident reports are filed using Web Enabled Safety System (WESS). Enterprise Safety Applications Management Systems (ESAMS) is a web enabled system that incorporates the filing of incident reports. When Serious Incident Reports (SIRs) or Personnel Casualty Reports are sent via message traffic, CC CO, MCB Camp Lejeune.

e. Designate a ROIC, RSO, and PSO for each firing point, live fire range or training facility as delineated in paragraphs 8 and 9 of this chapter.

f. Certify in writing, by the commander only, those individuals designated to perform the duties as ROIC/RSO, ensuring they:

(1) Are competent, current, and properly instructed/trained in the performance of their duties and assigned tasks/responsibilities.

(2) Are knowledgeable of proper procedures for the weapon system and ammunition for which they are responsible.

(3) Must complete the Marine Net, Distance Learning Course “Range Safety,” and have a copy of the diploma in hand to attend the MCB ROIC/RSO Information Safety Course. The ROIC/RSO must keep their Marine Net Range Safety Course current (diploma good for 3 years) to stay within the requirements of current diploma and current RSO card to act as ROIC/RSO aboard Camp Lejeune N.C.
(4) Have attended the ROIC/RSO Information Safety Brief given by the Range Safety Specialist and possess a valid Range Safety Officer card (Good for 3 years).

(5) A copy of the command certification letter with enclosure must be forwarded to Range Control and updated quarterly or as necessary to ensure currency. All pages of the enclosures listing command certified personnel must be signed.

g. Designate the appropriate uniform and protective equipment if not prescribed by a higher authority. (Helmets/Eyewear Protection/Flak Jackets/Hearing Protection /Gloves) or other items if needed or required based on the type of training event.

h. Ensure the scheduling, modification, and/or cancellation of Electronic Training Activity Requests (E-TAR) in RFMSS as per Chapter 3.

i. Appoint technically qualified personnel to certify, verify, and properly handle ammunition, explosives, and range residue (i.e. spent brass, bandoleers, clips, links, casings, ammunition cans/boxes) in accordance with DOD 4160.21-M and BO P8020.1A.

8. Range Officer in Charge (ROIC)

a. Qualifications

(1) Must be a Commissioned Officer, Warrant Officer, or Staff Noncommissioned Officer (SNCO) (E-7 or above for dud producing ammunition and fire and movement events). Training areas and facilities where training uses pyrotechnics, blanks, other training devices and simulnitions will be treated similar to a live fire event and must be signed for by an E-6 or above. Training areas and facilities were training does not use any of the above and only involves maneuvering will not have to be signed for. Requests to deviate from the established rank criteria must be signed by the Commanding Officer only (Not “By Direction”) and endorsed by at least an (06) Colonel within that chain of command and must be submitted via the chain of command (Example Bn, Regt, Div, MEF) to the Commanding Officer, MCB Camp Lejeune at least 30 days prior to the training event as per Chapter 1, Paragraph 4. The Range OIC is the only one that can sign for a live fire range, high risk training event or a training facility.

(2) Must have completed the Marine Net, Distance
Learning Course “Range Safety,” and have a valid completion diploma that is kept current. This course is a prerequisite for enrollment in the MCB Range Control Information Safety Brief. The ROIC must keep their Marine Net Range Safety Course current (diploma good for 3 years and must be renewed/updated) to stay within the requirements of current diploma and current RSO card to act as ROIC. A current copy must be provided to MCB Range Control to keep it current.

(3) Must have received the MCB Range Control Information Safety Brief (ROIC/RSO Class) and possess a valid Range Safety Officer card which is good for three (3) years.

(4) ROICs must be certified in writing by the Commanding Officer of that unit for the weapon system and ammunition for which they are responsible. For weapon systems equipped or dependent on LASERS, the ROIC must be knowledgeable of LASER hazards, proper employment and all LASER safety procedures and must attend the ALSO Course (Laser Safety) to be assigned as a LASER Range Safety Officer (LRSO) for Class 3B and Class 4 laser devices. The ROIC is responsible and accountable for conduct of the activity and adherence to governing regulations and safety requirements. ROIC must be able to fully influence the conduct of the training event.

b. Duties

(1) Ensure the overall safe conduct of all training and proper use of the installation/training complex. **ROIC is a supervisory position. ROIC will not participate in the training event. ROIC will have no other duties/assignments or fire any weapon during the time period he/she is the ROIC. ROIC must be physically present at the training event at all times.**

(2) Report to MCB Range Control (Building 54 on Post Lane) by 1200 the work day prior to the scheduled training to properly check-out and up to five (5) working days in advance to sign for the assigned live fire ranges, drop zone, training towers, observation post (OPs) gun positions (GPs), mortar positions (MPs), Combat Town, MOUT Complex, Mobile MOUT, or Area 5/Courthouse Bay Training Tanks and all other training facilities and receive and sign for the designated range safety equipment. All live fire ranges should be checked out by the using unit before any federal holiday liberty periods.

(3) Receive a range safety briefing from the installation range control organization on the use of the assigned training complex.
(4) Be physically present at the training site, live fire range, or training facility at all times. ROIC must have this SOP, a valid Range Safety Officer Card, signed ORM, unit SOP, Safety Brief, relevant ammunition/weapons/assigned equipment TMs and FMs, other required equipment and a Special Range Request (if applicable) on site when training or conducting a live fire range. The ROIC is responsible for how ammunition is handled, transported, stored, and accounted for within the training complex from time of receipt to the time of expenditure or turn in. The ROIC will inventory and sign for all ammunition, explosives, training devices and assigned DODICs on the NAVMC 11381 Expenditure Report.

(5) Determine when it is safe to fire in accordance with applicable regulations and installation Range SOP requirements.

(6) Ensure receipt of final clearance to fire from Range Control/BLACKBURN.

(7) Ensure the Range Safety Officer (RSO) has been certified in writing by the Commanding Officer for the weapon(s) or weapon systems to be used on the range scheduled in RFMSS and signed for.

(8) Ensure all personnel have a working knowledge of the weapon systems and ammunition being employed and wear the appropriate protective equipment, to include helmets, flak jackets and hearing protection during all live fire events. (Helmets/flak jackets not required during annual known distance marksmanship training.) Personnel involved in law enforcement-type training are permitted to substitute their equivalent protective equipment in lieu of helmets and flak jackets.

(9) Ensure proper supervision of personnel performing immediate action, misfire, hang-fire, and cook-off procedures for that weapon system and ammunition.

(10) Ensure all weapons and ammunition malfunctions, duds, defective ammunition and accidents are reported to Range Control and to higher headquarters (MCB ESO) as directed per MCO 8025.1, NAVMC 10155, and other applicable orders.

(11) Ensure required communications are established with BLACKBURN and maintained at all times.

(13) Ensure adequate medical support (Corpsman) and a
government safety vehicle are present on the live fire range,
training area, or training facility as required.

(14) Ensure ammunition and explosives are properly
handled, transported, stored, secured, and accounted for within
the training complex from the time of receipt to the time of
expenditure or turn in.

(15) Maintain records of “Hot and Cold” times, total
number of personnel, ammunition expended by DODIC, and reported
to BLACKBURN/Fire Deck Operators after the scheduled training
event.

(16) Ensure all planning for all live firing training
exercises and maneuvers are coordinated with Range Control as
required.

(17) During a Combined Arms/TACP shoot, the minimum
number of ROICs and RSOs are listed in Figure 1.

(18) Establish all control measures for the Surface
Danger Zone/target area are in place, enforced, and supervised
to prohibit entry by unauthorized personnel.

(19) Ensure coordination and approval has been gained
from the Range Control Division for all civilian personnel to
include contractors, which will be entering the training
area/live fire range/training facilities.

(20) Brief the RSO on the duties to be performed in
support of the training event. Clearly establish the
requirements for the RSO to brief the ROIC of the unit on the
safety of the facility/range/training area and the readiness to
commence live fire operations/training prior to the start of all
live firing.

(21) Comply with all MCB Camp Lejeune’s environmental
regulations/orders and the Environmental Handbook for
Trainers/Camp Lejeune “Quick Look” Environmental Guide.

(22) Ensure a thorough shakedown for all ammunition and
weapons checks are conducted prior to leaving the range.

(23) Units must have detailed checks in place and
supervise when using blank ammunition and live ammunition
together during the same scheduled training event.
Figure 2-1 Personnel Requirements for Combined Arms/TACP Shoot

**OP-2/3/5 or Future OPs**

- **OP-2/3 Air ROIC**
  - signs for OP-2/3/5 Air at Range Control
  - can be E7 or above

- **OP-2/3/5 RSO**
  - may dual hat as Air/Arty/Mortar OP-2 RSO
  - can be E6 or above

- **OP-2/3/5 Artillery FO ROIC**
  - part of required Arty FO team E7 or above
  - sign for OP-2 Arty at Range Control

- **OP-2/3/5 Mortar FO**
  - usually an E5 from Mortars FO team
  - can be E3 or above
  - does not sign for OP-2/3

**Mortar Position**

- **MP ROIC**
  - signs for MP at RCD

- **MP RSO**

**Artillery Position**

- **GP ROIC**
  - signs for GP at RCD

- **GP RSO**

**Naval Gunfire**

- **ROIC**

- **RSO**

**DASC Team**

- **DASC ROIC**

- **DASC RSO**
  - Safety over-watch to Air Controller

  Must be a minimum of (2) two DASC trained personnel at all times.

Either the OP-2/3/5 ROIC or RSO must be a FAC/JTAC

One of these must be LRSO if LASERS used

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Figure 2-1 Personnel Requirements for Combined Arms/TACP Shoot
(24) Ensure that the Class V(W) Expenditure Report (NAVMC Form 11381) is completed at the range per MCO P8020.10 signed by the ROIC and turned in within 48 hours to your unit S-4/G-4 ammunition section.

(25) Return all safety equipment within 24 hours to Range Control upon completion of the live fire event and submit any range maintenance issues back to Range Control.

9. Range Safety Officer (RSO)
   a. Qualifications
      
      (1) Must be a Commissioned Officer, Warrant Officer, or Staff Non-Commissioned Officer (SNCO) (Staff Sergeant and above). RSO duties/responsibilities will not be delegated to other personnel. Requests to deviate from the established rank criteria must be signed by the Commanding Officer only (Not “By Direction”) and endorsed by at least an (06) Colonel within that units chain of command and must be submitted via the chain of command (Example Bn, Regt, Div, MEF) to the Commanding Officer, MCB Camp Lejeune at least 30 days prior to the training event as per Chapter 1, Paragraph 4.

      (2) Must have completed the Marine Net, Distance Learning Course “Range Safety,” and have a valid completion diploma that is kept current. This course is a prerequisite for enrollment in the MCB Range Control Information Safety Brief. The RSO must keep their Marine Net Range Safety Course current (diploma good for 3 years and must be renewed/updated) to stay within the requirements of current diploma and current RSO card to act as RSO. A current copy must be provided to Range Control to keep it current.

      (3) Must have received the MCB Range Control Information Safety Brief and have in his/her possession a valid Range Safety Officer card and have been certified by their Commanding Officer in writing on all weapons systems/ammunition to be used during live fire training.

      (4) To support the following specialized training events the RSO may be a sergeant (E-5) with current certification in their specialty; HRST, HST, Dive Supervisor, DZSO/Jump Master, and EOD (see paragraph 9). Sergeants must be approved by his/her Commanding Officer in writing, must have completed the Marine Net, Distance Learning Course “Range Safety,” and have a valid completion diploma to attend the MCB Range Control
Information Safety. Sergeants must keep their Marine Net Range Safety Course current (diploma good for 3 years) to stay within the requirements of current diploma and current RSO card to act as RSO.

b. RSOs will have no other duties/assignments or fire any weapon during the time period that he/she are performing the duties as RSO. The RSO must be in a full duty status. Assistant Range Safety Officers (ARSO) and Position Safety Officers (PSO) may be appointed as required by the unit conducting the training to positively control all shooters, crew served weapons, or live fire maneuvering elements.

c. Duties

(1) The RSO is a safety supervisory position only. As such, the RSO is responsible to the ROIC for the enforcement of applicable range and general safety regulations at all times contained in this manual, the current edition of MCO 3570.1B/DA PAM 385-63 and other appropriate references as required. The RSO will ensure a copy of the portions of this SOP pertaining to the range in use and ORM worksheet are maintained and available on the range at all times. The RSO must be physically present at the training event at all times.

(2) Receive the Range Safety Brief from the Fire Desk Operators (BLACKBURN) by radio and the on site Range Inspector.

(3) Ensure weapons, ammunition, and personnel are properly positioned/staged before granting clearance to fire.

(4) Ensure that only the authorized ammunition, weapons, and explosives listed on the range request, scheduled in RFMSS, signed for and the Range Control SOP, to include proper charge/increments, explosive weight limits, fuzes, and fuze setting, are used. Ensure that firing data and weapons systems are within prescribed safety limits and are verified/checked. Expenditure Reports (NAVMC Form 11381 depicted in Figure 4-1 of MCO P8020.10B) will be used to document all expenditures of AA&E assets and must be reported within 48 hours.

(5) Ensure that the Surface Danger Zone (SDZ) and Weapons Danger Zone (WDZ) remains clear of all unauthorized personnel, vehicles and any aircraft prior to and during firing. Ensure road guards, gate guards, and tower and air sentries are properly positioned, equipped, and briefed in their duties and assignments. When applicable, secure all barriers, ensure all
signs and gates are checked and secured as required. RSO will ensure proper communications are established and maintained between the road guards and tower sentries during live fire at all times.

(6) Ensure personnel within designated hazard areas wear the proper eye and hearing protection as well as flak jackets and helmets during all live fire operations.

(7) Obtain authorization from Range Control (BLACKBURN) to commence training and live fire operations. The RSO, along with the ROIC, shall ensure that the unit monitors the safety/admin control net AT ALL TIMES. The Fire Desk Operator is the net control, call sign "BLACKBURN", on 34.70 FM (squelch off) and 233.8 UHF for air operations. Units shall request authorization to go "HOT" and "COLD" from "BLACKBURN" and give radio checks every 30 minutes on the hour and half hour. If, at any time, a unit loses communications with "BLACKBURN," the RSO will put the range in a "check-fire" status until communications are reestablished. Use of cell phones to communicate range, training area, or facility status with BLACKBURN is not authorized. Cell phones are authorized in an emergency situation.

(8) Prior to commencing live fire operations, conduct final coordination with ROIC to include a summary of checks, inspections, and other required actions that the RSO must complete. Verify that required communications has been established and a "HOT Status" has been received from BLACKBURN.

(9) Order immediate cease-fire or check-fire when any unsafe condition occurs or when BLACKBURN directs.

(10) Report all accidents, weapons/ammunition malfunctions and MEDEVAC/CASEVAC to the ROIC and BLACKBURN along with the unit’s chain of command. The unit is responsible for initial mishap/incident site control to prevent site contamination for mishap investigations.

(11) Upon completion of the firing order, verify to the ROIC all weapons and weapon systems are checked, clear, and safe before allowing the removal of weapons/ammunition from the firing area down range.

(12) During Light Amplification Stimulated Emission Radiation (LASER) operations:
(a) Ensure all unit personnel employing all Military LASERs receive a LASER safety brief to include explanations of specific LASER related hazards, safety equipment, and detailed range safety procedures.

(b) Comply with procedures in MCO 5104.1C, MCO 3570.1B/DA PAM 385-63, Military Handbook 828B and Chapter 9 of this manual.

(c) Ensure the LASER system is approved to be used aboard Camp Lejeune. Observe horizontal and vertical safety limits for the LASER range being used.

(d) Follow unit SOPs for LASER operations, LASER Safety and LASER training exercises.

(e) Ensure all personnel conducting LASER operations, to include personnel in target areas, maintain continuous communications with ROIC/RSO.

(f) Cease LASER operation immediately if communication or positive control of the LASER beam is lost or if an aircraft is with your zone of action.

(g) The LRSO may also serve as the RSO or the ROIC if properly trained and certified by the unit commander.

(13) The RSO is appointed by the ROIC to assist him in maintaining supervision of the firing and all safety requirements within the entire SDZ, impact area and the air space of the range. The RSO will not be assigned any other duties or fire a weapon while acting in this capacity.

(14) The RSO will be the last to leave the range following completion of firing, ensuring the range (to include surrounding areas/facilities) are clear of all personnel and equipment, properly policed up, and inspected. DO NOT LEAVE, BURY, OR BURN TRASH. If the range/area is not properly policed up, the unit could/will be denied further access to training ranges/areas until the range/area is adequately policed, inspected, and approved by a MCB Range Inspector. The RSO will receive a range inspection (Viper Card) upon passing the inspection. Range Control will not accept any range, training area or training facility without a Viper Card and all items issued out are returned to Range Control like the range binder, range flag, orange cones or other items issued within 24 hours.
This card acts as proof that the range, training area, training facility was inspected and properly cleared.

(15) In the event of an accident/incident (i.e. round out of safe, MEDEVAC/CASEVAC, downed aircraft, injury/fatality or others) a "Cease-Fire" command will be given on that range, training area, training facility and adjoining ranges, if necessary. The unit/command will report the incident/accident immediately to Range Control, BLACKBURN. The unit is responsible for initial mishap/incident site control/secure the site to prevent site contamination for mishap investigations.

(16) Report all forest fires/grass fires locations (grid/range/training area) immediately to BLACKBURN and standby for guidance from Blackburn/Fire Department.

(17) Submit UXO/dud reports (Location by grid and type of UXO/dud or UXO/duds) as per unit SOP and this Range Control SOP.

(18) Call BLACKBURN upon completion of firing to report number of all rounds fired by DODIC, type of ammunition fired, and total number of personnel (all) trained.

(19) Hold a shakedown of all personnel, vehicles, and equipment to ensure that no unauthorized brass or live fire ammunition exits the range to include sources of ammunition.

(20) Ensure no pyrotechnics like smoke/CS/pop-ups, and other flares, training devices are released or fired at any time without clearance from Range Control/Blackburn.

(21) Ensure that all tactical vehicles are parked in the designated parking areas only. Vehicles will not be parked on access roads, tank trails, or on or near the live fire ranges, training facilities, in the training area. Vehicles (all) will not park on the shoulders, or main thoroughfares, areas that have grass, seeded or otherwise planted areas like forestry sections. POVs are not authorized on ranges, training areas or training facilities unless issued a Range Control POV Pass. Violators will be reported to PMO/Game Warden for action.
### 10. ROIC/RSO Appointment Requirements

<table>
<thead>
<tr>
<th>Type of Event</th>
<th>ROIC (Note 1)</th>
<th>RSO (Note 1)</th>
<th>Additional Req</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OFF</td>
<td>WO</td>
<td>SNCO</td>
</tr>
<tr>
<td>Practice Hand Grenades; Sub-Caliber Training Devices; Class 1-4 LASERs; Training Simulators; Trip Flares, Blanks.</td>
<td>X</td>
<td>X</td>
<td>E-6</td>
</tr>
<tr>
<td>MOUT/Combat Town Operations.</td>
<td>X</td>
<td>X</td>
<td>E-6</td>
</tr>
<tr>
<td>SESAMS (Simunition) Training</td>
<td>X</td>
<td>X</td>
<td>E-6</td>
</tr>
<tr>
<td>Static Firing Only, Small Arms and Machineguns (.50cal and Below) Includes use of Short Range Training Ammo.</td>
<td>X</td>
<td>X</td>
<td>E-6</td>
</tr>
<tr>
<td>Chemical Agents (CS) and Smoke.</td>
<td>X</td>
<td>X</td>
<td>E-6</td>
</tr>
<tr>
<td>Aerial Gunnery &amp; Air Defense Weapons (Rockets and Guided Missiles); Live Hand Grenades, Grenade Launchers and Grenade Machineguns; Live Mines, Explosive and Demolitions; Tank, AAV and LAR Live Fire (Training Practice and Live Ammunition), HOT FARP (fuel or ammo). Breachers need to be school trained and certified by CO.</td>
<td>X</td>
<td>X</td>
<td>E-7</td>
</tr>
<tr>
<td>(Air) Fixed Wing/ Rotary Wing Operations, DASC Operations</td>
<td>X</td>
<td>X</td>
<td>E-7</td>
</tr>
<tr>
<td>Naval Gunfire.</td>
<td>X</td>
<td>X</td>
<td>E-7</td>
</tr>
<tr>
<td>Field Artillery. (105mm/155mm)</td>
<td>X</td>
<td>X</td>
<td>E-7</td>
</tr>
<tr>
<td>Mortars. (60mm/81mm/120mm)</td>
<td>X</td>
<td>X</td>
<td>E-7</td>
</tr>
<tr>
<td>Direct Fire Antitank Rockets and Missiles (Inert and Live Ammunition).</td>
<td>X</td>
<td>X</td>
<td>E-7</td>
</tr>
<tr>
<td>Live Fire Maneuver/Movement Exercises (Ground, Vehicles and Air).</td>
<td>X</td>
<td>X</td>
<td>E-7</td>
</tr>
<tr>
<td>Live Fire Exercises with organic weapons; Fire Team through Company.</td>
<td>X</td>
<td>X</td>
<td>E-7</td>
</tr>
<tr>
<td>Combined Arms, Live Fire Exercises with external Fire Support; Squad through Battalion or larger.</td>
<td>X</td>
<td>X</td>
<td>E-7</td>
</tr>
<tr>
<td>EOD Operations, Emergency Destruction only</td>
<td>X</td>
<td>X</td>
<td>E-5</td>
</tr>
<tr>
<td>Non-live Fire Events</td>
<td>Person in Charge (Note 1)</td>
<td>Additional Requirements</td>
<td></td>
</tr>
<tr>
<td>CVOT Courses/Facilities Operations</td>
<td>X</td>
<td>X</td>
<td>E-6</td>
</tr>
<tr>
<td>Dive Operations</td>
<td>X</td>
<td>X</td>
<td>E-5</td>
</tr>
<tr>
<td>Parachute Operations</td>
<td>X</td>
<td>X</td>
<td>E-5</td>
</tr>
<tr>
<td>HST Operations</td>
<td>X</td>
<td>X</td>
<td>E-5</td>
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<tr>
<td>HRST Operations including Towers</td>
<td>X</td>
<td>X</td>
<td>E-5</td>
</tr>
<tr>
<td>Water Survival Training (All Training Tanks)</td>
<td>X</td>
<td>X</td>
<td>E-6</td>
</tr>
<tr>
<td>Helo Casting/Open Water Swim</td>
<td>X</td>
<td>X</td>
<td>E-6</td>
</tr>
<tr>
<td>Use of Blanks and Pyro in Training Areas</td>
<td>X</td>
<td>X</td>
<td>E-5</td>
</tr>
<tr>
<td>UAS Operations</td>
<td>X</td>
<td>X</td>
<td>E-6</td>
</tr>
</tbody>
</table>
NOTES:

1. Civilians in the grade of GS-07/equivalent or above may act as ROIC or Person in Charge, and GS-05/equivalent or above as RSO. Approved civilian contractors may act as ROIC/RSO when approved by Installation Commander and in accordance with SOW. ROIC/RSO qualified civilian personal must be listed on the Unit’s CO Certification Letter.

2. The ROIC is the only person required to report to Range Control to sign for the event. Both the ROIC and RSO must be nuclear, biological, and chemical (NBC 5702, 5711) qualified when conducting NBC (CS) or smoke training and be listed on the CO’s certification letter.

3. If SNCO, ROIC/RSO must be JTAC qualified and listed in the CO’s Certification Letter.

4. The ROIC is the only person required to report to Range Control to sign for the event. ROIC and RSO must be a trained Naval Gunfire Liaison Officer, or Shore Fire Control Party (SFCP). ROIC must have RSO’s name for face-to-face brief with BLACKBURN and both names must be listed in the CO’s Certification letter.

5. Use of an E-7s as ROIC is authorized only when approved by Installation Commander. Either the battery executive officer or platoon commander normally performs duties of the ROIC/RSO.

6. Per the most recent change to the MCO 3570.1B/DA PAM 385.63

7. The ROIC for a battalion or larger combined arms live fire exercise (CALFEX) will be a field grade officer (O-4 or above).

8. Two (2) persons are required. E-5s can perform emergency destruction operations only.

9. The Person in Charge/Dive Supervisor (E-5 or above) will be the only person required to report to Range Control to sign for the event and must have a current RSO certification. Safety Divers must be a Marine Combat Diver or SCUBA Diver, any rank. The event must also have a Dive Medical Technician or SARC on standby. E-5 or above RSO qualified Dive Supervisors must be listed in the CO’s Certification letter.

10. The Person in Charge/Drop Zone Safety Officer (DZSO) for jumpers will be the only person (E-5 or above) required to report to Range Control to sign for the parachute event. The DZSO for jumpers will be certified per all requirements in the MCO 3120.11 (Marine Corps Parachuting Policy and Program Administration) and MCWP 3-15.7 (Static Line Parachuting Techniques and Training). The DZSO must have a current MCB RSO card and meet all the requirements set forth in this SOP. The DZSO must be a certified/current DZSO. The DZSO must provide the names
of the two (2) additionally required jumpmasters for personnel drops during the checkout process and list them on the face-to-face worksheet brief so Range Control can verify them with the CO’s certification letter. Any changes to personnel, other than the DZSO, must be called into Range Scheduling or BLACKBURN prior to conducting the RFMSS scheduled event. The DZSO must be a certified/current DZSO. Any changes to the DZSO must be done in person at Range Control Scheduling and another face-to-face brief must be conducted with BLACKBURN before training can be conducted. DZSOs (RSO Qualified) and jumpmasters (RSO qualification not necessary) are required to be listed in the CO’s certification letter. If US Army, Air Force, or Navy jumpmasters are used in aircraft and may not be on the CO’s certification letter, mention the military service when their names are requested by Range Scheduling or BLACKBURN.

11. The Person in Charge/DZSO for cargo will be the only person (E-5 or above) required to report to Range Control to sign for the parachute event. The DZSO must provide the name of the one (1) additionally required jumpmaster for cargo drops during the checkout process and list the person on the face-to-face worksheet brief so Range Control can verify the person with the CO’s certification letter. Any changes to personnel, other than the DZSO, must be called into Range Scheduling or BLACKBURN prior to conducting the RFMSS scheduled event. Any changes to the DZSO must be done in person at Range Control Scheduling and another face-to-face brief must be conducted with BLACKBURN before training can be conducted. DZSOs (RSO Qualified) and jumpmasters (RSO qualification not necessary) are required to be listed in the CO’s certification letter. If US Army, Air Force, or Navy jumpmasters/navigators are used in aircraft and may not be on the CO’s certification letter, denote the military service when their names are requested by Range Scheduling or BLACKBURN.

12. Person in Charge/Safety Insert Officer (SIO) (E-5 or above) for HST events will be the only person required to report to Range control to sign for the event. Person in Charge must be SIO, RSO, and HST qualified. The SIO must do a face-to-face brief with BLACKBURN. HST events require at least one (1) E-4 or above certified HRST individual (RSO qualification not necessary) in addition to the SIO. HST operations require certified HST personnel at all points of the lifted object. All other individuals conducting training have no rank restrictions but must be HST certified or undergoing training to be HST certified with no requirements to be certified RSOs. All qualified/certified SIOs and HST certified personnel must be on the unit’s Command Certification Letter.

13. Person in Charge/Safety Insert Officer (SIO) (E-5 or above) for HRST events will be the only person required to report to Range control to sign for the event. Person in Charge must be SIO, RSO, and HRST Master
qualified. The SIO must do a face-to-face with BLACKBURN. HRST events require at least one (1) E-4 or above, certified HRST individual (RSO qualification not necessary) in addition to the SIO. Other safety officers must be E-4 and above with no requirements to be certified RSOs. All qualified/certified SIOs and HRST certified personnel must be on the unit's Command Certification Letter.

14. Person in Charge, Water Safety Officer (WSO), of swim training events in training tanks must be RSO qualified and a qualified swimmer. The event requires two (2) individuals to sign for the training tank, the Person in Charge/RSO (E-6 or above) and MCWIS instructor (E-4 or above RSO qualification not necessary). The Person in Charge/RSO signing for training tank, regardless of his/her level of swim qualification cannot be the instructor conducting the training. All swim Persons in Charge/RSOs and MCWIS instructors must be listed on the unit's Command Certification Letter.

15. Person in Charge, Water Safety Officer (WSO), of open water swim training events must be RSO qualified. Open water events require one (1) individual to sign for the event. The Person in Charge/RSO (E-6 or above) must be certified in one of the following; Combat Water Safety Swimmer (CWSS), Marine Combat Instructor of Water Survival (MCIWS), Marine Combat Instructor Trainer of Water Survival (MCITWS), Dive Supervisor or civilian equivalent certification. Person in Charge/RSO must be certified on the unit’s Command Certification letter to sign for the event. These events include and are not limited to helo-cast, fin operations, or any other dive indoctrination training. Non-USMC military commands/units must have civilian equivalent certifications (Red Cross, etc). The Person in Charge/RSO is not authorized to take part in any training. Certified instructors/safety swimmers may be in the water at any given time with no restrictions to the amount of time. Certified instructors are responsible to meet any and all other additional requirements to meet the restrictions placed on the number of additional safety personnel/swimmers required. Person in Charge/RSO must ensure the necessary safety equipment, communications assets, safety vehicle(s), and safety boats are on hand prior to conducting training. All open water swim Persons in Charge/RSOs and certified instructors (RSO qualification not necessary) must be listed on the unit's Command Certification Letter.

16. When utilizing blanks and pyrotechnics in scheduled in RFMSS training areas an E-5 or above is required to be present for the all training. Person in Charge/RSO must ensure the necessary safety equipment, communications assets, and safety vehicle(s) (if required), are on hand prior to conducting training. All Persons in Charge/RSOs must be listed on the unit's Command Certification Letter.

17. See Chapter 8 for additional guidance on UAS Operations. Both ROIC and RSO should have UAS knowledge and experience. Commanding Officer will certify this in his Command/Unit Certification Letter by including a column to designate UAS certified personnel in the enclosure to the letter.
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Chapter 3

Scheduling

1. General

   a. The Range Control Scheduling Office (located at Range Control, Building 54 on Post Lane) supports hundreds of using unit accounts, both tenant and non-tenant commands at Camp Lejeune. The scheduling office reviews, approves or disapproves all training requests as required/received. The training unit must request to schedule all live fire ranges, training areas, and training facilities through the Range Facility Management Support System (RFMSS). Contact Range Control IT Specialist, 451-2012, for the website information and RFMSS training. The key to successful training here At MC Base Camp Lejeune is using RFMSS properly and being pro-active and proper unit training management.

   b. The scheduling office utilizes the computer database system called RFMSS to schedule, identify conflicts, track, and report utilization of all live fire ranges, training areas, training facilities, ammunition expenditure by DODIC, airspace, and sea space aboard Camp Lejeune. RFMSS requests will be accepted no later than two (2) working days (48 Hours) prior to the first day of the scheduled training event. Electronic Training Area Requests (E-TARs) with changes/additions/modifications must be routed through the proper chain of command to Range Control.

   c. The Range Scheduling Office is the scheduling and approval agency for all live fire ranges, training areas, training facilities, airspace, and sea space aboard Camp Lejeune with the following exceptions for scheduling only:

      (1) The rifle and pistol ranges located at the Stone Bay Range complex are scheduled through the Commanding Officer, Weapons Training Battalion, Stone Bay (Attn: S-3). Telephone number is 450-2917/2918/2687 and FAX Number 450-2915.

      (2) Ranges located at the Stone Bay complex; Special Operations Training Group, II MEF (SOTG) and Marine Special Operations Compound, are scheduled in RFMSS by the requesting command but must be coordinated through the Officer in Charge, SOTG II MEF (Attn: S-3) Telephone number is 450-2982/2676/2871 and FAX Number 450-2983, and MARSOC MSOS S-3 at 450-2738/2739
/2732/2730/2731. SOTG and MSOS will forward all email coordination to Range Control Scheduling section.

(3) Weapons Training Battalion, Special Operations Training Group and Marine Special Operations School/MARSOC units will schedule the ranges in RFMSS and report usage data (number of personnel trained and ammunition expended by DODIC) to Range Control (BLACKBURN) on a daily basis no later than 2359 on the same day of training.

(4) MOUT personnel will schedule use of the all MOUT Complexes to include; MOUT, Mobile MOUT, MOUT Sniper Tower, MOUT UTF, FOBs with ECPs, and Combat Town for requesting units via RFMSS. Units desiring to train in any MOUT facility should contact MOUT personnel at 451-2364/0752.

(5) Gas Chamber personnel will schedule use of the Gas Chamber for requesting units via RFMSS. Units desiring to use the Gas Chamber should contact Gas Chamber personnel at 451-3518.

(6) Training Tank personnel will schedule use of Area 5 and Courthouse Bay training tanks at 440-6005. The training tank are under the control of the Director, Training Support Division.

(7) Modular Amphibious Egress Trainer (MAET) can be scheduled by contacting the Support Coordinator at 451-4963.

d. All scheduled training is published via Naval Message (DMS) in the Range Firing Warning and Airspace Utilization Order. The Range Firing and Airspace Utilization Order is transmitted one working day prior to the scheduled event or the last working day for normal 2 day weekends, all holiday’s and long weekends such as federal holiday periods; only the events promulgated in this message are authorized in the training areas, training facilities and live fire ranges. Only the Range Control Officer/Range Control Operations Officer is authorized to change the Range Firing Warning and Airspace Utilization Order after it is transmitted. Published short notice contingencies will be handled on a case-by-case basis after verification by the units higher headquarters.

2. Range Facility Management Support System (RFMSS)

a. RFMSS is a computer web enabled database that Range Control and training units use to schedule, identify conflicts,
track, and report utilization of all training events aboard Camp Lejeune. Within RFMSS, units can view all training possibilities available, conflicts, specific requirements, and priority users for all ranges, training areas, and training facilities. RFMSS and this SOP will provide the requesting unit with all necessary information to schedule training.

b. RFMSS terminals should be located in all requesting unit operations/training sections. An additional terminal is available for requesting units in the Range Scheduling Office (Building 54, Range Control) for emergencies, if needed. Commanding Officers are responsible for ensuring their units have trained RFMSS clerks. Range Control will conduct RFMSS training for new RFMSS clerks as required with scheduled classes or by appointment as needed. Units may call 451-2102 to schedule a RFMSS class. Range Control Schedulers will also provide other support and entertain all reasonable questions but will not schedule events for units/commands if they have the capability to do so.

3. General Scheduling Information. Requests for live fire ranges, training areas, and/or training facilities will be provided to Range Control, MCB Camp Lejeune per the procedures stated below:

   a. Camp Lejeune tenant commands will submit RFMSS requests via the web directly to Range Scheduling for approval. All tenant commands and units will have priority of training aboard MCB Camp Lejeune. Units external to Camp Lejeune must have prior approval from MCB Operations. Training Area Requests (TARs) from non-tenant commands will not be given priority over tenant/II MEF Commands unless directed by higher headquarters.

   b. All Reserve/National Guard units, including Marine Corps Reserve units, must submit scheduling requests for the use of the Camp Lejeune Range Complex through the MCI East, Deployment Processing Command-East (DPC-E) telephone number 451-2740/0549. All administrative procedures, range/training area regulations, and scheduling priorities in this manual/SOP apply.

   c. Other civilian/military services, organizations, and agencies external to MCB Camp Lejeune must request approval to train aboard MCB Camp Lejeune from Base Operations, Operations and Training or forward a formal request to COMMANDING OFFICER, MCB CAMP LEJEUNE Attn: Base Operations. This request must include the type of training to be conducted and all required ranges, training areas, tactical landing zones, drop zones,
administrative landing zones, restricted airspace, adjacent waters and logistics support. Upon approval, a “Liaison Officer” will be assigned to Base Operations and Range Control. The “Liaison Officer” from requesting organization/agency will provide direct liaison between the requesting unit/organization, MCB Camp Lejeune and other tenant commands as required. All administrative procedures, range/training areas and training facilities regulations, and scheduling priorities are contained in this SOP.

4. Scheduling

a. All ranges, training areas, and training facilities must be scheduled and approved in RFMSS prior to use. Normally, units can request to schedule live fire ranges, training areas, or any other training facilities up to 90 days prior to the planned activity. If available, ranges could be requested as late as 0700 two working days (at least 48 hours or more) prior to planned use; exceptions are ranges that close the Atlantic Intracoastal Waterway (AIWW) or use the N-1/BT3 Impact Area and training or operations in the Atlantic Ocean Sector, to include Onslow Bay and all live fire ranges and facilities operated by contractor support (See Appendix A of this SOP for a listing of all contracted ranges). These exceptions must be scheduled at least 45 days prior to use to allow publication of a Notice to Mariners, coordination with external agencies, and the scheduling of aircraft to perform an aerial sweep of the AIWW and Atlantic Ocean Sector prior to live firing, per the Code of Federal Regulations.

(1) All tenant formal, MOS-producing schools can schedule live fire ranges, training area, and training facilities that directly support their program of instruction (POI) up to 120 days prior to the planned activity. Intent is to allow these schools a 30 day priority over other units to schedule their school’s training. 2d Tank Bn, 2d LAR Bn, and 2d AAV Bn can schedule their semiannual gunnery crew requalifications on SR-10 and SR-7 up to one year in advance. Weapons Training Battalion Rifle Range S-3 can schedule assigned ranges at Stone Bay up to (1) one year in advance. All other units scheduling Weapons Training Battalion ranges at Stone Bay are authorized to schedule out 90 days in advance for individual unit training.

(2) All dive operations must be scheduled 14 days in advance of the event to ensure proper notification via Notice to Mariners. Late requests for training events that require a
Notice to Mariners or notification of the public will not be approved (See paragraph 3008).

(3) All parachute operations in GSRA airspace must be scheduled 45 days in advance of the date of the event to ensure proper notice via the required message channels. Late requests for training events that require a Notice to Airmen (NOTAMs) or notification of the public will not be approved. NOTAMS for GSRA must be submitted NLT 5 days from the 1st day of training month (see paragraph 10). A separate NOTAM worksheet must be submitted by the unit to Cherry Point Airfield Management NLT 96 hours prior to the event (See worksheet at the end of this chapter).

b. Marine Expeditionary Units (MEUs) commanders are responsible for the deconfliction and submission of all RFMSS E-TARs generated by the MEU subordinate elements (MEU HQs, BLT/CLB/ACE Elements) unless directed otherwise by the MEU. SOTG has 120 day priority for MEU training events only. Likewise, other MAGTF commanders are responsible for the deconfliction and submission of all RFMSS E-TARs generated by their subordinate elements and units.

c. Units that must cancel scheduled training and notify Range Control Scheduling during normal working hours or Blackburn after working hours immediately by phone, written, or electronic means.

d. Requests to use artillery gun positions, for which standard/approved safety data has not been computed and listed in the Marine Corps Artillery Safety SOP, must include overlays of the surface danger zone and must be surveyed by the 10th Marines Survey Section. Requests with survey results should be provided to the Commanding Officer, MCB, Camp Lejeune (Director, RCD) ten (10) working days in advance of the first day of training.

e. Requests to use mortar positions for which standard/approved safety data has not been computed must include overlays of the surface danger zones and must be surveyed by the 10th Marines Survey Section. Requests with survey results should be provided to the Commanding Officer, MCB, Camp Lejeune (Director, RCD) ten (10) working days in advance of the first day of training.

f. During hunting season, unscheduled training areas are opened to the Game Warden for hunting. “Recreational Sheets”
listing the open hunting areas are sent out to the different agencies aboard the MCB Camp Lejeune the day prior. **Hunters are not authorized to hunt from or within any range proper complex as defined by MCO 3570.1B/DA PAM 385-63** which includes the cleared range footprint defined by the assembly area, firing positions, left and right lateral limit signs, and the last row of targets. **Hunters are not authorized to hunt from or within TLZs, runways, training facilities/complexes (classrooms, towers, and road networks), or inside and near buildings (see Chapter 6 of this SOP).** Units conducting training in State waters must be vigilant and yield to hunters in the area to prevent conflicts. Military units must be vigilant to avoid entering training areas they have not scheduled in RFMSS to ensure the safe deconfliction of hunting and training.

**g. Late Arrivals.** Units must occupy a contractor-supported range with a responsible unit or contracted training representative (not necessarily the ROIC/RSO) within 1 hour of scheduled "HOT" time or the range will be cancelled for that day. If a unit fails to arrive on a range that scheduled Base EOD support has been requested; F-6 and K-510, or as requested for down-range target emplacement within (30 Minutes) one-half hour of the scheduled time, that unit forfeits the requested Base EOD support for that day. Requests for an extension may be granted if notified within the designated time requirements. During normal working hours Range Control requires 4 hour notification. No extension will be granted after normal working hours, weekends, and holidays. A contractor must be present at all times during the scheduled event on contractor supported ranges no matter if units has its own targetry.

**h. Requests for Base EOD support must be submitted to the Commanding Officer, MCB Camp Lejeune (Director, RCD) five working days in advance of the first day of training. Call Range Control Operations Chief at 451-5803 for assistance.**

**i. Live fire ranges and most training areas/facilities may be used by more than one unit, on the same day if scheduled and deconflicted by time. There are two methods of use for sharing ranges and most training areas/facilities;** co-using and piggybacking.

(1) **Co-using** is encouraged when the following coordination, restrictions, and conditions are met:

(a) Co-using unit will contact original requesting unit and coordinate use of a range, training area/facility.
Original requesting unit will send an email to Range Scheduling modifying their time, event, or area allowing the co-using unit to schedule their training in RFMSS on the same date, de-conflicting by time or space.

(b) Live fire ranges must be scheduled, deconflicted by time, and approved by Range Scheduling.

(c) On-coming unit must ensure ample time is given to the prior unit for range police or accept the range “As Is”. The oncoming unit will be held accountable for all cleanup responsibilities. Damages must be noted during the turnover to ensure the responsible unit is held accountable.

(d) Training areas will be deconflicted by event and or area by the scheduled unit using that training area.

(e) More than one unit may use a range and training facilities supported by a contractor if scheduled hours collectively do not exceed the contractor’s daily hour limitations for that range/facility.

(f) MOUT facilities have restrictions emplaced for both single and multiple unit training use. MOUT facilities are deconflicted by event and contractor support more so than the number of units using the facilities. These facilities are deconflicted and scheduled by the MOUT staff.

(2) Piggy-backing is discouraged even if the following coordination, restrictions, and conditions are met:

(a) The piggybacking unit(s) must coordinate with the host unit (the unit that originally scheduled and signed for the range), must use the same weapon(s)/weapon system(s), and use same ammunition by DODIC that the host unit scheduled and signed for.

(b) The host unit agrees to the proposed piggyback and all requirements set forth by this SOP. Host unit must send an email to Range Scheduling discussing and agreeing to the piggybacking. Range Scheduling must approve the piggybacking prior to its use.

(c) The host unit must let BLACKBURN know of the additional piggybacking unit(s) and number of additional personnel and ammunition expended.
(d) The host unit requests RCO approval to employ or change any item not on the original TAR at least two workdays prior to actual firing time. The piggybacking unit(s) will work through the host unit for approval of any changes.

(e) The Range Control must authorize any changes to previously approved firing times or weapons, if supportable.

(f) The ROIC and RSO of the host unit will be responsible at all times for safety, firing, cleanup, and inspection of the range for all piggybacking units. If host unit cancels training, the piggybacking unit(s) training is cancelled as well.

(g) If piggybacking unit desires to resubmit for the range/area/facility, scheduling conditions mentioned in paragraph 3003 still apply. Any written special range request or agreements must be readdressed and re-approved.

j. A written special range request (SRR) to MCB, Camp Lejeune Range Control is required for units to reconfigure an existing range or train with a weapon/munitions not normally authorized on a specific range. The request must specify the planned scheme of maneuver, the weapons/munitions to be fired, and safety actions (Safety Plan/ORM) to be taken and must arrive at Range Control at least ten (10) workdays prior to the scheduled training. See Appendix J of this SOP.

k. Priority Range Assignments

   (1) Unit training priority assignments are listed below. These range priority assignments do not, however, preclude other units from requesting and using the range when it is unused by the priority unit. The list below is subject to change.

      (a) Range D-9/R100 (MCCS Skeet Range): Marine Corps Community Services (MCCS). In the future a new skeet range will be built called R-100 located off Saw Mill Road by the front gate. Another Range SOP section for R100 will be published at a later date.

      (b) Engineer Training Area ETA-3: 2d Combat Engineer Battalion, 2d Marine Division if scheduled within 90 days.

      (c) Range ETA-1/ETA-7: Marine Corps Engineer School (MCES) if scheduled with 120 days.
(d) RA, RB Training Areas: 2d Marine Division when scheduled in RFMSS.

(e) Camp Davis Runways (North/South), LHD Deck and Oak Grove runways: 2d MAW when scheduled in RFMSS.

(f) SR-10: 2d Tank Bn has priority during scheduled semi-annual gunnery requalification when scheduled in RFMSS.

(g) SR-7: 2d LAR Bn/2d AAV Bn has priority during scheduled semi-annual gunnery requalification when scheduled in RFMSS.

(h) Dodge City Stone Bay, Multipurpose Range, Breacher Facilities/Breacher Pit, RR-249 Shoothouse, RR-243 UTF, and TLZ Vulture: SOTG II MEF and MSOS MARSOC. II MEF units desiring to use these facilities will coordinate with SOTG S-3, MARSOC units will coordinate with MSOS S-3.

(i) Administrative Landing Zones (ALZs) have been designated to specific units or Area Commanders and must be approved by that area commander for other units requesting that ALZ for training. (See Chapter 8 and Appendix C).

(2) All units using these ranges, including priority users, must submit RFMSS TARs and comply with all other requirements of this SOP.

(3) Units that have signed for the above mentioned ranges are responsible for the police and maintenance and may not pass the scheduling assignment to another unit without approval of the RCO.

1. The scheduling of a training area(s) will not include any of the other training facilities that may be located within the borders of that training area, such as tactical landing zones (TLZ), parachute drop zones (DZ), gun positions (GPs), mortar positions (MPs), observation posts (OPs) or live fire ranges. They must be scheduled in RFMSS separately and signed for. When there will be personnel on the ground supporting or being supported by helicopters/tilt-rotors in a LZ (externals, SPIE, rappelling, troop lift, etc.), LZs must be scheduled and signed for prior to training. If the ground unit is being supported, they will schedule and sign for the LZ. If the ground unit is supporting helicopter/tilt-rotor operations, the squadron will schedule and make comments in RFMSS listing the supporting unit who will sign for the LZ.
m. All live fire ranges must be closed at regular intervals for EOD sweeps in order to reduce unexploded ordnance hazards and to conduct range maintenance and re-targeting. Priority and timing of closures will be determined by the RCO and will be scheduled in RFMSS and annotated in the Range Firing Warning Order/Message.

5. **Special Range Requests (SRR)**

   a. Any deviations/changes from established live fire ranges, gun positions, mortar positions, training facilities, training events or approved training scenarios identified in this SOP requires a Special Range Request (SRR). See Appendix J of this SOP for details regarding the creation and submission of SRRs.

   b. All SRRs must be submitted to the Commanding Officer, MCB via RCO/BRSS no later than 10 working days prior to the planned event. Late entries will be considered only on a case-by-case basis due to coordination and planning involved in an SRR.

   c. All SRRs must include the following:

      (1) A letter from the Battalion/Squadron Commander to the Range Control Officer requesting a specific deviation. SRRs can be signed “By direction”. The SRR must be endorsed by the Bn/Sqdn S-3.

      (2) An approved/reviewed and signed operational risk management assessment covering that special event must be included in the package.

      (3) A specific safety plan/ORM.

      (4) The planned scheme of maneuver.

      (5) The weapons/ammunition to be used.

      (6) Any Surface Danger Zones (SDZs) necessary.

      (7) Other information as required.

6. **Non-Standard Training Area Requests**
a. Non-Standard Training Area Requests (NSTAR) must be submitted and must be endorsed by the units chain of command (Example Bn, Regt, Div, and MEF) when a unit desires to train in an area or areas that is/are not designated as a 2-letter training area. (Examples of such areas include the Courthouse Bay, Camp Johnson, Camp Geiger, Industrial Area, Hadnot Point (Mainside), French Creek, family housing areas, and others).

b. The requesting unit must submit such requests to the Director, Operations and Training, MCB Camp Lejeune, attention Director, Operations and Plans Division (MCB S-3, O&P). Such requests must be previously approved through endorsement by the major subordinate commander and CG II MEF (G-3T) or Commander MARSOC prior to submission to MCB Camp Lejeune. TECOM Formal Schools and other tenant commands should submit their requests directly to Dir, Base S-3 O&T, O&P.

c. Requests must be submitted to reach MCB S-3, O&P at least 30 working days prior to commencement of training. This timeline is designed to allow sufficient time for thorough staffing and coordination. NSTARs require extensive coordination with MCB staff and tenant organizations. Additionally, certain specific NSTAR objectives routinely require general officer approval. As such, late NSTARs will not normally be accepted. NSTARs that require use of ammunition and explosives must be reviewed by the Explosives Safety Office prior to approval.

d. Request Format. Requests must include:

(1) Purpose of Request

(2) Detailed Concept of Operations Narrative

(3) Detailed Scheme of Maneuver

(4) Training and Readiness Goals of the Training (Core skills and tasks)

(5) Detailed Timeline of Training Events

(6) Risk Assessment, including ORM Worksheet

(7) Weapons and ammunition to be used

(8) Individual and unit equipment to be used
(9) Map chip outlining the exercise area

(10) Unit POC, including full name, rank billet, phone number and e-mail address

e. The requesting unit should be prepared to brief the NSTAR concept and details to the MCB Camp Lejeune staff at a coordination meeting prior to the training event.

f. The Commanding Officer, MCB Camp Lejeune is the final approving authority for all NSTARS; MCB S-3 is the cognizant staff section. Direct all NSTAR questions/issues to the S-3, at 451-0375/451-8905. DIRLAUTH with other MCB organizations or staff sections should not be assumed. The S-3 will publish approval/disapproval/modification of all NSTARs via Automated Message Handling System (AMHS).

7. Hikes/Conditioning Marches

a. All hike routes will be submitted to RCO/Range Control Operations Officer at least two (2) working days (48 Hours) in advance of the conditioning hike for scheduling of the training areas and roadways. If the unit is conducting a hike within a lettered training area the unit must schedule the training area in RFMSS. Units will include an overlay and must fill-in and sign the Range Control Hike Checklist.

b. Units conducting conditioning hikes must establish and maintain communications with the Fire Desk Operators, call sign BLACKBURN, on frequency 34.70 FM (squelch off) at all times during the hike. Communications are required to allow for passing of destructive weather conditions, heat index information, and potential safety issues and if MEDEVAC support is needed. BLACKBURN can also direct emergency medical support to the unit’s location if requested. Unit must check in with BLACKBURN at the start of the hike and upon completion reporting the number of personnel trained.

c. The unit must have road guards during the hike with safety vests on, a safety vehicle (government vehicle only) and a corpsman or corpsmen depending on the size of unit during the entire hike. The road guards (headlights/taillights) will have some type of light device (i.e., flashlight, or chemlights) during night/low visibility on them. Hiking units must keep all personnel at least 3 feet from the hard surface roads. Road guards will be posted for all paved road crossings. Safety vehicles are not authorized on the paved PT trails and cannot
delay the normal flow of traffic. Using unit must ensure proper road crossing procedures are in place, enforced, and supervised to prevent a mishap. Unit are not authorized to cross major/high traffic roads during high traffic times like Holcomb Blvd, Sneads Ferry Road, McHugh Blvd, Cross Street and Birch Street.

8. **Priority of Training**

   a. In the event of conflicting requests, ranges, training areas, and training facilities will be assigned to requesting units in the following precedence:

      (1) Capabilities Exercises (CAPEXs/VIPEXs), as directed VIPEX and Major Joint or Combined Exercises.

      (2) Marine Corps Formal Schools training required by POI (120 Days).

      (3) Pre-deployment training or training in conjunction with assignment to contingency status (i.e. COMPTUEX, CERTEX, ESGEX, MARSOC requirements).

      (4) Special training directed by higher headquarters; gunnery requalification; research, development & evaluation activities.

      (5) Normal unit training (90 Days).

      (6) Sports and recreational activities (MCCS) as scheduled.

   b. Unique training activities that do not fit the categories above will receive a training priority from higher headquarters.

4. **Bumping Procedures.** In the unlikely event that a unit must be bumped from its training to support a higher priority as designated by II MEF, TECOM, or other tenant command, the RCO or Range Control Operations Officer (RCOO) will make every effort to relocate the bumped unit to a similar range, training area, training facility or move the bumped training to another date that meets the unit’s needs.

9. **Notice to Mariners**
a. All training events that affect the waterways around Camp Lejeune, to include the AIWW, New River (all sectors), Mile Hammock Bay, and Onslow Bay (N-1/BT-3 Impact Area), requires publication of a Notice to Mariners for coordination with external agencies.

b. All events that require a Notice to Mariners must be scheduled at least 14 working days in advance. Late requests for such events will not be approved without special justification and the approval of the Director, Range Control Division.

c. Many of the ranges that require a Notice to Mariners also require an air sweep: E-1, G-5, G-7, H Ranges, Naval Gunfire, N-1/BT-3. In order to arrange the air support necessary for the sweep, these ranges must be scheduled at least two calendar months (60 Days) prior to the firing date. (Example: If a unit wants to fire across the AIWW in the month of March, the request must be submitted NLT the last working day of January.) Units requesting to schedule these ranges without the proper lead time are responsible for coordinating their own air support for the sweep.

10. Notice to Airmen

a. All training events that require Greater Sandy Run Area (GSRA) airspace activation outside the published time of use (0600-1800 Monday-Friday) require a Notice to Airmen (NOTAM) be in place 24 hours in advance. Some examples of these events may be live fire on GSRA Ranges or parachute operations outside the published time of use. Range Control coordinates a monthly NOTAM request message. Events that require a NOTAM must be scheduled in RFMSS 5 working days prior to the first day of the month the event is scheduled in. This gives Range Control time to coordinate with external agencies prior to releasing the monthly NOTAM request message for the month the event will occur. (Example: If a unit wants to shoot on SR-10 in the month of March, the request must be submitted NLT 5 working days before the end of February.)

b. For each NOTAM previously submitted a separate NOTAM Worksheet will be submitted by the requesting unit to Cherry Point Airfield Management NLT 96 hours prior to the start time of the scheduled event (see example at the end of this chapter). For questions concerning the NOTAM worksheet contact Cherry Point Airfield Management at (252) 466-6768.
11. Road Closures

a. When a requested event requires Range Control to close a major roadway, that event must be scheduled 10 working days in advance in order for Range Control to publish a road closure message. Ranges requiring road closures include:

(1) Lyman Road Ops for Harriers (AV-8B) Operations: closes Lyman Road.

(2) G-3 TOW: closes Lyman Road/Sim Center.

(3) G-3 .50 cal: closes Highway 172.

(4) ETA-2 line charge: closes a section of Highway 172.

(5) Naval Gunfire: closes Highway 172 and AIWW.

(6) G-10 Convoy Range: closes Highway 172 if firing the M-2 .50 cal machineguns.

(7) G-6 CBC if requested and scheduled by the unit to close Highway 172. Road Guards are required.

(8) Other training events may require road closures/road guards.

b. SRRs may require road closures/gates/barriers/road guards, depending upon the requesting unit’s scheme of maneuver, weapons and/or ammunition.

c. The unit is responsible for posting all road guards, with required night gear (road guard vest and lights), securing required gates, maintaining communications with BLACKBURN and the assigned road guards, and clearing the roads in the affected training areas prior to going hot.

12. Check Out/In Procedures

a. Responsibilities
(1) The Commander of the using unit is responsible for the live fire range/training facility/training area and the safe conduct of the scheduled training.

(2) The Commander, or his designated representative, must read and understand this entire SOP/manual. Sections on the duties of ROIC/RSO, safety requirements, and special instructions for the range requested are especially important. The ROIC and RSO must know the weapons system safety data, SDZs, all restrictions, and must have appropriate portion of Appendix A of this SOP and all applicable weapons safety publications such as (TM's/FM's/MCWP’s/MCRP’s and others) in their possession while on the range.

(3) Per MCO 3570.1B/DA PAM 385-63 all units must have a current Command/Unit Certification Letter (CCL) for all Range OICs/RSOs and non-live fire specialty personnel signed by the unit commander. The Command Certification Letter must be updated quarterly and is due before the beginning of the new quarter (Jan/Apr/Jul/Oct) or when needed or directed. The original Command Certification Letter (CCL) must be provided to Range Control and each sheet signed. Updates to the letter’s enclosure listing qualified personnel are NOT authorized to be sent via e-mail/FAX. The Command Certification Letter may also include non-live fire certifications/qualifications such as; Dive Supervisors, Drop Zone Safety Officers, Jumpmasters, Safety Insert Officers, Naval Gunfire Liaison Officers, Shore Fire Control Party, HRST/HST qualified personnel, Breachers, Marine Combat Instructor of Water Survival (MCIWS), Marine Combat Instructor Trainer of Water Survival (MCITWS), HEAT Instructors, and CVOT instructors, or any other specialty no matter the rank.

(4) The Commander’s designated representative must ensure the use of all required safety items, including but not limited to: range flag; light(s); phone(s) and radios; barricade(s); flak jackets; helmets; eye and hearing protection; emergency pyrotechnics if required by the using unit; illumination device(s) and reflective vests; safety vehicle, corpsman with required medical kit; binoculars; special range checklists, instructions, and scenarios.

(5) The Commander’s designated representative must complete all required coordination in advance of the scheduled training event. The ROIC/RSO is responsible for unit’s conduct and safety and must enforce and supervise all requirements. ROIC and RSO WILL NOT have any other duties/assignments, participate in the training, or fire any weapon/ammunition.
during the time period they are assigned duties as the ROIC or RSO.

b. Checking Out and Checking In Ranges

(1) Using units can check out scheduled ranges up to eight (8) working days in advance (Mon-Thur) to the date of use/event. The ROIC (Only the ROIC can check out ranges) must check out the range or training facility from Range Control no later than 1200 the day prior to the scheduled event (Thursday for ranges Saturday, Sunday, Monday and Holidays that fall on a Tuesday). Ranges not checked out by 1200 are cancelled and recorded as a unit no-show. Friday will be used to check out special events (TACPs) and write the weekend and holiday schedules. Those ranges and training facilities not checked out Mon-Thur could be checked out on a Friday if coordinated by unit’s operation officer and approved with Range Control Operations Officer prior 1200 Thursday.

(2) Prior to checking out a live-fire ranges/impact areas, gun positions, mortar positions, drop zones, OPs or TLZs, ROICs and RSOs must have attended the Range Control Range brief and have a current, signed Camp Lejeune Range Control Safety Card in their possession, and be on the unit’s current Command Certification Letter (CCL).

(3) The ROICs/RSOs of diving operations, parachute operations, HST/HRST operations, aerial gunnery, G-10 live fire operations, TACP/CAS, and SIMCAS must conduct a face-to-face brief with the Blackburn (Fire Desk Operators) upon checkout.

(4) Grenade ranges require special coordination due to the requirement of having an EOD response team standing by to take immediate action with UXO/dud grenades. See grenade range procedures for F-6 and K-510 in appendix A.

(5) The individual ROIC who checked out the range will be the only one who checks it in. The individual who checked out the range will be responsible for all equipment and items signed out and must return all range safety equipment within 24 hours. ROIC/RSO is requested to submit a range after action report concerning the quality, police, and maintenance conditions of the range, via ICE for each range used within 24 hours of completion of the training event. This will assist Range Control/Range Maintenance in the identifying problems or enhancements as early as possible so they can be resolved.
c. Checking in with BLACKBURN

(1) When the ROIC or RSO is prepared to commence fire, he must call BLACKBURN and request authorization to go "HOT" radio BLACKBURN on 34.70 FM (Squelch off). This net is for range safety traffic only; units will use their own tactical frequency for all radio traffic within the unit.

(2) Proper radio communications with BLACKBURN is critical to the safe conduct of live fire. Units must include the call signs (the name of the range they are on) in each radio transmission in order to prevent confusion on the net. A proper response would be, "BLACKBURN, THIS IS GOLF 3." "ROGER...OVER." is not safe when responding to a BLACKBURN radio call because BLACKBURN would not be able to positively identify the unit/range/training facility/training area making the radio check.

(3) The ROIC or RSO must monitor the safety net, 34.70 FM, at all times and give BLACKBURN a radio check every 30 minutes on the hour and half hour while in a "HOT" status. Other required radio calls to Blackburn: request to occupy the range; request to go hot; request to go cold; request inspection and secure/departing from the range. The ROIC/RSO is required to provide training data on the number of personnel trained and type and number of rounds fired by DODICs when calling to secure from the live fire range.

(4) Units are also required to report occupation of and departure from training areas by radio to BLACKBURN. Units must call BLACKBURN (34.70 FM) when occupying the training areas so BLACKBURN can pass weather information, fire conditions, heat conditions, and other pertinent information. 34.70 FM (squelch off) also serves as a MEDEVAC/CASEVAC emergency net. Mandatory times for all units training in the training areas to call Blackburn are 0600, 1400, and 2200 during the shift change so the oncoming BLACKBURN can update unit status information on the ranges and training areas.

(5) The ROIC and RSO who checked out the range must be present on the range until the range is declared "COLD" by BLACKBURN and present for the range inspection by a range inspector. Range inspections will not take place unless the ROIC or RSO is present and only during normal working hours.

13. Face-to-Face Briefs
a. The following events/ranges require a face-to-face brief with Range Control BLACKBURN/Base Range Safety Officer:

(1) All Artillery Gun Positions/Mortar Positions, to include Artillery Reconnaissance, Secure, Occupy, Position (RSOP).

(2) G-3 .50 cal
(3) G-3 TOW
(4) G-5/G-5 Inert Line Charge
(5) G-6 CBC
(6) G-7, G-7 Direct Fire Artillery
(7) All Parachute Operations, Cargo Operations
(8) All Dive Operations
(9) Control of Airspace (R5306D/E, R5304/R5303) by DASC
(10) All Unmanned Aerial System (UAS) Operations
(11) All CAS missions (including SIMCAS)
(12) ALL Lyman Road Closures (AV-8B Ops)
(13) All waterborne live-fire ranges (H Range)
(14) All AIWW closures
(15) Naval Gunfire
(16) FARP Operations
(17) Anti-Air/Air-Defense Operations on E-1
(18) G-10 Helo/Fixed Wing Operations (LF/NLF)
(19) MAC-3 (BRSS)
(20) G-10 Live Fire Convoy Range
(21) ETA-2/ETA-4 Line Charge training
(22) CAPEX and other large special events

(23) All Hikes (Hike Checklist Required)

(24) Training on Onslow Beach (EB Training Area)

(25) HST/HRST Operations

(26) Helo Casting/Open Water Swim

(27) Other ranges/activities as required/directed.

b. All face-to-face briefs will occur at the BLACKBURN fires desk right after the range/training facility is checked out. The range must be checked out NLT 1200 the day prior to the first day of the planned event. Contact BLACKBURN for larger range activities (EWTG TACP, CAPEX, MEUEX, etc.) at 451-3064 to schedule a brief.

14. Utilization Reporting

a. Accurate utilization data is critical to all DOD installations and is frequently used as a means to justify funding for new, improved, or enhanced ranges and training facilities.

b. Training units must report range usage data when calling in to BLACKBURN to secure from the range. The ROIC/RSO will be required to provide the number of personnel trained and type/DODIC/quantity of all ammunition fired to include blanks, pyrotechnics and other training devices assigned DODICs.

c. Training units will report training area usage by reporting occupation of and departure from training areas. This must be done by VHF radio (or range phone if available) to BLACKBURN.

d. Weapons Training Battalion Stone Bay, Special Operations Training Group, Marine Special Operations School/MARSOC units are responsible for the daily scheduling of their ranges into RFMSS and reporting the utilization of those ranges, to include the number of personnel trained and type/DODIC/quantity of ammunition fired.

e. To record training conducted aboard Camp Lejeune by non-tenant units, the hosting tenant command must report the required information to Range Control. Host units that schedule
ranges, training areas, or facilities for non-tenants can annotate the RFMSS comments section to identify the non-tenant unit. This information can also be passed to Range Control by electronic means. [Non-tenant units include: active DOD units not stationed aboard MCB, Camp Lejeune; non-tenant U.S. Coast Guard units; Reserve and National Guard units; units from foreign countries; local and national law enforcement agencies; civic or fraternal organizations].
15. NOTAM Para Drop Worksheet

Closest V.O.R. or NAVAID or Facility within 25nm, also radial/DME from that point.

Radius of the Jump EX: 2-3 NM.

Altitude of the Jump EX: SFC TO 10,000 Feet.

Date and Duration of Jump.

Call Sign & Type of Aircraft, Also Radio Frequency the Aircraft Will Be Operating on.

The Number of Passes and the Number of Jumpers on Each Pass.

POC and Phone Number.

Any questions contact:
Lejeune Range Scheduling at (910) 451-3065/3066/4478
lejeunerangescheduling@usmc.mil
Cherry Point Airfield Management (252) 466-6768
Chapter 4

Medical Evacuation Procedures

1. General

   a. All training/firing injuries/mishaps that occur within live fire ranges, training areas, or training facilities that are controlled by MCB Range Control (except MCOLF Oak Grove) requiring MEDEVAC/CASEVACs shall be reported to BLACKBURN by the unit, even if the unit uses its own assets to conduct the evacuation. BLACKBURN (Fire Desk Operator) is manned 24 hours a day in order to facilitate, coordinate and document (File a Report) on all training-related medical/casualty evacuations within MCB Camp Lejeune’s training areas, live fire ranges, and other training facilities. It is critical the incident details, victim injuries, and assets necessary to best address victim injuries are clearly relayed to BLACKBURN to ensure a timely response. The unit is responsible for initial mishap/incident site control to prevent site contamination for mishap/JAG investigations. These procedures also apply to all contractors/civilians aboard MCB Camp Lejeune that get injured in or on training areas, live fire ranges, and other training facilities.

   b. Red signals (smoke, pyrotechnics) are reserved for use during actual emergencies only. Any unit or aircraft observing a red signal should immediately inform BLACKBURN. Red signal devices being used for training must be coordinated with Range Control/BLACKBURN before being used.

   c. All commanders conducting training that involves the firing, or detonating of small arms, artillery, mortars, mines, missiles, rockets, demolitions/explosives, and hand grenades or any other high risk/high hazard activities will have a competent medical corpsman/medic with appropriate medical supplies/kit, government safety vehicle, and other required equipment present on the range, training area, or training facility at all times.

   d. Trauma patients will be transported to the most appropriate medical trauma center via the 911 system.

   e. There is no standby MEDEVAC aircraft at MCB Camp Lejeune.

2. MEDEVAC/CASEVAC Assistance Procedures
a. In the event of MEDEVAC/CASEVAC, the ROIC/RSO shall immediately contact and remain in constant communication with BLACKBURN until directed otherwise. The ROIC shall pass the following information to BLACKBURN:

(1) Category of MEDEVAC/CASEVAC request (competent medical personnel or the senior Marine on location shall determine the extent of the medical condition):

- **Emergency** - Life threatening
- **Priority** - Serious but not life threatening
- **Routine** - Minor Injuries

(2) Air or Ground transportation.

(3) Number of patients.

(4) Type of injury/injuries (Description of Injury), wound, patient(s) condition and if corpsman is present. If special equipment is needed for patient care it must be reported to BLACKBURN.

(5) Location of patient(s): grid coordinates, main roads, prominent terrain feature, prominent man made feature, live fire range number or training area letters.

(6) LZ marking (panels, smoke, and lights) and all hazards to the aircraft (if applicable) must be reported.

(7) Source of injury (e.g., gunfire, vehicle, shrapnel or others as required).

(8) Patient(s) age, sex, blood type, name, grade, service, and the unit/command.

(9) Other information as required, like factors which may generate public interest, if any. Unit may be required to secure the site.

b. Primary means of reporting this information should be telephone. If a telephone is not available, it will be transmitted to BLACKBURN via radio. ROIC/RSO should speak directly to BLACKBURN with all pertinent information. Personnel reporting emergencies will maintain communication with BLACKBURN.
until the MEDEVAC/CASEVAC is completed. Routine radio traffic for all live fire ranges/training facilities/training areas will be suspended until the MEDEVAC/CASEVAC situation is resolved.

c. **Ground transport is the primary MEDEVAC/CASEVAC means at MCB Camp Lejeune**; using organic safety vehicle or requesting an ambulance for medical emergencies through BLACKBURN. There is no dedicated military aircraft MEDEVAC/CASEVAC available at Camp Lejeune. If a military aircraft is airborne and available, BLACKBURN will coordinate the MEDEVAC/CASEVAC with the aircrew and direct them to the designated pickup site which the unit will select and control. The unit must be prepared to control the aircraft both during daylight or darkness as required. However, at most MCB Camp Lejeune live fire ranges, ground ambulance can arrive at the evacuation site more rapidly, with EMS/EMT personnel, and more sophisticated life saving support equipment. Units should provide guides for the ambulance from a main service road to the exact location on the ground, or, if in the opinion of the ROIC, RSO, Unit Leadership, and corpsman the patient can be moved, transport your patient to the **nearest paved hard surface road** to speed up the process. If unit is training with the GSRA Complex use Highway 17 only. In most circumstances, medical evacuation by unit safety vehicle will be the most effective means of transportation. Good judgment will always be the paramount factor in determining which mode of transportation (Unit Safety Vehicle or Ambulance) should be used.

d. BLACKBURN will put selected ranges into a "Check-Fire" as required or directed. BLACKBURN will notify the Naval Hospital and other agencies as required (Base OOD/Unit OOD, PMO, Fire Department, etc.) while continuing to monitor the radio net.

e. BLACKBURN will notify appropriate Unit Commander, the Base OOD/Unit OOD, Provost Marshal (PMO), Department of Public Safety (DPS), Naval Hospital (if required) and the Director, Range Control Division, Range Control Officer/RCOO/RSS and all others as required.

f. Under no circumstances will the names or units of anyone killed or injured on government property be released to media representatives or other members of the public. The appropriate Unit Commander shall notify the Public Affairs Office, which will release any required official statement. If a Serious Incident Report (SIR) or Personal Casualty Report (PCR) is
released by a command/unit the command/unit must ensure that the
CO MCB is included as an info addressee on the message/report.

3. Casualty Procedures for Diving, Internal Passenger
Helicopter Aircrew Breathing Device (IPHABD), and Modular
Amphibious Egress Trainer (MAET) Accidents

   a. Prior to scheduling or conducting any training that uses
compressed air; IPHABD and MAET (Helo Dunker) operations,
coordination with the Master Diver at 2d Reconnaissance
Battalion Dive Locker, 450-7710/7711/7742 or 2d MSOB chamber,
440-7830/7840 is required for ensure availability of their
recompression chambers by coordination 7 days prior. This is
mandatory to ensure proper preparation and assignment of
personnel to operate the Recompression Chamber will be on hand
if needed. Scheduling is subject to 2d Recon and 2d MSOB
operational commitments. 2d Recon should be contacted as the
primary, 2d MSOB as the secondary. If 2d Reconnaissance
Battalion or 2d MSOB chambers are not available, Emergency
Consolidated Communication Center (ECCC) will coordinate
recompression chamber use with Duke University Medical Center.

   b. Contact the 911 to request an ambulance for all diving
accidents and pool casualties. While awaiting response, the
senior diving EMT will notify BLACKBURN and identify and
evaluate the patient for turn over to the Base EMT. Area 2,
Area 5, Courthouse Bay, and MAET all have red “direct hot line”
connected directly to the ECCC to request immediate medical
support in case of emergencies at those locations.

4. Airspace Management During Emergency Response Requiring
Civilian/Military Aircraft Evacuation. Regardless of the
situation, emergency response aircraft entering the restricted
airspace shall contact BLACKBURN on 233.8 MHz or 34.70 MHz
(Military) or 119.5 (Civilian). BLACKBURN shall route emergency
response aircraft in the most expeditious manner as possible to
the location requested by the “On-Scene Commander”. At all
times, the emergency response aircraft shall maintain
communications with BLACKBURN and shall adhere to all aircraft
safety requirements (VFR) as set-forth in this SOP. BLACKBURN
will inform all other aircraft operating in the area about the
routing and destination of the MEDEVAC/CASEVAC aircraft. If
there is an “on scene commander” aircraft, it will communicate
with the MEDEVAC/CASEVAC aircraft (on BLACKBURN’s frequencies
233.8 UHF, 119.5 VHF, or 34.70 FM) and maintain separation.
Chapter 5
Use of Weapons Systems

1. General
   
a. Firing of all direct fire weapons, indirect fire weapons, explosives/demolitions, lasers devices and all other training devices must conform in all respects to appropriate Surface Danger Zones (SDZs) for that weapon system/ammunition; see MCO 3570.1B/DA-PAM 385-63 and all other references as required. Units firing weapons must ensure the down range area is cleared of all personnel/aircrafts before conducting any live fire. The proximity of major highways, paved roads, tank trails, adjacent ranges, or maneuver areas at MCB Camp Lejeune demands that careful consideration be given to the live fire range and the impact areas for all flat and high trajectory projectiles to ensure that they impact within established, impact areas, approved SDZs, and sector of fire for the assigned range.

   b. Experimental and foreign weapons, training devices, ordnance, or ammunition will not be fired or demonstrated on any range at Camp Lejeune without the prior approval from the Base Range Control Officer. The unit must provide Range Control with a Safety Certification from MARCORSYSCOM, Warfighting Lab or any other appropriate military service documentation prior to conducting live firing or use of that device/equipment. MARSOC may also have certifications through USSOC, Naval Special Warfare Command (Crane) and USASOC Foreign Weapons Armory which will be provided to Range Control as required.

   c. For further guidance and information on general range safety issues, all using units should reference the MCO 3570.1B/DA PAM 385-63 and the TECOM ROIC/RSO Pocket Guide. Specific range safety information is contained throughout this SOP and in Appendix A of this document.

2. Chemical Ammunition and Smoke
   
a. The use of lethal or incapacitating chemical agents in training is prohibited aboard MCB Camp Lejeune.

   b. Riot Control Agents (RCAs)

      (1) Types of RCAs authorized for use at CLNC are limited to CS, CSX, CS-1, CS-2, and CR.
(2) Use of RCAs in training areas requires supervision by CBRN personnel specially trained (5702/5711) in field behavior, individual protection, and first aid for RCAs.

(3) RCAs will not be used under conditions that are dangerous to life, property, or endangered species like the RCW. Minimum safe distance to tank trails, improved trails, and TLZs is 500 meters. Minimum safe distance to public roads, built-up areas and endangered species sites is 500 meters. No RCA will be used within 1000 meters of the installation boundaries to include waterways. CS can be used on tank trails as long as the distance from paved roads is more than 500 meters and the surrounding training areas are scheduled. Road guards should be posted to prevent other units/vehicles/personnel from entering the training area/tank trail. CS will not be used in TLZs unless the TLZ is scheduled in RFMSS and signed for by the using unit.

(4) All commanders conducting field exercises with RCAs must conduct an ORM to include, but not limited to: heat conditions, safety, training of Marines, protective gear, open wounds, and contact lenses, and all other requirements set forth in the Marine Corps Order on CBRN Training.

(5) CS is not authorized inside MOUT Complex, Mobile MOUT, Combat Town, and all Forward Operating Bases (FOBs). At no time will any CS/Smoke be used in any building or structures of the facilities listed above. CS/Smoke is not authorized in the entire Greater Sandy Run Area (GSRA).

c. Smoke/Smoke Pots. The use of smoke grenades/smoke pots can pose health and safety issues. Follow the guidelines set below:

(1) Smoke will not be used inside any enclosed structures, buildings, tunnels, or caves.

(2) Smoke will not be used in public demonstrations, displays or ceremonies unless positive dissipation of the smoke can be assured with minimal exposure to non-participating personnel.

(3) Special care must be taken when using hexachloroethane mixture or high capacity (HC) smoke. Ensure that appropriate protection is provided and that consideration is given to weather conditions and potential down wind effects.
Personnel will carry a protective mask when participating in exercises that include the use of HC smoke.

(4) HC smoke is not authorized for use within the Red-Cockaded Woodpecker cluster sites. Cluster sites are marked with a single band of white paint on perimeter trees.

(5) Smoke pots must be kept dry and will not be ignited during visible precipitation. Minimum safe distance to a smoke pot is 30 meters. Smoke pots will only be used after checking wind direction to ensure the smoke will stay within the boundary of Camp Lejeune and not impede any traffic aboard the MC Base.

3. Simunitions, Special Effects Small Arms Marking System (SESAMS) and MILES 2000

a. Though simunitions (SESAMS) training is less dangerous than live fire, such training still holds the possibility of injury to SESAMS users and others in the training areas. SESAMS rounds travel at approximately 500 feet per second and can cause damage to soft, unprotected tissues including the eyes, throat, genitals, and exposed skin. The unit commander is responsible for the safe use of this innovative training system at all times. A SESAMS training event is treated like a live fire event and must be signed for by a ROIC and all other requirements in place.

b. Scheduling SESAMS usage. All requests to use SESAMS will be initiated via RFMSS and must include a qualified Range OIC and RSO. The using unit will identify the weapon to be used and scheduled "Hot Times" in RFMSS. Units can request a specific location such as Combat Town, the MOUT Complex, Mobile MOUT, Urban Training Facility (UTF, a Tactical Landing Zones (TLZ)/Gun Positions (GP) or an entire training area. Scheduling SESAMS in the MOUT, Combat Town, Mobile MOUT or a TLZ/GP will include an area 150 meters around the training site that must be secured/controlled by the using unit. This distance provides a buffer area to mitigate the chance for inadvertent contact or injury. The daily Range Fire Warning Order/Message will highlight training locations where SESAMS will be used. This will serve as warning to trainers and all other personnel. Other units are authorized within the MOUT training sites as long as the 150 meter rule is in place and coordination has taken place between the two units.

c. Safety Guidance. The unit commander is responsible for conducting training on SESAMS characteristics, hazards, and
safety procedures before conducting training. The unit commander will ensure no live/blank ammunition is located in the SESAMS training area.

(1) Safety gear will be used by all participants:

(a) Full face/eye protection; only the Scott Extreme Stalker Mask, JT Spectra System Mask, or MCU-2A/P gas mask (CQB gas mask) with outer plastic eye shield and canisters attached are approved for use.

(b) Neck and throat protection. Can be a flak jacket attachment, a towel or commercial throat protection.

(c) Body/Skin/Groin protection. Flak Jackets will be worn. Camouflage utilities, sleeves down, and gloves will be worn during simunitions/SESAMS training events. The groin can be protected with the flak jacket attachment, an athletic cup, or a towel. Groin protection and gloves are highly encouraged as per the SOUM 2-10.

(2) A safety vehicle and corpsman will be present. If the safety vehicle or corpsman departs, SESAMS training will cease.

(3) All safety requirements listed in the TECOM SAFETY OF USE MEMORANDUM (SOUM) 2-10 on SESAMS and in this chapter of the SOP will be in place, enforced, and supervised by the ROIC/RSO. Copies of the SOUM 2-10 are posted on the Range Control Web Page and the RTAM TECOM Web Page.

(4) SESAMS are not authorized for use during weather with temperatures are below 38 degrees Fahrenheit as per the TECOM SAFETY OF USE MEMORANDUM (SOUM) 2-10.

d. Rules of Engagement

(1) No intentional shots to the head or face (Rules of Engagement). No shots will be taken at a distance closer than 7 feet/2 meters for the 9mm device.

(2) Prior to firing SESAMS, clear identification of the target must be made, to include identification that the target is wearing appropriate facemask and protective clothing.

(3) Full face and eye protection will be worn until the
ROIC or RSO ensures all weapons are holstered, rendered safe, and a "cease fire" call has been given.

(4) All personnel within 150 meters of the event must be in the required PPE to include support personnel.

e. Ground Safety Measures

(1) The using unit will secure a perimeter 150 meters around the SESAMS training location to deny non-exercise personnel entry into the SESAMS training area by placing out road guards or barriers.

(2) SESAMS will not be used within 250 meters of any paved hard surfaced road used by civilian traffic (i.e. Sneads Ferry Road, Marines Road, Lyman Road, Highway 172, Onslow Beach Road) are some examples.

f. Communication Procedures. The Range OIC or the RSO will call in to BLACKBURN to request permission to "Go Hot" with simunitions exactly as if requesting to "Go Hot" on a live fire range. Once BLACKBURN provides the simunitions/SESAMS brief and authorizes the use of simunitions/SESAMS, the Range OIC/RSO will make normal radio checks every thirty minutes (on the hour & half-hour) stating: "Combat Town, TLZ Gull, Training Area Hotel-Hotel simunitions/SESAMS in use." This will notify other trainers aboard MCB CLNC that simunitions/SESAMS are in use in that area.

g. Upon completion of training, the ROIC/RSO will request to "go cold" and report number of rounds expended, number personnel trained, and conduct a police call. Once BLACKBURN places the unit in a cold status, all simunitions/SESAMS training is terminated for the day. All weapons will be checked by the RSO and ammunition collected/turned in.

h. Minor Training Devices. When using MILES 2000 gear, IED Simulators and SESAMS Kits, refer to the information provided on the following website www.miles-2000.net. Personnel are required to be trained prior to obtaining the equipment. Contact the MILES warehouse (451-9009) to schedule training or obtain the equipment.

4. Small Arms

a. General
(1) Small arms are defined as weapons of .50 cal and below, to include rifles, pistols, shotguns, squad automatic rifles, sniper rifles, sub-machineguns, and both ground mounted, vehicle mounted, and rotary wing aircraft mounted machineguns. All ROIcs/RSOs should review all Technical Manuals/Operator Manuals and all other required references on the weapon, weapon system, and ammunition before conducting any live fire training.

(2) Ensure all safety rules/policies/procedures are followed, enforced, and supervised by the command/unit IAW MCO 3570.1B/DA PAM 385-63 and this SOP.

(3) Ensure all weapons have the proper Pre-Firing Inspection/Limited Technical Inspections (PFI/LTIs) before firing. Requirements for PFI/LTIs are based on TM 4700. Weapons should be properly cleaned and lubricated with the proper/authorized lubrication before conducting any live fire training.

(4) Ensure all personnel within the designated hazard areas wear proper eye/hearing protection, flak jackets, and helmets as required unless authorized by a request for deviation via the unit’s chain of command to the CO, MCB Camp Lejeune via the Range Control Officer 30 days in advance.

(5) Do not mix blank ammunition with live ammunition on any live fire range, training area, or training facility. Ensure all Blank Firing Adaptors (BFAs) have been removed before conducting any live fire with live ammunition or have been properly attached for all blank firing events. Ensure strict accountability of all blank/live ammunition at all times; they must be staged and issued separately. The unit must have and use BFAs on the weapon when firing blank ammunition at all times. BFAs must be painted a bright color like red, yellow or orange and placed on the correct weapon for that color. Units must ensure all ammunition sources like magazines, feed tray are cleared, inspected by the ROIc/RSO.

(6) All personnel will be knowledgeable on immediate action/misfire procedures for the weapon, weapon system, and ammunition being used.

(7) Overhead or flanking fire is authorized only as prescribed in MCO 3570.1B/DA PAM 385-63. Ammunition must be cleared for overhead fire.

b. Machineguns
(1) Field firing for machineguns includes the firing of 5.56mm linked, 7.62mm linked, and .50 caliber linked machineguns at ground targets.

(2) Ammunition should be stored and accountable properly on all live fire ranges as per the required references (BO P8020.1B).

(3) Before the start of any live fire event, the ROIC/RSO will ensure that a cleaning rod and dry patch has been run through the bore from the muzzle of each gun/weapon.

(4) Units firing machineguns shall ensure the complete SDZ is cleared of all personnel before going hot.

(5) All personnel within the designated hazard areas must wear proper eye/hearing protection, flak jackets, and helmets.

(6) No weapon will be loaded until a command to do so is given by the ROIC/RSO. The ROIC/RSO shall check direction/azimuth of fire with a compass; the weapon systems must be pointing down range when loading ammunition. Tripods/Bipods may need to be sandbagged or dug in, as required.

(7) No one is allowed forward of the gun for any purpose unless/until authorized by an ROIC/RSO. The ROIC/RSO will not allow anyone forward of the gun until they have confirmed that each weapon is in a condition 4 and that all other safety rules are in place and enforced by all personnel. (This does not apply to tactical exercises involving blank fire.)

(8) Machineguns may be fired over individuals wearing the proper safety gear in firing exercises provided the ammunition used is cleared for overhead fire and the provisions of MCO 3570.1B/DA PAM 385-63 and appropriate firing tables, field manuals and technical manual are followed. MCB Camp Lejeune does not have any ranges specifically designed to support overhead machinegun fire.

(9) After machineguns are fired, and prior to dismounting or removing them from firing positions/vehicle mount, each gun will be inspected by the ROIC/RSO to physically and visually confirm it is unloaded and in condition 4.
The following actions are required for machineguns being mounted on all vehicles. Vehicle must be stationary, vehicle engine must be turned off, hand brake set, wheels chalked/block and the driver must be out of the vehicle. The T&E must be attached unless firing free gun.

During fire conditions 5 and above units are restricted from delinking ammunition until approved by the G-4/S-4 ammunition section. .50 Cal ammunition is not authorized to be delinked. When approval for delinking ammunition has been granted, only approved tools and methods are authorized.

The 50 cal sniper rifle round DODIC A606 is not authorized on any MCB Camp Lejeune ranges.

5. Mortars

a. Mortars (60mm, 81mm, and 120mm) are not cleared/authorized for any overhead fire. Mortars will not fire over numbered or named highways without an approved Special Range Request (SRR) and appropriate road closure with assigned road guard/gates/detour signs. Requests to fire from other than established mortar positions (MPs) will be handled with a Special Range Request; ten (10) working days in advance.

b. Mortars shall be fired only into G-10 and K-2 impact areas. The minimum range for 60mm mortars is 300 meters, the minimum range for 81mm mortars is 400 meters, and the minimum range for 120mm mortar is 600 meters.

c. All Marines involved in mortar firing shall wear approved protective helmets, flak jacket, and hearing/eye protection.

d. A Forward Observer (FO) is required for mortar firing to observe and adjust the impact of all rounds being fired.

e. Increments removed before firing will be placed in a metal or wooden covered container located outside the firing position at a safe separation distance of 25 meters or more. Unused increments will be handled and destroyed in accordance with FM 3-22-68 (Old FM 23-90). Burning of increments/powder bags must be in accordance with Base fire regulations. Fire fighting equipment must be on hand during all fire conditions. Units burning increments will notify BLACKBURN before and after
the training event. The mortar position must be in a “Hot” status before burning increments.

<table>
<thead>
<tr>
<th>MORTAR POSITION</th>
<th>GRID LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP 1</td>
<td>18S TD 90273765</td>
</tr>
<tr>
<td>MP 2</td>
<td>18S TD 91313759</td>
</tr>
<tr>
<td>MP 3</td>
<td>18S TD 92493731</td>
</tr>
<tr>
<td>MP 4</td>
<td>18S TD 93423739</td>
</tr>
<tr>
<td>MP 5</td>
<td>18S TD 95143719</td>
</tr>
<tr>
<td>MP 6</td>
<td>18S TD 95433535</td>
</tr>
<tr>
<td>MP 7</td>
<td>18S TD 89763471</td>
</tr>
<tr>
<td>MP 8 (In-Active)</td>
<td>18S TD 92603186</td>
</tr>
</tbody>
</table>

f. All mortar safety checks for 60mm/81mm/120mm mortars are mandatory before firing live ammunition. Mortar sights will be bore sighted before any live fire training. Ensure mortars have completed bore scope and pullover tests as required.

g. The ROIC/RSO will calculate, by charge for each mortar, the left and right deflection limits and the minimum and maximum quadrant elevations that can safely be fired from that position. Units firing mortars will have applicable firing tables on the range during the live fire event.

h. The ROIC of the live fire event will ensure each mortar leader has in their possession a copy of the safety information, as calculated by the Range Safety Officer. It will be written on a range card in the form of a SAFETY “T”. The Fire Direction Officer/Fire Direction Control (FDC) will have a copy of the safety information for that mortar unit/mortar system/ammunition. Use of a Mortar Ballistic Computers (MBC) is authorized. In addition to the MBC, a secondary means of computing mortar data must be used and in place and checked against the primary MBC before conducting live fire.

i. Firing restrictions and limitations in TM 43-0001-28 apply to all cartridges and fuses. Cartridge M720 will not be fired in the 60mm in the hand held mode greater than Charge 1.
j. Light Armored Vehicle - Mortar variants (LAV-Ms) will observe all guidance, guidelines, and restrictions in TM-086-55A-10A on the mortar variant.

k. When the Fire Direction Center (FDC) calculates the firing data, the data will be checked against the "SAFETY T" by the appropriate persons for each mortar to ensure that the data calculated is safe and that the data placed on the mortar is safe. Only then can a round be fired.

l. When computing firing data, the MBCs should match exactly for range and deflection. When using an M16 plotting board to verify the firing data from the MBC, deflections should check within 10 mils and ranges should check within 25 meters.

m. At no time will mortars conduct live fire into the Urban CAS (UCAS) facility.

6. Hand Grenades

a. Before live grenade training begins, all personnel must be knowledgeable of the grenade being used and proficient in the safety precautions/immediate action procedures for handling and throwing live hand grenades. Personnel being trained must successfully throw at least two practice grenades prior to throwing a live grenade and rehearse/conduct immediate action procedures for a dropped grenade in the throwing pit. Additional information on all grenades can be obtained in FM 3-23.30 with Change 1, Grenade and Pyrotechnic.

b. Protective helmets, body armor, eye protection, and hearing protection are mandatory on all grenade ranges.

c. Live hand grenades will only be thrown on dedicated hand grenade ranges (F-6, K-510, and MAC-3). Once the safety pin has been pulled, the grenade will be thrown. Do not attempt to re-insert the safety pin.

d. Only one high explosive hand grenade will be thrown at a time on the grenade range. Do not make unauthorized modifications to any hand grenades. Hand grenades will not be milked or delayed before throwing. Hand Grenades will not be taped with any type of tape.

e. Grenade impact areas contain aiming posts for throwers to use as targets/aiming points. Additional targets will not be placed in grenade impact areas; they create an additional hazard.
for EOD personnel during render safe and destruction operations of UXO/dud grenades. Throwers must consider the flight path of the grenade; the grenade must detonate within the impact area. Do not throw the grenade beyond the impact area or outside the designated lateral limits.

f. Live grenades will not be thrown into standing water, mud, snow, or dense vegetation. Duds in such areas cannot be cleared and will result in closure of the range or that lane.

g. White phosphorous grenades will not be thrown on any of the grenade ranges.

h. Range Control scheduling will contact Base Explosive Ordnance Disposal (Base EOD) at least five working days prior via an e-mail with an attachment of the scheduled dates, ranges and times for the following week to coordinate “on-call” Base EOD support if needed or required. It is the responsibility of the ROIC/RSO to notify BLACKBURN when they occupy the range so an Base EOD team can be placed on alert if needed. The “on-call” Base EOD team will be standing by to clear UXO/duds if called by BLACKBURN. BLACKBURN will notify Base EOD that the using unit had a dud/UXO grenade and place the unit in a “Cold” status. Once the dud/UXO grenade has been taken care of by Base EOD the unit will be placed back into a “Hot” status. Once the unit has gone cold for the day the unit must confirm to BLACKBURN that all grenades are accounted for and functioned properly down range, then the ROIC/RSO is authorized to initiate the mandatory police call and range maintenance of the down range impact area.

i. Hand grenade duds/UXOs will be rendered safe or destroyed only by Base EOD personnel. They will not be marked, handled, or moved except by Base EOD personnel. EOD will observe a minimum of a 30-minute waiting period from the time of the report to clearing a dud/UXO grenade. When a grenade fails to function, the ROIC will:

(1) Cease throwing hand grenades into the affected impact area. If the impact area is split by a protective berm, throwing may continue in the half of the impact area unaffected by the dud/UXO with permission of BLACKBURN.

(2) Notify BLACKBURN of the dud/UXO live hand grenade, request to go “Cold” and request Base EOD support.
(3) Ensure all personnel remain under cover until Base EOD personnel have cleared the dud/UXO.

(4) Standby to render assistance to EOD personnel as to the location of dud/UXO grenade.

(5) After the dud/UXO has been cleared, request permission from BLACKBURN to go “Hot,” and continue throwing hand grenades.

j. Cease all handling and throwing of all live hand grenades one hour prior to sunset.

k. Do not move down range unless accompanied or cleared to do so by Blackburn or Base EOD.

l. Units should delay training during inclement weather (i.e., thunderstorms, rain, snow, sleet) that would interfere with the grip, and/or throwing of grenades or standing water in the throwing pit.

m. Do not throw practice grenades from the live fire pits. Practice Grenades will only be thrown from the practice pits.

n. After all hand grenades are thrown and the unit has confirmed that all hand grenades have functioned properly the using unit must pick up all ammunition dunnage (i.e., pins, spoons, clips down range), fill in all holes and level out the impact area before calling for inspection by a Range Inspector.

7. 40mm Grenade Launchers

a. Personnel firing the 40mm M203, M32A1, and MK19 grenade launchers shall be instructed in the proper use, safety precautions, and immediate action procedures for the launcher prior to firing live and training practice rounds. A minimum of 6 meter separation will be maintained from the firing positions and between weapon systems. Minimum target engagement is 310 meters with 40mm linked HE/HEDP for MK-19. When firing from a vehicle mounted with a MK-19, ensure the vehicle remains stationary with the T&E mechanism emplaced and the driver must be out of the vehicle, vehicle engine is turned off. Ensure the weapon system is properly mounted and locked down.

b. Protective helmets, body armor, hearing and eye protection are mandatory when firing 40mm HE/HEDP. Proper
eyewear protection (ballistic goggles) sleeves down, and gloves must be worn when firing the MK-19 at all times.

c. HE/HEDP grenades will only be fired on authorized ranges and into a dedicated impact area. Hazardous fragmentation from HE/HEDP grenade ammunition maybe experienced up to 165 meters from point of detonation.

d. Dud/UXO 40mm HE/HEDP rounds are extremely dangerous due to sensitive fusing and should not be disturbed in any fashion. Report all duds to BLACKBURN; do not enter the impact area.

e. 40mm illumination/smoke (signaling devices) rounds can be used in the training areas for unit training (except inside any MOUT complex, Mobile MOUT complex, and Combat Town Facilities). Ensure all safety rules and weapon conditions are supervised and enforced with the M203/M32A1 40mm weapon system. Ensure observance of all safety rules during the fire season to prevent forest fires.

8. Guided Missiles and Rockets (Ground Systems Only)

a. The TOW IIB, MK153 SMAW, M136 AT-4, M72A7 LAAW and M98 Javelin to include all sub-cal training devices are the only guided missiles and rockets approved for use at MCB Camp Lejeune. Firing units will recover the wire from the TOW missile before departing the range like SR-7 and SR-10. When firing the TOW Missile (DODIC WF-10) the Kevlar Protected Blanket is required as per TECOM Safety of Use Memorandum 1-04.

b. Before firing, the danger zone and back blast area will be cleared of personnel, material, vehicles, and vegetation when firing SMAW/LAAW/AT-4/TOW IIB/Javelin. Firing the SMAW, AT-4, or LAAW from foxholes or the prone position is not authorized.

c. All loading preparations for firing and unloading will be done on the firing line, with the weapon system pointed down range. Sighting systems or missiles will not be loaded behind the firing lines. Firing of anti-tank rockets over personnel is not authorized. Single hearing protection is required. Pre-Fire inspection of all rockets/missiles is required.

d. Care should be taken with all training devices, i.e. 9mm Trainers/Miles/Javelin/21mm LAAW sub cal training devices. Ensure that all safety procedures in the weapons system TMs/FMs are followed, enforced, and supervised.
e. TOW Missiles and rockets fired from an airborne platforms will be discussed in Chapter 8 of this SOP.

9. Artillery

a. Artillery will only be fired from designated and surveyed gun positions (GPs) unless a specific SRR has been approved for other areas/sites and surveyed/approved by 10th Marines. Artillery can only fire highest angle of fall, lowest charge aboard Camp Lejeune. Artillery live fire into the G-10 Impact Area, will not take place from 0600-0800 and 1600-1800 Monday-Friday.

b. Impact areas for G-10, K-2, and N-1/BT-3 are described in Appendix B of this Range Control SOP. G-10 is the principal impact area for artillery indirect fires. Direct fire artillery is authorized into the N-1/BT-3 using range G-7. Firing into the K-2 is by SRR only and only from a few selected approved Gun Position.

c. A Artillery FO with positive visual means to observe rounds impact is required at all times. The OP must be in a “HOT” status first before a gun position can be placed into a “HOT” status.

d. Installation public roads have been approved for traffic during artillery firing; warning signs are posted that artillery rounds may be fired over the roads. During certain weather conditions with low cloud cover, which will amplify noise, Range Control may impose restrictions to reduce noise levels.

e. No personnel are authorized to be within Area E of the SDZ, as depicted in MCO 3570.1B/DA-PAM 385-63, Chapter 11. Weapon crews firing from an approved tactical configuration and other operational personnel involved in the firing exercise with a valid need to enter this area may do so with the approval of the RCO.

f. The firing unit will place necessary road guards (with comm) and/or barriers. Traffic on main and secondary roads may be delayed for short periods of time (5 minutes) when properly scheduled and coordinated with the RCO/BLACKBURN.

g. Artillery Safety. Artillery unit safety certification programs, to include specific artillery safety billets, will be in compliance with MCO 3570.1B/DA PAM 385-63 and the Artillery JRegtO P3570.1D. Review MCO 3570.1B/DA PAM 385-63/JREGTO
For additional information on field artillery safety requirements and firing procedures. Ensure all artillery safety checks are completed before live fire events. Ensure all safety personnel are properly trained and proficient in duties IAW all applicable orders and this RC SOP.

h. Danger Areas

(1) The Secondary Danger Area (SDA) grid coordinates listed in Appendix B under the appropriate impact area; define the outer limits of the surface danger zone. Surface danger zones constructed manually will use those grid coordinates and the procedures listed in MCO 3570.1B/DA-PAM 385-63/JRegtO P3570.1D.

(2) The Primary Danger Area (PDA) grid coordinates listed in Appendix B under the appropriate range will be used as "initialization points" in the Automated Range Safety System (ARSS) for the safety computation.

i. Ammunition and Propellants

(1) Alteration of fuses/ammunition is prohibited.

(2) With the introduction of the new Modular Artillery Charge System (MACS) of 155mm propelling charges. MACS charges do not require the burning of unused propellants significantly reducing the need for conducting powder burns during artillery training. Unused, deteriorated and damaged powder increments will be burned in accordance with MCWP 3-1.6.23 and JRegtO P3570.1D.

(3) Firing ICM and antipersonnel-type projectiles in training is prohibited at MCB Camp Lejeune.

(4) Prior to firing artillery illumination, check with BLACKBURN for aircraft flights to minimize interference with night flights, night vision flights, and local fire conditions.

j. The maximum ordinate will not exceed 17,999 feet and will remain within the restricted airspace outlined in Chapter 8 of this Range Control SOP.

k. Check rounds will be fired upon initial occupation of any artillery firing position. The target for the check rounds will be located near the center of the target area.
l. Any projectile that bursts or lands outside the impact area requires immediate action and investigation in accordance with the artillery JRegtO P3570.1D and this SOP.

m. Artillery Direct Fire is only authorized on the G-7 Range. A detailed range description and listing of safety rules and policies for this range is in Appendix A.

n. GP-23 is the only gun position authorized for the construction of howitzer pits (Artillery Fire Base Training), use of engineer equipment and the training of artillery regimental engineers, as approved by Commanding Officer, MCB Camp Lejeune Decision Memorandum 01-39. Engineer training at this gun position satisfies the requirements of NAVMC 3500.7 (ARTILLERY T&R MANUAL) (Section – Regt Engineers – 8102, Arty Btry – 6122, Arty Btry – 6124. Requests to conduct engineer operations in this gun position will be submitted as a SRR.

   (1) No earth moving/disturbing activities will be conducted within 20 meters of a delineated wetland or RCW site.

   (2) When authorized, berms will be no higher than five feet and only three sides of the berm will be constructed. Pits will not exceed 20 meters wide or 25 meters long. A maximum of six howitzer pits can be constructed. Dirt for the berms will be pushed from the outside of the howitzer pit. Additional dirt may be obtained from the dredge spoil site on Weil Point Road but must be returned to Weil Point Road once the event is completed.

   (3) Upon completion of training, the area must be leveled out, all holes filled in, and the GP inspected by a Range Inspector. At no time will trash/dunnage/tactical wire/other items be burned or buried.

   (4) No petroleum products (fuel, oil, lubricants) will be stored (temporarily or permanently) at this gun position without prior approval from Range Control and Base EMD.

   (5) The only tactical formation authorized when engineer operations are conducted is battery on line.

   (6) Coordination for engineer support is the responsibility of the using unit.

   (7) No clearing of existing forest is authorized.
(8) No more than six engineer/artillery training evolutions per year that require digging are authorized at GP-23.

<table>
<thead>
<tr>
<th>ARTILLERY GUN POSITIONS</th>
<th>GUN POSITION GRIDS</th>
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<tr>
<td>GP-1</td>
<td>18S TD 8974 4226</td>
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<td>GP-2</td>
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<td>GP-3</td>
<td>18S TD 9280 4090</td>
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<tr>
<td>GP-4 (Inactive)</td>
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<td>GP-5 (Inactive)</td>
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<td>GP-6 (Inactive)</td>
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<td>GP-8 (Inactive)</td>
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<td>GP-9</td>
<td>18S TD 9694 3513</td>
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<td>GP-11 (Inactive)</td>
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<td>GP-24 (Inactive)</td>
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</table>
10. Tanks, Expeditionary Fighting Vehicles (EFVs), Assault Amphibian Vehicles (AAVs) and Light Armored Vehicles (LAVs)

a. Tanks equipped with 120mm main gun, EFVS equipped with the 30mm chain gun, AAVs equipped with the Up Gunned Weapon Station (.50 cal/MK-19) and LAVs equipped with 25mm chain gun are authorized to fire on the ranges designated in Appendix A. Only training practice (TP) ammunition will be fired on SR-7 and SR-10 in GSRA. All MK-19/M203 training ammunition dunnage down range on SR-7, SR-10 must be policed up and removed from the range (DODIC BA-12/B519).

b. Although the Commander of the unit is responsible for safety during all phases of firing, Vehicle Commanders are responsible for the safe firing and operations of their vehicles. Weapons will be cleared, pointing down range, and checked by the ROIC/RSO.

c. Static Firing. During daylight and good visibility, firing vehicle(s) will display colored flags. At night and during reduced visibility, firing vehicle(s) will display lights. With either flags or lights, the color displays will be:

(1) Red. Vehicle engaged in firing; weapons must be pointed at the target area.

(2) Green. All vehicle weapons are clear and elevated. Any live ammunition in the vehicle is properly stowed.
(3) Red and Green. Vehicle is performing prep to fire checks or the crew is performing a non-firing exercise. Weapons are clear, but not elevated.

(4) Red and Yellow. Vehicle has a malfunction or misfire. Weapons are not clear and are pointed down range.

(5) Green and Yellow. Vehicle has a malfunction. All weapons are clear.

d. Firing on the Move and Battle Runs. Once a vehicle begins its battle run and passes the start firing line, all weapons are considered to be loaded and ready to fire. Flags or lights are not required to be displayed, but their use will provide a greater degree of control when more than one vehicle is firing on the move. Cross-range firing of weapons is not authorized on SR-7 and SR-10.

e. Completion of Firing. When the vehicle or vehicles have completed its battle run and all vehicle weapons systems have been cleared and checked by the ROIC/RSO, they will move to the rear of the range and out of the firing area or maneuver box. Review MCO 3570.1B/DA-PAM 385-63 for additional information on tank and light armored vehicles firing. Using units will police up all range roads and around the defilade firing positions, targets (areas where the grass is cut) on SR-7 and SR-10 and remove all ammunition dunnage like brass/links/tank round canisters/MK-19/M203 ammunition dunnage from the range and the surrounding areas that are mowed/cut.

f. Exiting the Range. The Vehicle Commander or the ROIC/RSO will ensure the main gun is aligned within the envelope of the vehicle width when traveling off range on the roadways or tank trails. Report all maintenance problems on tank trails/road crossing pads to BLACKBURN or a Range Inspector.

g. Off-road Maneuver. Tracked and wheeled vehicles can be authorized to maneuver off-road in LZs and other designated areas. Upon completion of this training, the unit is responsible for filling in and smoothing out all ruts and returning the area to a usable condition. The unit/command may be required to provide heavy engineer equipment to meet this requirement. A Range Inspector will inspect the entire area and clear the unit upon completion of filling/smoothing of the areas used.
h. Road Crossing Procedures

(1) All Tactical Vehicles will go admin at road crossings and use white lights/head lights. Unit’s will place out Road Guards with safety vest on at all crossing points. Road Guards will stand on both sides of paved road at the crossing point at a distance sufficient to stop all on coming traffic. Road Guards will be placed at a minimum of 100 meters on all 55 MPH roads and 50 meters on all other roads aboard MC Base roads. Road Guard will wear reflective vests both day and night. Tracked vehicles will only cross at designated concrete crossing pads.

(2) Road Guards will remain in position for the entire crossing period and will stay in place until the using unit police detail has removed all debris like dirt/rocks/mud from the paved road by sweeping it off.

(3) During hours of darkness or reduced visibility road guards will be equipped with reflective road guard vests, some type of lighting system like flashlights, flares, distress marker, chemical lights. The lighting system should be placed in front of the road guard and the road guard should be in a safe position to prevent from being hit by the on coming vehicles. Road Guard must ensure all traffic is stopped before any tactical vehicle (Wheeled/Tracked) starts crossing the road.

11. Aerial Gunnery

a. Safety measures, ranges, and firing requirements for aerial gunnery, including rockets and missiles, can be found in Chapter 8 and Appendix B of this SOP and Chapter 13 of DA PAM 385-63. This type training will be requested by SRR. Range Control has a separate Aerial Gunnery template SRR and CD available for SR-7 and SR-10 on request.

b. Pilots and gunners will be familiar with the impact area, firing limits, sectors of fire, SDZs/WDZs for the weapons and ammunition being fired, Battle Positions (BPs), and safety regulations for the range on which they will fire. Ensure safety procedures are in place for runaway gun from an aircraft.

c. Communication will be maintained between FAC/FAC(A)/JTAC, ROIC/RSO, firing aircraft, Navy Boat Crew (when applicable) and BLACKBURN at all times.
d. Aircraft weapons system will be loaded or unloaded only at approved areas point down range.

e. The master arm switch will be placed in the safe position before leaving any firing position.

f. Door Gunnery operations require a face-to-face brief with the Base Range Safety Officer and will be conducted in accordance with the appropriate aviation gunnery manuals established by MAWTS-1 and MCO 3570.1B/DA PAM 385-63, this RC SOP, and the appropriate TMs/FMs and all other references.

g. The Aircraft Commander will ensure his aircraft is properly oriented with the primary direction of fire on the range before firing.

h. When conducting Close Air Support (CAS) or Simulated CAS, aircraft must be under the positive control of a FAC/FAC(A)/JTAC. When conducting SIMCAS within the MOUT Complex, a separate FAC/JTAC will be responsible for that event; the MOUT must be signed for at Range Control.

i. Before any live fire, each aircraft will conduct a cold pass of the target area to familiarize them with the run and to ensure unsafe conditions do not exist.

j. FAC/FAC(A)/JTAC procedures shall adhere to the Joint CAS Publication JP 3-09.3 (w/Ch 1).

k. Review MCO 3570.1B/DA-PAM 385-63 and JP 3-09.3 (w/ch 1) for additional information on aerial gunnery firing.

12. Air Defense Weapons

a. Safety measures, ranges, and firing requirements for air defense weapons can be found in Appendix A of this SOP and in MCO 3570.1B/DA PAM 385-63 (Chapter 4).

b. The E-1 Range is the only location at MCB Camp Lejeune for live fire of air defense weapons (Stingers/Avenger Weapon System). Using unit must also schedule the W-122 air/sea space and have in place procedures for runaway gun and missile misfires. Additionally, unit must have a recovery capability for targets/drones that fail to sink within the approved surface danger zone. Targets should be recovered if possible and may be required to sweep/check the entire beach to include the State Park.
c. All environmental policies protecting sea turtles/sea mammals on the beach during the turtle-nesting season (1 May-31 Oct) must be enforced and supervised by the ROIC/RSO.

d. Unit must also be on the lookout for marine mammals and go into a check fire if sighted.

13. Demolitions

a. **General.** The routine use of high explosive demolitions will be confined to demolition ranges (Engineer Training Areas) and specially prepared pits, per MCO 3570.1B/DA-PAM 385-63. However, SRRs for the use of demolitions in other training areas/ranges can be considered. Use of demolitions to simulate supporting fires, when authorized, is limited to the use of 1/4-pound blocks of TNT. Review MCO 3570.1B/DA-PAM 385-63, Chapter 17 and FM 3-24.214 with Change 1 and 2 for Explosives and Demolitions, for additional information on demolition training.

b. ROIC/RSO will ensure positive means to keep personnel at safe distances to protect hearing and prevent injury from fragmentation or inadvertent/premature detonation. All non-participating or observing personnel will either be in a bunker or outside of the SDZ of the demolition pit during firing of live explosives.

c. ROIC/RSO will ensure that all personnel wear helmets, flak jackets, and hearing and eye protection.

d. All demolition operations must go into "check fire" during Thunderstorm Condition 1.

e. "Trash/Fuel Shots" are not authorized on any range or ETA.

f. Units shall not mix live and inert demolitions for training. At no time will units mix live explosives with training IEDs during the same training event.

g. Cratering charges will not be exploded on roads leading into or adjacent to the ETA. Units must fill in all holes made by cratering charges.

h. The use of field expedient demolitions/devices (i.e., modified/improvised Claymore Mines, Bangalore Torpedoes, and
cratering charges) is not authorized unless approved by Range Control via a SRR ten (10) working days prior to planned use.

i. The use of demolitions and explosives after sunset requires an SRR ten (10) working days prior to the planned training event.

j. Breaching operations requires a SRR at least ten (10) working day before the scheduled event and must use charges no larger than 0.25 lbs Net Explosive Weight (NEW). Units will be guided by FM 3-34.214 with Change 1 and 2, (Explosives and Demolitions), and NAVSEA SW060-AA-A-010 (Demolitions Materials), OP-5, EOD/TM/TO 60A Series other required references and this Range Control SOP. Breaching operation require a certified in writing, school trained Breacher, and must also be in accordance with all requirements set forth in the Guidebook for Assault Entry Techniques manual.

k. Units are not authorized to use any live fire training with petroleum products/fuel and explosives or demolitions aboard MCB Camp Lejeune.


a. Mines and Booby Traps

(1) The use of live mines and booby traps will be confined to controlled firing demonstrations. Such demonstrations may be conducted on any ETA of approved size for that quantity of explosive. Units firing a M18A1 Claymore mine will strictly follow procedures in FM 23-23 and this SOP. For additional information on mine/booby traps, see MCO 3570.1B/DA-PAM 385-63.

(2) All personnel will wear flak jackets, helmets, hearing and eye protection.

(3) Practice mines and booby traps can be used in all training areas and on all demolition ranges provided necessary safety precautions are taken as stated in MCO 3570.1B/DA PAM 385-63, Chapter 17. The using unit will remove all devices after the training event and will account for each device.

(4) Utmost care will be taken to ensure no live, practice mines, or booby traps with any type of explosive device are left on any range, training facility or in any training area. Such items will be counted before issue and retrieved on
completion of training. The using unit will sweep the range after the training event, remove all ammunition dunnage and dispose of it properly.

b. Pyrotechnics. Smoke grenades, CS grenades and other pyrotechnics such as signaling devices are authorized for training, but must be supervised by a SNCO or Officer. Use of pyrotechnics may be restricted by fire conditions; unit must check with BLACKBURN during fire season (Mar-June, Sept-Dec). Additional information for smoke grenades, CS grenades and other pyrotechnic devices can be found in FM 3-23.30. Pyrotechnics, CS and all smoke type devices are not authorized in the GSRA Complex/GSRA Ranges.

15. Fire and Maneuver

a. Fire and maneuver exercises will be conducted only on designated/approved ranges. Review MCO 3570.1B/DA PAM 385-63 (Chapter 19) for additional information on live fire and maneuver ranges. ROIC/RSO will ensure all individuals and weapons crews have conducted gun drills, BZO/Zero/ISMT training, and fired and passed a qualification course for the weapon/weapon systems they will fire during the live fire and maneuver exercise.

b. The ROIC/RSO will submit a coordinated/detailed plan (Special Range Request) to Range Control. This plan will include, but is not limited to:

(1) A detailed scheme of maneuver, fire support plan including SDZs for support by fire positions, direction of fire, and cease or shift fire requirements (with all required data).

(2) A list of weapons, ammunition, lasers, pyrotechnics, smoke, and any other items with assigned DODICs to be used.

(3) Unit control measures, signals, including means of communications.

(4) Terrain features and facilities required.

(5) A Special Range Request signed by the unit chain of command and reviewed and signed ORM worksheet (see Appendix D, Operational Risk Management (ORM) of this SOP) and any other pertinent information concerning the proposed live fire exercise that will assist in evaluating the safety of the event.
c. Sufficient additional Safety Officers, such as an (ARSO) Assistant Range Safety Officer and (PSO) Position Safety Officers, shall be designated whenever fire and maneuver exercises are conducted to ensure every Marine is positively controlled and supervised.

d. The ROIC shall conduct a detailed safety brief of the planned exercise and will instruct firing personnel as to lanes, limits of fire, direction of fire, and the safety regulations for that range. The ROIC, RSO, and additional Safety Officers (PSOs/ARSOs) will be thoroughly familiar with safety provisions of MCO 3570.1B/DA PAM 385-63, and the criteria for flanking/frontal firing.

e. Each Safety Officer shall position himself to ensure observation of all personnel under his control at all times. Safety Officers shall be present for all walkthroughs and rehearsals. The Safety Officer shall be equipped with an appropriate signaling device/communication equipment to signal “CEASE FIRE” in the event of danger or an emergency. Exercises conducted during darkness require stricter control measures.

f. Prior to the exercise, the ROIC/RSO will:

   (1) Brief participants on the capabilities of the weapons being used by other units/components in the live fire exercise.

   (2) Train subordinate commanders, additional Safety Officers like PSOs/ARSOs and other safety control personnel on the live fire scheme of maneuver and other safety requirements before the live fire event before conducting live fire exercises.

   (3) Must conduct at least two (2) rehearsals/dry run exercises prior to conducting any live fire and movement/maneuver using the same conditions on the assigned range (example: night rehearsal for night attack).

   (4) Provide for safety checks of each weapon system, crew served weapon before, during, and after firing live ammunition.

g. Aircraft participating in fire and maneuver exercises will have communications with a FAC/FAC(A)/JTAC, and either
BLACKBURN or an airspace control agency at all times. Aircraft must conduct a dry pass before conducting live fire.

h. Only ammunition cleared for overhead fire and other authorized ammunition will be used for fire and maneuver events.

16. Pistol Ranges

a. All Camp Lejeune pistol ranges are set up by a civilian contractor and require 48 hour advance scheduling. Range operators are provided. Requests for additional range time must be received at Range Control at least 4 hours before the originally scheduled cold time during normal working hours. After working hours the using unit will need to contact BLACKBURN. The range operator must be present on the range before a unit can request to go HOT.

b. Training on the remote control unit and the PITS system is available by the contractor Monday through Friday on a walk-in basis by contacting 451-4542/8132 at Building 1404 on Elm Street.

c. When the range is signed for at Building 54 Range Control, the using unit will receive a SOP and Range Flag.

d. Using unit will be responsible for a complete and detailed police call of the entire range to include parking lot, port-a-johns, firing lines, and target/bullet trap area.

e. Any problems with the operation of the PITS systems/RCU, or damage to the system, contact the Contracting Officer Representative at 451-5749.

17. Counter Improvised Explosive Device Home Station Lane Training Complex (SR-12)

a. Within the ST Training Area, GSRA Complex is the Counter Improvised Explosive Device (CIED) Home Station Lane Training Complex (JEIDDO Course) for mounted and dismounted CIED training which will be coordinated and scheduled through the Marine Corp Engineer Center/School (MCEC).

b. A separate Range Standard Operating Procedures (SOP) for this complex will be published by the MCEC/MCES and Range Control in a separate document.
c. Ground Based Electronic Warfare Systems for IED/JIEDDO training. Counter Radio Control Electronic Warfare (CREW) systems are ground based radio jammers. The ROIC/RSO for the unit utilizing these systems must ensure that the frequencies load sets that are being jammed by the CREW systems have been cleared via the Base Frequency Management Officer and Range Control before conduct any training with this device system. These devices can be checked out at the Tactical Engagement Simulation System (TESS) warehouse and used in training areas with proper coordination if the systems are used.

d. Live ammunition, SESAMS, pyrotechnic, explosives and demolitions are not authorized on this range complex. Blank ammunition, practice hand grenade with fuze and smoke grenades are authorized if properly scheduled and coordinated. Smoke grenades are only authorized in areas that will not caught on fire. Smoke grenades are not authorized in any of the buildings/structures of this complex. Contact Range Control 451-1240 for more information.
Chapter 6
Environmental Procedures

1. General. It is the responsibility of each individual/unit and command to preserve our natural resources for all training and military operations. As professional Marines, Sailors, tenant commands, and good citizens we should strive to provide realistic training while protecting MCB Camp Lejeune’s natural environment for future generations. The following guidelines support the best utilization of MCB Camp Lejeune’s training areas/ranges and also protect the environment. Regulations concerning environmental restrictions are mandated by Federal Law and are applicable to all Federal agencies including military reservations. Additional guidance on how to train and preserve the environment can be found in “The Environmental Handbook for Trainers and the Quick Look Environmental Guide.” These handbooks/guides are excellent sources of information and are issued by Range Control.

2. Environmental Impact Review

   a. The National Environmental Policy Act of 1969 requires that careful consideration be given to environmental impacts of proposed actions. Some training exercises on the ranges and training areas of Marine Corps Base, Camp Lejeune (MCBCL) require the preparation of a document called a Field Exercise Request for Environmental Impact Review (FEREIR); the blank document (in Microsoft Office Word format) can be accessed via the MCBCL intranet at this link: https://intranet.emportal.usmc.mil/sites/le/eiwg/default.aspx
   Click on “Current FEREIR”. Read and follow the instructions on the first page. Examples of training exercises requiring a FEREIR include – but are not limited to – establishment of a tactical fuel farm, FARP, TWPS site, cutting vegetation, or non-routine activities at Onslow Beach. Submit the completed FEREIR form to Lejeune_REIR@usmc.mil at least two weeks prior to the planned FEX. Any units that cannot access the webpage for downloading the form submit an email to Lejeune_REIR@usmc.mil and request a FEREIR form via email.

   b. EMD will contact the Responsible Office in Charge (ROC)/Unit Representative if any topics require clarification or additional information. A field/site visit/survey by Base EMD may be necessary. After reviewing and processing the FEREIR form
by Base EMD staff, signatures of the representative from Base EMD and the ROC will be required. The ROC must implement and comply with all remarks/stipulations developed by EMD for the specific exercise. These stipulations will be explained and lined out on the FEREIR form.

   c. Exercises in garrison (e.g. setting up tents, antennas, generators, lights, digging or ground disturbing activities etc. in the units motor pool, in an open area between buildings or on grass/parking areas in garrison) WILL ALSO require the submittal of a FEREIR.

   d. Any feedback on the “ease of use” or any suggestions how to improve the FEREIR form should be sent to Lejeune_REIR@usmc.mil.

   e. Whenever there is any potential for significant environmental impact, exercise planners should contact Range Control at 451-1240/1236 for guidance, direction, and support.

3. Protected Species

   a. MCB Camp Lejeune is known to be home to 8 federally listed threatened or endangered species:

      (1) Red-Cockaded Woodpecker

      (2) Green Sea Turtle

      (3) Loggerhead Sea Turtle

      (4) Leatherback Sea Turtle

      (5) Rough-leaved Loosestrife

      (6) Seabeach Amaranth

      (7) Piping Plover

      (8) American Alligator

   b. The waters off of Camp Lejeune provide seasonal habitat for 7 listed marine mammal species, including the West Indian manatee and right whale. Guidelines for boating and training use of the N-1/BT-3 impact area, H-Range are given in the following sections.
c. Although American Alligator have recovered, they are still listed as threatened due to similarity of appearance to the American Crocodile. MCB Camp Lejeune also has two federal candidate species, Hirst’s Panic Grass and the red knot. The bald eagle is no longer listed as threatened or endangered by the Federal government, but is protected under the Bald Eagle and Golden Eagle Protection Act, and the Migratory Bird Treaty Act. Finally, this document addresses other species of concern which, although not federally listed, receive protection.

d. Unit Commanders, Officers-in-Charge, Unit SNCOs/NCOs ROICs/RSOs will ensure strict compliance with applicable regulations regarding these protected species, as listed in Base Order 5090.11 and this SOP.

e. Site-specific information can be obtained from the MCB Environmental Conservation Branch (ECON), Environmental Management Division (EMD), Installations and Environment Department (I&E) personnel at 451-5063.

4. Endangered Animals

a. Red-cockaded Woodpecker (RCW). The RCW is an endangered species protected by Federal law. Red-Cockaded Woodpeckers are cavity-nesting birds and depend on live pine trees for their survival.

(1) The Commanding Officer of the MCB has implemented the following program to protect RCW habitat: Buffer Zones extending 200 feet out from each cluster of cavity trees are marked with single bands of white paint on the trees at chest height and signs reading:

Endangered Species Site
Restricted Activity
Red-Cockaded Woodpecker

Or

Endangered Species Colony Buffer Zone

Or

Restricted Area Endangered Species Site

Further, the all RCW cavity trees are marked with blue-white-blue painted bands. Units must be fully aware of this
distinction; some activities are allowed within the buffer zones but cannot be conducted within 50 ft of the cavity tree. See Figure 6-1 for easy reference.

(2) The below actions are prohibited under Public Law 93-205, Endangered Species Act of 1973, and Base Orders concerning the RCW and marked buffer zones. Violators and their chain of command can be prosecuted under Federal law for willful noncompliance.

(a) The cutting or damaging of pine trees of any size within the buffer zones and training areas. Damage to RCW cavity trees, including attaching wires, trip flares or other devices.

(b) Any digging within 50 ft of the cavity tree.

(c) The firing of artillery/mortars within buffer zone.

(d) Bivouacking, the establishment of command posts or any defensive fighting positions occupied for longer than 2 hours within the buffer zone.

(e) "Tree topping" antennas, girdling pine trees with communications wire, burying cable or climbing pine trees with tree gaffs within the buffer zone.

(f) Use of generators/portable lighting systems within the buffer zone.

(g) CS, riot agents, smoke pots or HC smoke will not be used or set up within the buffer zone. The smoke may drift through the buffer zone.

(h) Heavy (mechanical) digging, or establishing vehicle fighting positions, tank ditches, trench lines, fighting holes or deliberate defensive positions.

(i) Establishing camouflage netting within RCW buffer area.

(j) The removal or destruction of RCW signs marking a restricted area.

(k) Any act which results in the shooting, wounding, killing, capturing, or collecting of any red-cockaded
woodpecker, the destruction of its eggs, the destruction of its nesting sites, or the attempt to engage in such conduct is prohibited. Any such event should be reported to Range Control and MCB EMD.

<table>
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<td>YES</td>
</tr>
<tr>
<td>HOFFMAN TYPE DEVICES</td>
<td>YES</td>
</tr>
<tr>
<td><strong>PYROTECHNICS/SMOKE:</strong></td>
<td></td>
</tr>
<tr>
<td>CS/RIOT AGENTS</td>
<td>NO</td>
</tr>
<tr>
<td>SMOKE, HAZE OPERATIONS ONLY, GENERATORS OR POTS</td>
<td>YES</td>
</tr>
<tr>
<td>SMOKE GRENADES</td>
<td>YES</td>
</tr>
<tr>
<td>INCENDIARY DEVICES TO INCLUDE TRIP FLARES</td>
<td>NO</td>
</tr>
<tr>
<td>STAR CLUSTERS/PARACHUTE FLARES</td>
<td>YES</td>
</tr>
<tr>
<td>HC SMOKE OF ANY TYPE</td>
<td>NO</td>
</tr>
<tr>
<td><strong>DIGGING:</strong></td>
<td></td>
</tr>
<tr>
<td>TANK DITCHES</td>
<td>NO</td>
</tr>
<tr>
<td>HASTY INDIVIDUAL FIGHTING POSITIONS, HAND DIGGING ONLY, FILLED AFTER USE</td>
<td>YES</td>
</tr>
<tr>
<td>DELIBERATE INDIVIDUAL FIGHTING POSITIONS</td>
<td>NO</td>
</tr>
</tbody>
</table>
Figure 6-1. Training Activity Within Marked RCW Buffer Zones

(3) The following actions are authorized in RCW buffer zones:

(a) Foot transit or patrolling through the RCW colony/cluster.

(b) Vehicular transit through the colony (no closer than 50 ft to any cavity tree) when off-road traffic is authorized in advance by the Range Control Officer.

(c) 7.62mm and below blank firing and use of flash bangs, pyrotechnics, signaling smoke, artillery simulators and Hoffman device.

(d) Cutting hardwood foliage (arm diameter or smaller) is permissible for camouflage and concealment.

(e) Hand digging of individual fighting positions in support of a hasty defense (no closer than 50 ft to cavity tree; position not to be occupied longer than two hours; must be filled in upon completion).

b. Sea Turtles. Although there are many types of sea turtles, MCB Camp Lejeune beaches are most frequently visited by the Green Sea turtle and the Atlantic Loggerhead turtle. These threatened species are particularly vulnerable to predators and poachers during the May-October nesting season. Federal law prohibits disturbance of the turtles, their nests, or eggs.

(1) All known turtle nests are surrounded with wire cages with signs reading:

ENDANGERED SPECIES NEST
DO NOT DISTURB

(2) The following protective rules for sea turtles apply:

(a) Regular training use of Onslow Beach between old Riseley Pier area (Grid 904265) and old Onslow South Tower area (Grid 883251) is authorized. Nests between old Riseley Pier area (no longer there) and old South Tower area (no longer
there) will be relocated to other safe locations. Only EMD personnel shall accomplish the relocation of the nest. EMD will also move nests from the area extending 750 m north of old Riseley Pier area (no longer there), and from the ingress/egress area south of the old South Tower area going toward the splash point road. Exercises with more than one unit (MEU onload/offload, Joint, Combined) must be coordinated through Range Control and EMD. All other areas of Onslow Beach are subject to restrictions during the nesting season of May through October.

(b) During the nesting season, night landing exercises should be reduced to the minimum level and need to be pre-coordinated with Base EMD and Range Control. Vehicles and equipment cannot remain on the beach side of the dunes or be left in egress points overnight.

(c) During the nesting season, night lighting on the beaches should be kept to a minimum or eliminated if possible. All U.S. Navy Beachmaster CPs, along with all bivouac sites, will be located behind the sand dune line with lighting reduced to the minimum required for safety.

(d) Vehicular traffic on the beaches during nesting season is restricted to the tidal zone (Wet Sand Only) except within the identified operating area.

(e) The Environmental Management Division (EMD), I&E, must be notified immediately at 451-5063 upon discovery of any sea turtle nest that has not been marked/protected to ensure its successful relocation. Any daytime sightings of turtles on the beach will also be reported.

(f) The shooting, wounding, capturing, or collection of any Sea Turtle (all types) or any attempt to engage in such conduct is prohibited.

(g) The destruction or collection of any Sea Turtle eggs, the destruction of their nests, or any attempt to engage in such conduct is prohibited.

(h) Any digging or excavating, including the building of tank traps on the beach is ordinarily prohibited unless specifically requested and authorized. Bunkers and fighting positions constructed in support of CAPEX must be covered with plywood and sandbags if left overnight.
(i) Egress from the beach to the road behind the sand dunes shall be via the designated egress routes and sites only. Vehicular traffic is prohibited on the dunes.

c. American Alligator. The American alligator is considered recovered, but is still listed as threatened due to similarity of appearance to the American crocodile. MCB Camp Lejeune’s wetlands provide a suitable habitat for alligators in both fresh and salt-water estuarine areas. Precautions should be taken between the months of May and June when the female alligator usually lays 20-60 eggs in a nest consisting of mounds of vegetation. Areas known to contain alligators are marked with signs reading:

**DANGER**

**THREATENED SPECIES HABITAT**

**AMERICAN ALLIGATOR**

**STATE PROTECTED**

**DO NOT DISTURB OR FEED ALLIGATORS**

**SWIMMING BY PERSONNEL OR PETS STRICTLY PROHIBITED**

d. Manatees. Manatees have occasionally been sighted in the waters adjacent to MCB Camp Lejeune, including Mile Hammock Bay, the New River, and the AIWW. Manatees can grow to 15 feet in length and are uniformly gray or gray-brown in color. They are very slow moving mammals; boat collisions are a significant source of manatee mortality, both from impact and propeller damage. Everyone conducting waterborne operations should be alert for possible manatee encounters. If a manatee is sighted, immediately slow to a no-wake speed. Allow sufficient room for the manatee and maneuver cautiously away from the encounter area. Do not approach the manatee. Report all sightings to the MCB Camp Lejeune Fish and Wildlife Branch at 451-5063.

e. Piping Plover. Onslow Beach provides potential nesting habitat for the threatened piping plover and several other migratory shorebirds and colonial water birds. At least five bird species nest along the sparsely vegetated beach area and between the accreting and eroding sand dunes. From April-August, portions of the New River Inlet beach (Area EA) are closed to vehicle traffic with signs reading:

**COLONIAL WATERBIRD AND SHORE BIRD NESTING AREA VEHICLES PROHIBITED**
f. Bald Eagle. The bald eagle is no longer listed by the US Fish and Wildlife Service as threatened or endangered. However, the birds and their nests are still protected under the Bald Eagle and Golden Eagle Protection Act and the Migratory Bird Treaty Act. In addition to a nest in the JE training area that has been active since 2000, another active nest and alternate have been located in the IF training area. The areas around these nests have been established as a Temporary Wildlife Restricted Area due to the nesting of Bald Eagles. The temporary wildlife restricted areas are east of Highway 172 at Grid 802298, off of Traps Bay at grids 856274 and 857273, and north of TLZ Eagle at 786417. During the nesting season (1 Oct-15 May), human entry within the primary zone (1500 feet buffer from the nest site) must be avoided. Helicopter/fixed-wing aircraft must remain above 500 feet and maintain at least 1,000 feet horizontal separation from the nest; aircraft presence is considered detrimental to the nesting eagle. Aircraft using the LHD Deck will only ingress/egress from the north, south, or west of Highway 172. Additional Bald Eagle nests may exist but are, as of yet, undocumented. Bald Eagle sightings occurring from January - June should be reported to EMD personnel at 451-5063.

g. Marine Mammals. The waters surrounding Camp Lejeune are inhabited by marine mammals, including dolphins, whales and manatees. All marine mammals are protected under the Marine Mammal Protection act. Those marine mammals that are listed under the Endangered Species Act, such as the North Atlantic right whale, receive additional protection. When using water ranges, the following precautions shall be taken to avoid harm to marine mammals.

(1) USE OF THE N-1/BT-3 IMPACT AREA
(Small Arms up to 50 cal and 40mm Inert Practice rounds, direct fire 155m Artillery).

(2) Preventative measures specific to the avoidance of harm to marine mammals and which should effect the least practicable adverse impacts include the following:

(a) All ranges and training maneuver areas must be scheduled and approved in the Range Facility Management Support System prior to use. Ranges that are close to the Atlantic Intracoastal Waterway (AIWW) or use the N-1/BT-3 Impact Area and training or operations in the Atlantic Ocean Sector, to include Onslow Bay, must be scheduled at least 45 days prior to use to allow publication of a Notice to Mariners, coordination with external agencies, and scheduling of aircraft to perform an
aerial sweep of the AIWW and Atlantic Ocean Sector prior to live firing, per the Code of Federal Regulations. Ranges requiring 45 days notice are as follows: G-5, G-6, G-7, H-1, E-1, and Brown's Island Impact Area 4.

(b) Prior to commencing live fire exercises in the BT-3 Impact Area, an air sweep must be conducted to identify marine mammals and sea turtles (in addition to boats) in the impact area.

1. Flyovers (range sweeps) will be flown at 227 m (750 ft) above ground level and consist of at least two survey lines 2 nm apart and parallel to the coast, with the first line 1-2 miles off the beach, and the second 3-4 miles off the beach.

2. If a marine mammal or sea turtle is spotted in the N-1/BT-3 Impact Area, firing cannot commence until the whale clears the impact area.

(3) Lookouts with binoculars will be placed in the Bear and North Onslow Towers for safety purposes. These lookouts are detailed in the range instruction folders to maintain a marine mammal watch also and will check fire the range should any marine mammal be detected in the impact area. Lookouts will be given a guidebook, developed by Camp Lejeune Environmental Conservation Branch to recognize when a marine mammal or sea turtle has surfaced, and identify to species, if possible. In addition, lookouts will be encouraged to take the Navy’s online Marine Species Awareness Training (MSAT) course.

(a) If a whale or other marine mammal is spotted within the Surface Danger Zone of the weapons being fired, all live fire operations shall be halted. Live fire will not resume until the marine mammal or sea turtle clears the impact area.

(b) The Navy Boat crew will be present in the AIWW during active live fire training and will maintain a watch for marine mammals and sea turtles in the AIWW. The Navy Boat Crew will check fire if a marine mammal or sea turtle is seen in the line of fire. Firing will not resume until the animal has cleared the line of fire. Although firing from boats in the AIWW will be directed towards land targets, those targets will not be fired upon if a marine mammal or sea turtle is between the boat and the target.
(c) Lookouts will visually survey for marine mammals and sea turtles. Weapons will not be fired in the direction of known or observed, marine mammals or sea turtles.

(d) Training practice projectiles will not be fired to impact within 200 m of the AIWW.

(e) Unit Commanders, Officers-in-Charge, Non-commissioned Officers-in-Charge, Range Officers in Charge, and Range Safety Officers will ensure strict compliance with applicable regulations regarding protected species (including the West Indian manatee and North Atlantic right whale), as listed in Base Order 5090.11A.

(f) To further protect North Atlantic right whales, Range Control issues a daily warning order to trainers from November 1 through April 30 when North Atlantic right whales are present along the North Carolina coast. The warning order states:

ENDANGERED NORTH ATLANTIC RIGHT WHALES MIGRATE ALONG THE NORTH CAROLINA COAST ENROUTE TO AND FROM NEW ENGLAND AREAS. USED PRIMARILY SPRING THROUGH FALL, AND GEORGIA/FLORIDA CALVING AREAS USED DURING WINTER. RIGHT WHALES, INCLUDING MOTHER/CALF PAIRS, CAN BE FOUND 1/4 MILE OR MORE OFF ONSLOW BEACH FROM 1 NOVEMBER TO 30 APRIL. RANGE CONTROL REQUIRES RANGE SWEEPS DURING THIS PERIOD IN CONJUNCTION WITH LIVE FIRING EXERCISE INTO THE BT-3 IMPACT AREA.

(g) Environmental Management Division will distribute a Critical Sightings Program guide to all training crews operating offshore of Camp Lejeune.

(h) A logbook will be kept, recording results of marine mammal sweeps and tower observations. Information, including lack of marine mammal sightings will be recorded for each exercise.

(4) Operating procedures and collision avoidance.

(a) While in transit, vessels will be alert at all times, use caution, and proceed at a “safe speed” so that the vessel can take proper and effective action to avoid a collision with any marine animal and can be stopped within a distance appropriate to the prevailing circumstances and conditions.
(b) When whales have been sighted in the area, vessels will increase vigilance and take reasonable and practicable actions to avoid collisions and activities that might result in close interaction of Navy/Marine Corps assets and marine mammals. Actions may include changing speed and/or direction and are dictated by environmental and other conditions (e.g., safety, weather).

(c) Vessels will maneuver to keep at least 1,500 ft (460 m) away from any observed whale and avoid approaching whales head-on. This requirement does not apply if a vessel’s safety is threatened, such as when change of course will create an imminent and serious threat to a person, vessel, or aircraft, and to the extent vessels are restricted in their ability to maneuver.

(d) Restricted maneuverability includes, but is not limited to, situations when vessels are engaged in dredging, submerged operations, launching and recovering aircraft or landing craft, minesweeping operations, replenishment while underway and towing operations that severely restrict a vessel’s ability to deviate course. Vessels will take reasonable steps to alert other vessels in the vicinity of the whale.

(e) Where feasible and consistent with mission and safety, vessels will avoid closing to within 200 yard (183 m) of sea turtles and marine mammals other than whales (whales addressed above).

(f) Floating weeds, algal mats, Sargassum rafts, clusters of seabirds, and jellyfish are good indicators of sea turtles and marine mammals. Therefore, increased vigilance in watching for sea turtles and marine mammals will be taken where these are present.

(g) Everyone conducting waterborne operations should be alert for possible manatee encounters. If a manatee is sighted, personnel should immediately slow to a no-wake speed, allow sufficient room for the manatee, and maneuver cautiously away from the encounter area. All sightings are to be reported to the Camp Lejeune Environmental Branch (451-5063).

(h) Vessels/water crafts will not knowingly approach any whale head on and would maneuver to keep at least 500 yards (457 m) away from any observed whale, consistent with vessel safety.
5. **Endangered Plants.** Two federally protected and two other “species of concern” are found aboard MCB Camp Lejeune. It is unlawful to remove or possess federally listed plants from MCB Camp Lejeune, cut, dig up, maliciously damage or destroy federally listed plants or species of concern in knowing violation of the laws/regulations protecting these species.

   a. **Rough-Leaved Loosestrife.** A federally listed endangered plant usually found in or adjacent to pocosin. Buffer zones for Rough-leaved Loosestrife are clearly marked as restricted areas, with a single band of white paint on the lower portion of tree trunks and/or signs reading "Restricted Area Endangered Species Site." The restricted area will extend 100 feet from the outermost plant. The following restrictions protecting of the Rough-Leaved Loosestrife apply:

      (1) No off trail vehicle use within marked habitat.

      (2) No earth disturbing activity (e.g. excavating, digging fighting holes) within marked habit.

      (3) No drainage activities that might alter site hydrology within marked habitat.

      (4) No bivouacking or extended occupation within marked habitat.

   b. **Seabeach Amaranth.** A federally listed threatened plant found in the beach overwash areas and the zone between the high tide mark and the front of dunes of Onslow Beach. Seabeach Amaranth sites are roped off and posted with “No Vehicles Allowed” signs. All vehicles must stay out of these sites.

   c. **Venus Flytrap.** The Venus flytrap is a rare and easily identifiable state-protected species. Digging up or poaching Venus flytraps is prohibited.

   d. **Coastal Goldenrod.** MCB Camp Lejeune is home to 3 of the 5 known populations of this recently identified species. Some sites are marked “Conservation Area.” Units shall refrain from excavations, heavy site disturbance, or excessive vehicle movement in these areas.

   e. **Conservation Areas.** Conservation Areas are designed to protect species at risk or especially sensitive habitats (e.g. Hirst’s panic grass, coastal goldenrod, and nesting shorebirds).
and are posted with signs marked “Conservation Area”. The following actions are prohibited in conservation areas:

1. The use of any vehicle off designated roads/tank trails.
2. Any earth disturbing activity such as excavating or digging foxholes.
3. Bivouacking and the establishment of command posts.

6. Land and Wildlife Resources Issues

a. Land Use

1. MCB Camp Lejeune promotes soil conservation and makes efforts to restore and repair training areas degraded by erosion. This may include culvert replacement, repair of tactical trails, use of silt fences, and the grading and reseeding of tactical landing zones and artillery gun positions.

2. The above activities are coordinated through Range Control. Range Control will notify trainers of any training areas temporarily closed for soil conservation and erosion repair. These areas will also be posted with signs, fences, or barricades. Stay out of these areas.

3. MCB Camp Lejeune also protects wetlands (swamps, creeks, streams, marshes, open water areas). Use maintained tactical vehicles trails whenever possible to avoid damage to wetlands. Avoid wet and low-lying areas during off-road tactical vehicle movement.

b. Wildlife Resources Use

1. MCB Camp Lejeune also supports a variety of recreational activities in areas not scheduled for training use. These activities include fishing, hunting and scouting, trapping, fire wood cutting, shell gathering, and bird watching.

2. Unscheduled training areas are turned over to the Conservation Law Enforcement Office (Game Warden) for recreational use. This makes it extremely important that trainers schedule the areas they want to train in via RFMSS. When conducting training, units must ensure they stay within the areas they have scheduled to ensure the safe deconfliction of their training with recreational activities.
(3) The Game Warden will control hunting/scouting, fishing, trapping, shell gathering, fire wood gathering, and bird watching recreational use of training areas. Hunters are not authorized to hunt from or within any live fire range proper complex/impact area as defined by MCO 3570.1B which includes the cleared range footprint defined by the assembly area, firing positions, left and right lateral limit signs, and the last row of targets. Hunters are not authorized to hunt from or within TLZs, runways, training facilities/complexes (classrooms, towers, and road networks), or inside and near buildings. Hunters are not authorized to hunt or travel along Hwy 172 between the Hubert/Triangle Gate and Sneads Ferry Road when noted as “Closed.” Hunters are not authorized on Lyman road between the Hubert/Triangle Gate and Sneads Ferry Road when noted as “Closed.” When GH/GI training areas are marked “HOT” the AIWW and N-1/BT-3 are “Closed” from the Onslow North Tower to Bear Inlet. A special access permit is required for all personnel using boat launches. Hunters are not authorized to park on Freeman Creek Access Road or surrounding areas. Hunters within the Weapons Training Battalion’s area to include LC, LD, and LG training areas must check in/out with Rifle Range Security at building RR-11. GSRA hunters are not authorized to unlock gates or access CC Road when noted as “Closed.” Hunters within the MCOLF Oak Grove are not authorized to hunt on runways, TLZs, or in the recreation areas.

(4) Training units must avoid wildlife food plots (they are small, tilled/planted clearings marked with signs). Do not train in them, drive through them, or establish bivouac sites/command posts within them. Units must also avoid the mowed, maintained shorelines around managed fishing ponds.

c. GSRA Wetland Mitigation Bank

(1) The GSRA Wetland Mitigation Bank is an officially designated preservation area that was created to provide wetland mitigation for wetlands that were filled for the construction of GSRA training ranges and other projects located on Camp Lejeune.

(2) The mitigation bank is comprised of 2 separate areas totaling 1,250.5 acres, including a portion of the Big Shakey Swamp (143.4 acres) in the ST/SV training areas, and a portion of pine flatwoods and pocosin wetlands (1107.1 acres) in the SL training area.
(3) The GSRA Wetland Mitigation Bank must be protected and as a result is off-limits to certain training activities.

(4) The Big Shakey Swamp is not accessible by roads. The pine flatwoods and pocosin wetlands in the SL training area are bordered by; South Pocosin Road (to the north), Ditches Road (to the South), South Bay Road (to the east), and Prince Trail (to the west).

(5) No tactical vehicles or any type of ground disturbance is permitted within the GSRA Wetland Mitigation Bank boundaries. Training activities within the GSRA Wetland Mitigation Bank boundaries shall be limited to foot traffic only. No tactical vehicles are permitted on Watershed Road, Blue Heron Road, or South Pocosin Road.

7. Off Road Vehicle Movement

a. Use common sense. Do not drive around any shut/locked gates, through chain-link fences, or enter areas that are posted as “Hazardous Waste Site,” or “Authorized Personnel Only.” These controls are there for a reason. When grasses and shrubs are damaged or removed as a result of vehicle movement, the bare soil is subject to erosion. Over time, erosion results in a barren area of deep ruts, large holes, and flooding, greatly restricting foot and vehicle movement. Report excessive damage to roads, trails, and vegetation to Range Control so necessary corrective measures may be taken. Marines on foot should not cross into any area marked or fenced off as a “HAZMAT” site.

b. Tracked vehicles must stay on tank trails transiting to/from designated training areas, i.e., tactical landing zones accessible by tank trails, free play tracked vehicle training areas designated by Range Control (ETA-2), MOUT Complex, Mobile MOUT, and Combat Town. Consult Chapter 3 of this SOP regarding scheduling of the above mentioned areas.

c. Tracked/wheeled vehicles must cross railroad tracks and paved roads at the official tank pad crossing sites only. Tracked vehicles are to avoid road shoulders of paved roads. When crossing paved roads, road guards will be placed out in both directions at 100 meters during daylight, during limited visibility, and at night. The using unit crossing paved roads will remove/sweep all debris from the tank pad crossing site generated by the tracked/wheeled vehicles. At night, ensure all safety gear, safety vests, flashlights, etc., are worn/used by
road guards at the correct distance. See Chapters 5 and 11 of this SOP for detailed road crossing procedures.

d. Tracked vehicles are to avoid wetlands and low areas (which includes much of MCB Camp Lejeune). If a vehicle operator is not sure whether an area is a wetland, move to higher ground.

e. Trench systems and tank traps are authorized in designated free play tracked vehicle areas after approval by Range Control and the Environmental Management Division (EMD).

f. Trees will not be knocked down by any military vehicle.

g. Off road movement is prohibited on marked National Register of Historic Places archeological sites, which have signs that state:

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RESTRICTED AREA
EXCAVATION, DIGGING, VEHICLES PROHIBITED
BY ORDER CO, MCB

ARCHAEOLOGICAL SITE
RESTRICTED ACTIVITY
NO DIGGING
NO TRACKED VEHICLES OFF of
DESIGNATED TANK TRAILS
Ref: Base Order 5090.8
Call EMD/ECON at 451-5063/7230 for further information
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h. Take measures to reduce the silting of streams caused by vehicles at fords and approaches. Areas showing signs of erosion will be avoided, especially by heavy equipment and tracked vehicles. No digging is allowed in these areas.

8. **Fighting Positions**

   a. Fighting holes/Fox holes, trench systems, tank traps, hull-down positions for tanks and artillery, and other fighting positions are an important part of training and are authorized in many areas. However, everything you dig must be refilled and leveled out after your training! All ground repairs will be done within 24 hours of the end of the training. This will prevent erosion and enable other units to use this area safely.

   b. **When Digging In**

6-17
(1) Do not dig any manner of hole nor deposit any manner of fill in wetlands. If you think you are in wetlands, go to higher ground before digging.

(2) Do not dig up any drums or other potentially hazardous waste material. If drums or other unknown materials are encountered during excavation, stop, and immediately notify the Environmental Management Division at 451-5068.

(3) Dig tank traps, and fighting holes only in authorized areas. Do not cut tank traps, dig fighting holes, or create obstacles in TLZs/GPs/MPs/designated re-forested areas.

c. Expedient roadblocks on tank trails (not authorized on paved roads) must be kept under observation and manned while in use during tactical exercises; emergency vehicles and/or official observers/vehicles may require access. When not in use, remove all tactical wire and obstacles from the tanks trails/training areas.

d. Unexploded Ordnance (UXO): If UXO is discovered during digging activities, immediately stop digging, retreat to a safe area and contact Range Control (BLACKBURN on 34.70 MHz or phone number 451-3064/4449).

e. Groundwater-monitoring wells are located throughout the training areas and may be encountered during training. If a monitoring well is inadvertently damaged, immediately contact Range Control (BLACKBURN) and Environmental Quality Branch (EQB) at 451-5068 for further instructions.

f. Excavation or digging within the marked boundary of an archeological site is prohibited unless expressly approved by the Base Archaeologist at 451-7230/5063.

9. **Laying Cable and Field Wire**

   a. Use of communication wire and concertina/barbed wire is essential during training, but when these wires are left behind, they become real hazards.

   b. When using cable and field wire during training, you must:

      (1) Recover and police up all communications and concertina/barbed wire. Old wire lying in the underbrush and along the road can become tangled around Marines, animals, and
tracked/wheeled vehicles; it also impedes forestry operations.

(2) Double check to ensure you have picked up all trip wires, especially those connected to pyrotechnic training devices. It is the using unit’s responsibility to remove training devices such as flash bangs and trip flares from the training area. These items must be turned in as required.

10. Cutting Brush and Trees

a. Forested areas are an extremely important resource on MCB Camp Lejeune for both training and the environment. When cutting brush and hardwoods for camouflage, do not cut or knock down any standing hardwood trees. Do not cut any tree limbs larger than the diameter of your arm. Training units are not authorized to cut down trees with demolitions or explosives in training areas or on ranges.

b. Units are prohibited from cutting trees by explosive methods or chainsaws without a SRR and Field Exercise Request for Environmental Impact Review (FEREIR). Units are prohibited from knocking over trees with vehicles/equipment. Tree cutting requests must be submitted through the NEPA section (via a request for environmental impact review - FEREIR), and must indicate the number, size, and physical location of the trees.

c. Cutting or damaging of pine trees of any size is prohibited anywhere on base, except by permission of MCB EMD, or in cases of a hazard to human safety. At no time will any pine trees or pine foliage be cut for camouflage aboard MCB Camp Lejeune.

11. Archeological Sites

a. Many archeological sites are located throughout the training areas of MCB Camp Lejeune. BO 5090.8 directs protection against unauthorized excavation, removal, alteration, or defacement of archeological resources. Significant sites will be marked with the following signs:

```
RESTRICTED AREA
EXCAVATION, DIGGING, VEHICLES PROHIBITED
BY ORDER CO, MCB
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Or
Potential sites not yet evaluated, will not be marked but potential impacts will be assessed on a case-by-case basis. Training-related impacts to archeological sites will be assessed and appropriate measures taken to minimize/mitigate the effects.

b. In established archeological areas with signs indicating an archeological site, training is restricted as follows:

(1) Walking across these areas is permitted; digging, tampering with the site or collecting bone/artifacts from the site is strictly prohibited.

(2) Driving tracked vehicles on these sites is strictly prohibited. Tracked vehicles are restricted to existing trails in order to preserve these unique natural resources.

(3) Operations or projects on or around marked sites require approval from the Base Archeologist. For clarification of training impact adjacent to these areas, contact EMD at 451-5063/7230.

c. If human remains are discovered in any training area, training facility, or range, immediately stop all ground disturbing activities to avoid further disinterment. Notify Range Control (BLACKBURN on 34.70 MHz), EMD at 451-5063, the Base Archeologist at 451-7230, and the Provost Marshall at 451-2455.

12. Field Waste Disposal

a. Field mess facilities generate four types of waste: liquid, garbage, rubbish, and possible human waste. Disposal of this waste must not create conditions that endanger Marines’ health. Unit commanders have a responsibility to supervise and inspect training areas, training facilities, and live fire ranges to ensure they are policed properly and field wastes disposed of properly.

b. Liquid Waste. In the field, bathing and liquid field mess wastes (gray water) may be disposed of in the soil by using
a soakage trench if the site conditions allow for proper treatment of the wastes. Coordinate with EMD for authorized disposal of grey water wastes via soakage trenches at 451-5063.

(1) A soakage trench consists of a central pit, two feet on a side, one foot deep, with trenches at least six feet long outward from each side of the pit. Trenches must be one foot wide and one foot deep at the central pit, increasing to one and a half feet deep at the far end. Fill the bottom of the pit and trenches with small rocks which the using unit must request, purchase, or contract. One soakage trench can absorb the liquid waste from 200 diners for up to two weeks. If the field mess is to be used for more than two weeks, construct two trenches for each 200 diners and rotate them daily.

(2) A grease trap must be placed between the field mess or shower unit and the soakage trench. (It may be of the filter or the baffle type.) This removes grease, scrap food, and other suspended solids and ensures the soil will be able to absorb the remaining gray water. Suspended solids will be considered as garbage and must be removed by the using unit.

(3) Field showers/mess units must be located on adequately drained soils, at least 150 feet from nearest surface water and at least 500 feet from nearest drinking water well.

(4) Closing the soakage trench:

(a) Fill the trench with successive layers of earth, packing each layer down before adding the next.

(b) Mound the trench with at least one foot of compacted dirt.

(c) Spray the mound with an approved residual insecticide.

(d) Call Preventive Medicine Unit, Naval Hospital, at 451-5707, to inspect soakage trenches before use and after closing.

c. Garbage. Garbage is solid/semi-solid wet waste resulting from shower units, food preparation, cooking, and serving. Garbage attracts flies and animals to field mess facilities and bivouac sites, which greatly increases the risk of disease transmission and personal injury; it also quickly
decomposes, causing unpleasant odors. Follow these handling guidelines for garbage:

(1) Return garbage to an administrative mess hall for disposal. Keep it in covered containers or plastic bags while in the field and during transportation.

(2) Do not leave trash like MRE bags on the ground overnight, even if it is contained in large plastic bags. Place all trash in dumpster as required.

(3) Store open food in lockable or animal proof containers. DO NOT FEED WILD ANIMALS.

(4) Locate dumpsters away from tents, high pedestrian traffic areas, and high-speed roads. Do not place food/shower unit garbage in dumpsters. Unit will be responsible for placing and removing dumpsters.

d. Trash. Good habits formed with regard to trash handling pay off in combat. Expeditionary operations generate trash, but disciplined units leave no "intelligence" track for the enemy to exploit. There is no "magic working party" to clean up after your unit. Commanders of using units are responsible for policing MCB Camp Lejeune’s ranges, training areas, and training facilities. To keep the training areas of MCB Camp Lejeune usable:

(1) Police-up your assigned area. Each unit utilizing a training area/training facility/range is responsible for its state of police upon completion of training. Segregate trash by type; ammo dunnage, brass (by caliber/mm), links, metal, cardboard, wood, and transport to the Recycling Center/DRMO or landfill as appropriate or as required. Use dumpsters (when available) for small trash intended for the landfill. Burying or burning trash is never authorized.

(2) Crush and flatten all recyclable cardboard boxes and transport to the Recycling Center or place in green, “cardboard only” dumpsters. Cardboard that is not acceptable for recycling; paste or paperboard, wax-coated, plastic-coated, and food contaminated cardboard, should be placed in brown “trash” dumpsters.

(3) Do not place grass, leaves, pine straw, lumber, metal, pallets, dirt, metal items or other weighty materials in
or next to the trash dumpsters. All wood products will be taken to the wood lot at the Base Landfill.

(4) Process ammunition boxes with reusable value through DRMO via the unit S-4/Supply Officer. Transport scrap wood and unserviceable wooden boxes to the MCB Landfill located on Piney Green Road to be weighed. Vehicles must have a weight ticket from the MCB Landfill scale master prior to transit to the appropriate disposal facility. Once weighed, transport the wood debris to the wood-waste site across the road from the landfill. "Usable pallets" will be taken to the Recycling Center, Bldg. 978, next to the landfill. Do not dispose of used pallets in the woods/training area/training facility/range, this provides more fuel for forest fires.

(5) Do not place any type of ammunition dunnage with the recyclable materials being transported to the Recycling Center. The using unit is required to turn in ammunition dunnage (ammunition cans, brass (separated by caliber/mm), links, and other items as required) to MCB DRMO.

(6) MRE wrappers/trash are not biodegradable presently. They must be picked up throughout the training areas/training facilities/ranges and disposed of in brown "trash" dumpsters.

(7) Report all dump/trash sites to Range Control, 451-1240.

e. **Human Waste.** Bivouac sites established for longer than three (3) days require sanitary chemical toilets (Port-a-Johns). Requests are submitted through normal unit logistics channels for Port-a-Johns. For planning purposes 1 port-a-john will support 25 Marines in a 24 hour period. The use of large, field expedient head facilities (i.e., slit trenches, four-holers) can be authorized. Contact MCB EMD for site evaluation and consult local preventative medicine units (PMU) for guidance on using slit trenches and four holers. "Cat Holes" are permissible in remote training areas but are not authorized in RCW areas and wetlands. Units must ensure human waste sites are closed properly and all holes are filled in.

13. **Hazardous Materials (HAZMAT), Hazmat Spills, and Spoil Areas**

a. **HAZMAT.** Spills of hazardous materials, fuels, and POLs of any quantity on land and water must be reported promptly to the MCB Fire Department by telephoning 911 and Range Control
(BLACKBURN on 34.70 MHz or 451-3064). After reporting the spill, the unit responsible will follow guidance received from the MCB Fire Department or senior on-site MCB EMD representative, assist in clean up of the spill, and management of the recovered product/contaminated soil. Oil soaked dirt must be dug up by the spilling unit and placed in a metal drum or a hard plastic spill container. Unit personnel will coordinate with their Unit Environmental Compliance Officer and will be responsible for the transportation of the contaminated soils to the MCB Hazardous Material/Hazardous Waste Consolidation Site at Bldg 977/S-962 (451-1482). Higher authority must arrange contract spill response for any spills that could potentially impact the Atlantic Ocean, the Atlantic Intracostal Waterway (AIWW), New River, or salt marshes.

b. Battery Waste. Properly manage batteries according to existing Base environmental standard operation procedures. Environmental Compliance Officers may coordinate with the MCB Hazardous Material/Hazardous Waste Consolidation Site Managers at 451-1482 for the receipt of batteries directly from field operations. Batteries (all) will not be buried in the training area or ranges.

c. Fuel Storage Restrictions. Units wishing to establish tactical fuel farms must submit a Field Exercise Request for Environmental Impact Review (FEREIR) to the EMD NEPA section. Range Control and EMD must approve locations for tactical fuel farms; Range Control 451-1240/1236 and EMD 451-4542. Prior to approval, unit personnel must receive a briefing on fuel storage and spill response from EMD personnel. Coordination for the required briefings, spill response, and fuel storage requirements or coordination for removal of contaminated oils, fuels, transmission fluid, anti-freeze may be completed by calling the Resource Conservation and Recovery Section at 451-1482. Use of containers with a 55 gallon or greater capacity must be coordinated with the Environmental Compliance Branch (ECB) Military Liaison at 451-1482 and must be placed within a soil or sandbag berm with an impervious liner. Each storage or use area must be marked per BO 5090.91, have a current and properly posted spill plan and have appropriate spill response and communication equipment immediately available at the site. A complete list of requirements will be provided from EMD. Contaminated oil, fuel and anti-freeze should be stored within properly marked containers and returned to the unit motor pool or the unit must have coordinated with Base EMD for the removal from the field.
d. Munitions. Per 40 CFR 266.202(d), if a munition/round lands off-range (Round Out of Safe) and is not promptly rendered safe and/or retrieved, the munition will be subject to Resource Conservation and Recovery Act (RCRA) authority and considered a solid waste. Units with “Rounds out of Safe” must document them by reporting the information to BLACKBURN on the net or by phone at 451-3064/4449 or by contacting Range Control at 451-1240.

Disposal of unused munitions or munitions debris by burial or any other method is prohibited.

Note: Before any construction/digging of any type aboard this Base within a range, training area a UXO anomaly survey must be conducted and coordinated with the MCB Range Development Staff.

e. Leaking Equipment. Any vehicle, generator, or other equipment identified as leaking anti-freeze or other petroleum oils, fuels or lubricants will be immediately removed from service and the training area. All releases of POL/HM/HW shall be called in to the Fire Department at 911. Units will capture incidental leaks by placing absorbent matting under the area of discharge. Using units are responsible for the turn-in of contaminated matting to EMD after coordination with the unit Environmental Compliance Officer.

f. Spoil Areas. The spoil containment berm located from Grid 86772616 to 86742619 to 86472638 to 86806393 is a restricted area and off limits to all unauthorized personnel. This berm contains the dredging spoil from the Mile Hammock Bay dredging project. The spoil is the consistency of quicksand and poses a severe hazard to anyone who might inadvertently enter it. A newly created spoil area at Weil Point (Grid 875350) contains dredging spoil from the French Creek area. It is also a hazard area and is off limits.

14. Beach Operations

a. Any marine environment is very fragile and extra caution is required to ensure that the balance of nature is not disturbed. MCB Camp Lejeune, with its ocean beaches, Atlantic Intracoastal Waterway (AIWW), inlets, marshes, and bays is no exception. As Marines, we depend on these waterways for training and recreation. We also have a responsibility to protect waterways for civilian use and the wide variety of plants and animals living there.
b. MCB Camp Lejeune’s ocean beaches are important training and recreation assets. By following these simple rules we can preserve our beaches:

(1) Never disturb or remove grass or plants from the beach. Dune plants help prevent erosion.

(2) Exit and enter the beach only at designated areas by poles marked with black and yellow striped signs.

(3) Keep all heavy equipment, track, and wheeled vehicles off the sand dunes and vegetation.

(4) Leave the sand fences alone. They help build new sand dunes and prevent erosion to existing dunes.

(5) Bivouac only on the north side of the beach road.

(6) Filling sandbags from the beach is not authorized.

(7) Fires/Camp Fires are not authorized on the beach.

(8) Remove all trash, debris, and all other items.

(9) ROIC must fill out a Range Control Beach Checklist when signing for the training beach and provide a road guard at the gate. Upon completion of training and police call, the beach must be inspected by a Range Inspector.

(10) When not in use for training, the EB training beach is available for recreational use. Refer to the flip sign on the road at the entrance of EB training area for the availability of recreational use. Range Inspectors will flip the sign to recreational use after the training unit passes the required inspection. Recreational users may contact the Game Warden 451-5226 or BLACKBURN, 451-3064, to check on the use of the EB training beach. MCCS and the Game Warden are responsible for advising its patrons on the environmental rules of the beach and cleaning up after its use. All recreational users (other than approved family days) are responsible to sign in/out at the Game Warden’s shack by the entrance to EB. Game Warden will periodically check the log to verify recreational users have checked in/out of the area. All domesticated animals accompanying recreational users must be held on a leash/reins and any defecation by these animals must be bagged and removed with the patron from the beach. If any portion of the EB training area is desired to be used for a family day/unit party,
unit must submit a SRR through their chain of command to arrive
at MCB S-3 via Range Control 30 working days in advance of the
date of the event.

c. Rules regarding the recreational vehicle use of the
beach are covered in BO 5090.111, Use of Off-Road Recreational
Vehicles (ORRVs). Copies of the Order may be obtained by
calling the Environmental Conservation Branch at 451-5063 or it
can be found on the MCB Base Adjutant website. Beach Permits
and stickers are required to drive ORRVs on the beach. They can
be obtained at the Game Warden’s office at 451-2196 or at the
Onslow Beach Caretaker’s (MCCS) office at 450-7502.

d. Training exercises will generally be limited to the
operating area between old Riseley Pier which is longer there
(Grid 904265) and Grid 883251. The MCB Range Control Officer
must approve requests for use of additional beach operating
area. In all cases, the beach must be signed for at Range
Control.

(1) Special-use Area #1. The area 750 meters northeast
of Riseley Pier is available from November-March when more
maneuver or landing area is required.

(2) Special-use Area #2. The area 500 meters northeast
of Onslow Beach North Tower is available for live fire exercises
(Stinger/Avenger shoots, etc.) following coordination with Range
Control. During the sea turtle nesting season, specific
measures must be implemented to prevent disturbance to nesting
females or hatchlings. These include the following: Sandbag
walls will be placed around any vehicle or equipment left on the
beach overnight. Vehicle traffic, at less than 10 mph, will be
restricted to below the high tide line. The training unit will
be responsible for smoothing the beach and removing debris once
the exercise has concluded. Any deep ruts or large mounds that
create a safety hazard or obstacle to vehicles needing to access
the beach will be smoothed out by the responsible unit.

e. Egress from the beach to the road behind the sand dunes
shall be at designated egress routes. Vehicular traffic is
prohibited on or between the dunes. Access points for military
traffic are marked by poles marked with black and yellow striped
signs in the vicinity of the following grids:

(878248) (883251) (885253) (887254)
(889256) (891257) (893258) (895260)
(897261) (899263) (900264) (901264)
f. There are two beach access points for ORRVs: old Riseley Pier area (Grid 901264) and old South Tower area (Grid 883251), per BO 5090.111.

g. Causeway use must be coordinated and scheduled 60 days in advance with MCB Range Control at extension 451-3065/1240/1236.

h. The collection of archeological material (stone tools, pottery, bone) is prohibited on Onslow Beach by BO 5090.8.

15. Environmental Assessment. The National Environmental Policy Act (NEPA) requires that careful considerations be given to environmental impacts of proposed projects or actions. Further, it requires the consideration and documentation of alternatives to the proposed action. Some training exercises require the preparation of an Environmental Assessment (EA). Examples include training impacts on wetlands, endangered species, archeological sites, and some training exercises taking place on or over non-military property. In those cases, and whenever there is any potential for significant environmental impact, exercise planners should consult the appropriate directives and then contact Range Control. Point of contact for more information about environmental assessment is the MCB EMD, NEPA Section, at 451-4542.

16. Summary. Protecting the environment is everyone’s job at MCB Camp Lejeune. When you damage plants, animals, and other natural resources, the Marine Corps, MCB Camp Lejeune, and your training all suffer along with the cost to repair or replace. Damage could curtail training, and, in the case of Endangered Species, result in legal action. Caring for our natural resources is not something that takes a lot of time; it takes just a little planning, attention to detail, passing the word, enforcement and supervision.
Chapter 7

Environmental Influences

1. Forest Fire Danger and Ratings

   a. General. All brush and wild fires, regardless of size or location aboard MCB Camp Lejeune, must be reported immediately to BLACKBURN (34.70 MHZ or 451-3064/4449) and BLACKBURN will notify the Base Fire Department. Training units will provide fire-fighting details to combat grass or brush fires if requested, but at no time will fire fighting details go down range or into any impact areas (K-2, G-10). Units should not use military 782 gear to fight fires, i.e. flak jackets/ponchos. At no time will a unit place Marines in danger/harms way in an effort to fight wild fires. Units must report all smoke and the direction smoke may be traveling from possible wild fires to BLACKBURN immediately. Use extreme caution on any tank trail or hard surface road from drifting smoke or any other condition due to the fire.

   b. Fire Readiness Planning and Readiness Plans. Each March/September, MCB, Range Control will publish the fire readiness plan message to remind all units/commands of their responsibilities during the forest fire season. Readiness levels are set by the N.C. Forestry Service, located in New Bern, and include New River and Cherry Point Air Stations, Camp Lejeune, and the surrounding N.C. counties. Fire Readiness planning establishes training restrictions and preparation commensurate with the wild fire danger by establishing forest fire danger ratings as follows:

   (1) Fire Readiness Plan 1. Fire danger is low. No restrictions on authorized live fire ranges, training facilities, and training areas. Normal safety precautions will be followed.

   (2) Fire Readiness Plan 2. Little or no chance of fire, occasional fire activity. No restrictions on authorized live fire ranges, training facilities, and training areas. Normal safety precautions will be followed.

   (3) Fire Readiness Plan 3. Fire danger is moderate. The use of certain ranges, training facilities, and training areas may be curtailed at the discretion of the Commanding
Officer, MCB, Camp Lejeune. Normal safety precautions will be followed. Caution shall be exercised in the use of all pyrotechnics, smoke type devices or any training device that could start a fire.

(4) Fire Readiness Plan 4. Normal Fire Season. The use of certain live fire ranges, training facilities, and training areas may be curtailed at the discretion of the Commanding Officer, MCB Camp Lejeune. Warming fires, when specifically authorized and approved, will be used only in designated places and only under supervision of a Staff Noncommissioned Officer (SNCO) or officer at all times. Pyrotechnics/smoke type training devices are restricted to authorized live fire ranges only.

(5) Fire Readiness Plan 5. Fire danger is very high/severe. All pyrotechnic/smoke/incendiary/white phosphorous/illumination type ammunition will be restricted to the N-1/BT-3, G-10, and K-2 Impact Areas only. Tracer ammunition (all calibers) is restricted to the N-1/BT-3, G-10, and K-2 Impact Areas only. Authority to use tracer ammunition in GSRA or on any other ranges will be a situational, MCB command decision. Smoking is permitted only in locations specifically designated by the training unit commander to reduce the fire hazard. These areas will be fireproofed and supervised. The use of generators will be restricted to the areas that have been fireproofed for at least a 50 foot diameter circle around each generator. Warming fires are not authorized.

(6) Fire Readiness Plan 6. Fire danger is critical. All military training in forested areas and other activities likely to start forest fires, such as smoking, will be suspended. Only ball ammunition, fragmentation hand grenades on grenade ranges, demolition materials on assigned ETA’s, high explosive artillery, and mortar ammunition on designated ranges/impact areas can be used during Readiness Plan 6. All other items listed in Fire Readiness Plan 5 will also comply.

(7) Fire Readiness Plan 7. Fire danger is extreme. All training will cease and troops will come out of the field. Request to train during Readiness Plan 7 will be submitted to the CO, MCB Camp Lejeune via Director, S-3, MCB Operations and Training and the Director, Range Control Division.

(8) Blow-up Alert. An alert to units that conditions could quickly elevate from level 4 to level 7 or higher. All
training will cease and all assigned units will come out of the field.

**Note:** As directed by the Commanding Officer MCB, as a temporary control measure a higher Fire Readiness Condition could be set due to extreme forest fire/wild fire condition aboard the base as per Range Control Advisory 07-11 Message DTG 111042Z.

c. Fire Department. Firefighting personnel will allow fires in the impact areas to burn until they reach the fire buffer zone. Firefighting personnel will not enter the impact areas.

d. Prescribed Burns. Prescribed burning is routinely scheduled and conducted by Base Forestry to stimulate new growth, control insects, clear underbrush, open up areas for better training for military personnel, and reduce the fuel on the ground. Do not enter training areas that are scheduled for burning and don’t confuse prescribed burns with wild fires.

e. Catalytic converters and vehicle/aircraft exhausts can get hot enough to catch fire to nearby ground cover/grass. Do not leave the engine running while parked during high fire readiness periods.

2. Destructive Weather Warnings and Conditions

a. General. Storms are a potential and continuous threat to naval shipping, aircraft, and all military installations. Adequate and timely warning, coupled with prompt and effective actions by all unit commanders, will reduce loss of life and damage to property due to destructive weather conditions. BLACKBURN will notify all training units of impending destructive weather. For additional/detail information on destructive weather see Base Order P3440.6G.

b. Destructive Winds. Destructive weather of this category generally affects localized areas and is usually short in duration, but the onset could be very sudden and treacherous.

(1) Wind Warnings

(a) Local Wind Warnings. A local wind warning is issued when potentially hazardous winds, between 20 to 33 knots, are anticipated. They are issued by MCAS New River Weather for the information of the MCB, Camp Lejeune area so as to initiate
appropriate precautions in daily, training, and recreational activities.

(b) **Small Craft Warnings.** A term used by the U.S. Navy and the U.S. Weather Bureau to describe wind speeds of 18 to 33 knots over coastal areas and inland waters only. As the name implies, this warning is intended to alert operations of small craft to take appropriate precautions to avoid damage to craft or injury to personnel.

(c) **Gale Warnings.** Sustained winds of 34-47 knots, not associated with a tropical cyclone system, are expected in the warning area during the period stated (usually within 12 hours). Winds are steady and of sufficient force to cause heavy turbulence and high seas. This warning is primarily for mariners use.

(d) **Storm Warnings.** Sustained winds of 48 knots or greater, not associated with a hurricane, are expected in the warning area during the period stated (usually within 12 hours).

(2) **Destructive Wind Conditions.** Storm condition settings for localized destructive weather.

(a) **Destructive Wind Condition II**

1. Destructive winds are reported or expected in the area within six hours.

2. Be prepared to secure from field training.

3. Initiate the progressive preparations of personnel, facilities, buildings, equipment, and material for the developing destructive weather.

(b) **Destructive Wind Condition I**

1. Localized storm conditions are imminent or in progress. Progressive actions toward preparing personnel, facilities, buildings, equipment, and materials against the effects of destructive winds will be ongoing.

2. Activities in the Camp Lejeune area will continue without substantial operational or service interruption.
3. Secure from field training as required.
Take safety precautions and seek shelter.

c.. Thunderstorms. Thunderstorms are small-scale storms produced by cumulonimbus clouds, always accompanied by lightning and thunder. These storms may develop within sight and do not have a destructive appearance until shortly before passing overhead. Often, hail is associated with thunderstorms and may inflict major damage. Thunderstorms may be accompanied by extremely strong winds, heavy rainfall, and near zero visibility. Lightning strikes are common; North Carolina ranks second in the nation for fatalities from lightning strikes. To avoid being struck by lightning, you should seek shelter when you hear even the faintest thunder. Some of the best places to take refuge are enclosed buildings or vehicles (but don't touch the metal!). In case there are no safe spaces nearby, bend into a crouching position until there is a break in the storm. Isolated trees and open structures make poor lightning shelters. If there is a tall object nearby, move as far away as possible, at least 2 meters. Standing next to tall isolated objects like a pine trees, poles, or towers makes you vulnerable to secondary discharges coming off those objects.

(1) Severe Weather Advisories

(a) Watch. Thunderstorm is possible within or adjacent to the watch area.

(b) Warning. The occurrence of a thunderstorm has been confirmed by observation on weather radar.

(c) Local Thunderstorm Warning. A warning issued by the MCAS New River Weather Service to notify of potentially hazardous weather. Warning is issued for the Camp Lejeune area to initiate appropriate precautions in daily training and recreational activities. BLACKBURN broadcasts the thunderstorm warning, on the Range Control radio net, to all units training in the field.

(2) Destructive Thunderstorm Conditions

(a) Thunderstorm Condition II

1. A thunderstorm is reported or expected in the Camp Lejeune area within 6 hours.

2. Be prepared to secure from field training.
3. Be prepared to take immediate safety precautions and shelter.

(b) **Thunderstorm Condition I**

1. A thunderstorm is imminent or in progress in the Camp Lejeune area.

2. Secure from field training as directed by the unit commander or as required.

3. Take safety precautions and seek shelter.

d. **Tornadoes.** A tornado is a violently rotating column of air generally spawned from thunderstorm clouds and touching the ground. Maximum winds created by tornadoes may exceed 300 MPH. Tornadoes move at speeds of approximately 54 MPH and have an average lifespan of 20 minutes.

(1) **Tornado Advisories**

(a) **Tornado Watch.** The conditions for tornado formation are favorable. “Tornado watch” is a standard term used by the National Weather Service (NWS). MCAS, New River Weather Service will issue a Tornado Watch Advisory for the MCB Camp Lejeune area when such an advisory has been issued by the NWS.

(b) **Tornado Warning.** A tornado has a strong potential to develop, is about to strike, has been detected by radar, or has been spotted in or adjacent to the locale for which the warning is issued. “Tornado Warning” is a standard term used by the NWS. MCAS, New River Weather Service will issue a Tornado Warning Advisory for the MCB Camp Lejeune area when such an advisory has been issued by the NWS.

(2) **Tornado Conditions**

(a) **Tornado Condition II**

1. Conditions aboard Camp Lejeune are favorable for tornado activity.

2. Initiate the progressive preparation of personnel, facilities, buildings, equipment, and material for the developing destructive weather.
3. Be prepared to secure from field training.

4. Take precautions to ensure an appropriate state of readiness on short notice.

(b) **Tornado Condition I**

1. A tornado is about to strike or has been spotted aboard Camp Lejeune or the surrounding area.

2. Activities in the Camp Lejeune area will continue without substantial operational or service interruption. Actions toward preparing personnel, facilities, buildings, equipment and material against the effects of tornadoes will be ongoing.

3. Secure from field training, take immediate safety precautions and seek shelter, as directed by the unit commander or as required.

d. **Hurricanes**

   (1) Hurricanes are systems of rotating winds characterized by a rapid decrease in pressure and increase in winds speed toward the center of the storm. These dimensions vary from 60 to over 1000 nautical miles. Three stages of intensity are associated with tropical cyclones:

      (a) **Tropical Depression.** A weather system with wind speeds up to 33 knots.

      (b) **Tropical Storm.** A weather system with wind speeds between 34-63 knots.

      (c) **Hurricane.** A weather system associated with high winds, 63 knots or greater and torrential rain.

   (2) **Destructive Weather Condition (DWCs).** Specific actions and staff responsibilities during DWCs are contained in BO 3440.6G.

      (a) **Destructive Weather Condition V (DWC V).** Potential for occurrence of destructive weather is elevated but no specific system threatens the MCB Camp Lejeune area.

      (b) **Destructive Weather Condition IV (DWC IV)**
1. A specific destructive weather system with sustained winds of 50 knots or greater is forecast to affect the Camp Lejeune area within 72 hours.

2. Initiate the progressive preparation of personnel, facilities, buildings, equipment, and material for the developing destructive weather.

(c) Destructive Weather Condition III (DWC III)

1. A specific destructive weather system with sustained winds of 50 knots or greater is forecast to affect the Camp Lejeune area within 48 hours.

2. Secure all loose gear and continue preparations for destructive weather.

3. Secure all non-essential personnel as directed.

(d) Destructive Weather Condition II (DWC II)

1. A specific destructive weather system with sustained winds of 50 knots or greater is forecast to affect the MCB Camp Lejeune area within 24 hours.

2. Secure all field training prior to DWC I.

3. All training units will depart from the field.

(e) Destructive Weather Condition I (DWC I)

1. A specific destructive weather system with sustained winds of 50 knots or greater is forecast to affect the Camp Lejeune area within 12 hours.

2. Release all non-essential personnel.

3. Ensure the completion of all preparations and staging of equipment, material, and personnel.

4. Restrict personnel to base liberty.

(f) Destructive Weather Condition I, Caution (DWC IC)
1. A specific destructive weather system with sustained winds of 50 knots or greater is forecast to affect the Camp Lejeune area within 6 hours.

2. Close Base to all incoming traffic.
3. Secure all activities.
5. Secure all non-essential personnel to quarters.

(g) Destructive Weather Condition I, Emergency (DWC IE)

1. MCB Camp Lejeune is currently experiencing a specific destructive weather system with sustained winds of 50 knots or greater.

2. Only functions crucial to essential operations and emergency response necessary to protect life and preserve law and order will be the only authorized activities.

(h) Destructive Weather Condition I, Recovery. The destructive weather system has passed the MCB Camp Lejeune area, but safety and storm hazards remain.

e. Winter Storms. Winter storms may bring any combination or all of the following: freezing temperatures, wind, sleet, freezing rain, and the accumulation of ice and or snow.

(1) Winter Weather Advisories

(a) Hard Freeze Advisory. The temperature is forecast to drop to 20 degrees Fahrenheit or below for more than 24 hours.

(b) Light to Moderate Snow Advisory. Expected accumulation of less than 2 inches of snow in the local area is forecast, not requiring the setting of a Winter Storm Condition.

(c) Heavy Snow Warning. An accumulation of 2 inches or more of snow is expected which may be accompanied by freezing rain or sleet.
(d) **Blizzard Warning.** A considerable amount of falling and/or blowing snow. These types of storms present dangerous wind-chill factors.

(e) **Light to Moderate Ice Advisory.** Freezing rain will result in the glazing of exposed surfaces with the possibility of some measurable accumulation. Bridges and metallic surfaces will likely glaze first with other flat surfaces to follow.

(f) **Ice Storm Warning.** Freezing rain will result in the measurable accumulation of one-quarter inch of ice.

(g) **Winter Storm Watch.** Severe winter weather conditions are forecast for the area and time designated. These conditions may include freezing rain, sleet, snow, wind, and/or ice conditions.

(h) **Winter Storm Warning.** Severe winter weather conditions are imminent or occurring in the forecast area. These conditions may be freezing rain, sleet, snow, wind, and/or ice conditions.

(i) **Wind-chill.** This is the still air temperature that would have the same effect on exposed flesh as the current combination of still air temperature and wind.

(2) **Winter Storm Condition II**

(a) A winter storm of 1/4 inch of ice or 2 or more inches of snow is forecast within 24 hours.

(b) Initiate the progressive preparation of personnel, facilities, buildings, equipment, and material for the developing destructive weather.

(c) Be prepared to secure from field training.

(3) **Winter Storm Condition I**

(a) A winter storm of 1/4 inch of ice or 2 or more inches of snow is forecast within 12 hours.

(b) Ensure the completion of proper preparation and response actions.
(c) Secure from field training as directed by the unit commander or as required.

(4) Winter Storm Condition I, Emergency

(a) A winter storm of 1/4 inch of ice or 2 or more inches of snow is imminent, or in progress.

(b) Take immediate safety precautions and seek shelter.

(5) Winter Storm Condition I, Recovery. Winter storm activity has abated or ceased such that initial response and recovery operations may commence.

3. Wet Bulb Globe Temperature Index (WBGTI)

a. WBGTI information can be found on the Automated Heat Sensor System (AHSS) web page[http://clion.lejeune.usmc.mil], which can also be accessed through the Range Control web page by using the MCB Camp Lejeune website, http://www.lejeune.usmc.mil (refer to Chapter 1 for access to the website). Phone inquiries should go to the Marine Corps Base Automated Information System, 451-1717. WBGT readings may be obtained from BLACKBURN between the hours of 0800-1900 daily.

b. WBGTI Index Readings

(1) Green Flag - When the WBGTI reads from 80 to 84.9 degrees, heavy exercises for personnel not acclimatized should be conducted with caution and under constant supervision.

(2) Yellow Flag - When the WBGTI reads from 85 to 87.9 degrees, strenuous exercises, such as marching at standard cadence, should be suspended for troops who are not acclimatized in their first 2 or 3 weeks. Outdoor classes in direct sun should be avoided.

(3) Red Flag - When the WBGTI reads from 88 to 89.9 degrees, all physical training should be halted for those troops who have not become thoroughly acclimatized by at least 12 weeks of living and working in the area. Those Marines who are thoroughly acclimatized may carry on limited activity not to exceed 6 hours per day. BLACKBURN will notify all training units with established communications when the WBGTI reaches red or black flag conditions.
(4) **Black Flag** - When the WBGTI exceeds 90 degrees, all strenuous activity should be halted for all troops.

c. The WBGTI readings are relayed hourly via radio to training units by BLACKBURN when the reading exceeds 84 degrees.
1. **General**

   a. This chapter describes the restricted airspace(s), aircraft operation procedures, unmanned aircraft systems operations (UAS), and other facilities controlled by MCB Camp Lejeune, and sets forth all instructions, policies concerning their use in conjunction with the MCB live fire ranges, training facilities, and training areas. MCB Camp Lejeune restricted airspace is controlled to safely permit multiple uses with the least interference. All firing and aircraft operations must conform to airspace regulations contained in this section and all other Federal Aviation Administration regulations.

   b. All airspace over MCB Camp Lejeune is subject to Federal Aviation Administration (FAA) regulations. A major portion of Camp Lejeune lies within airspace designated by the FAA as Restricted Airspace R5306D, R5306E, R5303 A/B/C, and R5304 A/B/C (Figure 8-1). Military aircraft operating within the restricted airspace will squawk 4000 unless already assigned a discreet transponder code by Air Traffic Control (ATC). A Letter of Procedure (dtd 8 Mar 2010) signed by MCB Camp Lejeune, MCAS Cherry Point, Regional Airspace Coordinator, and DOT/FAA (MCAS Cherry Point) and a Letter of Agreement (dtd 15 Oct 2007) signed by MCB Camp Lejeune, MCAS New River, Regional Airspace Coordinator, and DOT/FAA (MCAS Cherry Point) further divides R-5303 and R-5304 by identifying sub areas; SR-6, SR-7, SR-8, and SR-10 for real time joint use and scheduling.

   c. Restricted Area R5306D: includes airspace from surface to 17,999 feet Mean Sea Level (MSL) within the area from Lat 34 Degrees 44'51"N, Long 77 Degrees 14'39"W (Grid 18S TU 9457 4734); to Lat 34 Degrees 34'31"N, Long 77 Degrees 08'59"W (Grid 18S UD 0281 2804); to Lat 34 Degrees 30'49"N, Long 77 Degrees 15'49"W (Grid 18S TD 9219 2057); to Lat 34 Degrees 33'01"N, Long 77 Degrees 18'59"W (Grid 18S TD 8746 2561); to Lat 34 Degrees 36'06"N, Long 77 Degrees 26'07"W (Grid 18S TD 7668 3157); to Lat 34 Degrees 40'01"N, Long 77 Degrees 21'59"W (Grid 18S TD 8317 3866); 18S TD 8492 3708) to the start point.

   d. Restricted Airspace R-5306E: includes airspace from surface to 17,999 feet Mean Sea Level (MSL) within the area from Lat 34 Degrees 40'21"N, Long 77 Degrees 21'11"W (Grid 18S TD
8-2

BO 3570.1C

8288 3928); to Lat 34 Degrees 40'01"N, Long 77 Degrees 21'59"W (Grid 18S TD 8317 3866); to Lat 34 Degrees 36'06"N, Long 77 Degrees 26'07"W (Grid 18S TD 7668 3157); to Lat 34 Degrees 38'13"N, Long 77 Degrees 25'59"W (Grid 18S TD 7698 3548) to the start point.

e. Restricted Airspace R-5306D/E Fixed Wing Procedural Line: subdivides R-5306D and includes all of R-5306E below 3000 ft MSL to allow MCAS New River to conduct approaches and departures to/from runways 19 and 23 vice only runway 23 during hazardous fixed wing operations within R-5306D/E. The Procedural Line is defined as a line running NE and SW from Lat 34 degrees 39'11"N, Long 077 degrees 20'49"W (Grid 18S TD 8492 3708) to Lat 34 Degrees 63'06" N, Long 077 Degrees 26'07"W (Grid 18S TD 7668 3157). When the Procedural Line is put into affect by BLACKBURN, fixed wing hazardous traffic shall remain south of the line when flying below 3000 ft MSL. Moving the 3 mile buffer to the Procedural Line below 3000 ft MSL allows approaches to MCAS New River. Above 3000 ft MSL, the 3 mile buffer is from the border of R-5306E as before.

f. Restricted Airspace R5303 (GSRA). Designated Altitudes: R5303A -- Surface to 6999 ft MSL; R5303B -- 7000 to 9,999 ft MSL; R5303C -- 10,000 to 17,999 ft MSL. R5303A excludes the Airspace 1,500 FT AGL and below within a 3NM radius of Sky Manor Airport. The lowest sub-area, R-5303A, is the most frequently used area. Time of designation 0600-1800 Monday-Friday; other times (including any use of R5303B/C) by NOTAM at least 24 hours in advance. Boundaries: Lat 34 Degrees 41'40"N, Long 77 Degrees 33'09"W (Grid 18S TD 6619 4212); to Lat 34 Degrees 39'16"N, Long 77 Degrees 28'31"W (Grid 18S TD 7316 3751); to Lat 34 Degrees 36'51"N, Long 77 Degrees 29'01"W (Grid 18S TD 7228 3306); to Lat 34 Degrees 36'13"N, Long 77 Degrees 31'51"W (Grid 18S TD 6792 3199); to Lat 34 Degrees 37'03"N, Long 77 Degrees 35'25"W (Grid 18S TD 6250 3368); to Lat 34 Degrees 38'49"N, Long 77 Degrees 37'31"W (Grid 18S TD 5938 3702) to the start point.

g. Restricted airspace R5304 (GSRA). Designated Altitudes: R5304A -- Surface to 6999 ft MSL; R5304B -- 7000 to 9,999 ft MSL; R5304C -- 10,000 to 17,999 ft MSL. R5304A excludes the airspace 1,500 FT AGL and below within a 3NM radius of Holly Ridge Airport. The lowest sub-area, R-5304A, is the most frequently used area. Time of designation 0600-1800, Monday-Friday; other times (including any use of R5304B/C) by NOTAM at least 24 hours in advance. Boundaries: Lat 34 Degrees 37'03"N, Long 77 Degrees 35'25"W (Grid 18S TD 6250 3368); to Lat 34 Degrees 36'13"N, Long 77 Degrees 31'51"W (Grid 18S TD 6792 3199).
h. The restricted areas shall be managed on a real-time basis to minimize impact on non-participating aircraft. When non-participating aircraft on V-139 are unable to transit above the restricted area altitudes in use, range activity shall either be capped or a cease-fire imposed to accommodate the aircraft on the airway. On occasion, ATC may vector non-participating aircraft off the airway to the east of the range through restricted areas R-5306D and R-5306E, which shall be deactivated for that purpose.

i. Warning Area W-122. The portion of Warning Area W-122 of concern to MCB Camp Lejeune is the airspace over the Atlantic Ocean 30 miles in radius from a point three miles at sea off Onslow Beach Bridge (Areas 15 and 15 A). Warning Area W-122 is controlled by the Fleet Area Control and Surveillance Facility, Virginia Capes, Naval Air Station, Oceana, Virginia Beach, VA (FACSFAC VACAPES).

j. New River Class D Area. New River Air Station controls this airspace, which extends upward from the surface to and including 2500 feet MSL and within a 5 NM radius of MCAS New River.

2. General Aircraft Operations

a. Fixed wing operators utilizing R5306D/E are also required to schedule R5306C and Hatteras Foxtrot MOA with Cherry Point Central Scheduling Office at (252) 466-4040/4041 (DSN 582). Same-day scheduling of R-5306C and Hatteras Foxtrot MOA will be through Big Rock Range Control at (252) 466-2936/5127, DSN 582. Arrival and departure notifications to/from R-5306C, Hatteras Foxtrot MOA are required with Big Rock Range Control on UHF 323.775 or VHF 141.95. Arrival and departure notifications to/from AIR 15 are required with Cherry Point Approach Control via direct communications on UHF 268.7 or VHF 124.1. The resulting block (R-5306C, R-5306D/E, Hatteras Foxtrot MOA, and AIR-15) provides the maneuver area needed to contain and protect participating aircraft from non-participants during fixed wing operations. When fixed wing aircraft cannot maintain flight within a scheduled SUA and spill into an adjacent SUA a “Whiskey Alert” call will be reported immediately to the controlling agency.
b. This SOP provides command, control, and maneuver protocols for operations inside SUA. Terms such as “controlling agency”, “controller” and/or “terminal controller” are used in the tactical sense and are not to be confused with 14 CFR Part 73 or Part 91 terminologies. 14 CFR responsibilities remain intact.

Figure 8-1.—Special Use Airspace

Figure 8-1.—Special Use Airspace

c. Prior to entering the R-5306D, R-5306E, R-5303 A/B/C, or R5304 A/B/C area, aircraft shall contact BLACKBURN or appropriate controlling agency Direct Air Support Center (DASC) CHIEFTAIN, Air Support Element (ASE) NOMAD, FAC/Joint Terminal Attack Controller (JTAC), FAC(A) on primary air control UHF frequency (233.8), alternate air/civilian aircraft VHF frequency (119.5), or the Range Control FM net (34.70) for authorization to enter the airspace. Positive two-way communications with the controlling agency is required at all times for all aircraft. Aircraft operations in the Special Use Airspace are on a VFR concurrent use basis. Extreme vigilance shall be used as numerous military aircraft use these areas concurrently. Once in the Special Use Airspace, the pilot is responsible for the conduct of the mission, squawking the assigned transponder code, monitoring the assigned frequency, and remaining within the approved area of operation.

d. Flights over MCB Camp Lejeune require the below visual
conditions (unless unit minimums are more restrictive):

<table>
<thead>
<tr>
<th></th>
<th>DAY</th>
<th>NIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helo</td>
<td>500 ft/1 mile</td>
<td>1000 ft/3 miles</td>
</tr>
<tr>
<td>Tiltrotor (&lt;150 KIAS)</td>
<td>500 ft/1 mile</td>
<td>1000 ft/3 miles</td>
</tr>
<tr>
<td>Tiltrotor (&gt;150 KIAS)</td>
<td>1000 ft/3 mile</td>
<td>1000 ft/3 miles</td>
</tr>
<tr>
<td>FW</td>
<td>2000 ft/5 miles</td>
<td>2000 ft/5 miles</td>
</tr>
<tr>
<td>FW (with Ordnance at night)</td>
<td>3000 ft/5 miles</td>
<td></td>
</tr>
</tbody>
</table>

**e.** Aircraft shall be advised of and guided around or over firing gun positions, live ranges, and indirect fire gun target lines (GTL). To safely allow concurrent air operations and indirect firing, aircraft shall not approach **CLOSER THAN 1000 meters from Gun Target Lines (GTLs)**. Pilots must be familiar with all Artillery Gun Positions (GPs) and Mortar Positions (MPs).

**f.** Minimum altitude for aircraft flying over all civilian residential areas, to include mainside housing areas is, 1000 feet AGL.

**g.** Aircraft will not fly directly over the Base Ammunition Supply Point (ASP) area lower than 4000 ft MSL, just west of the G-10 Impact Area.

**h.** All aircraft will maintain a two-mile (3.22 KM) radius from parachute operations at all times.

**i.** Over-flights of the G-10, K-2, and N-l/BT-3 Impact areas are prohibited during live firing operations unless the aircraft is above the minimum altitude prescribed, involved in the exercise, and directed by BLACKBURN/CHIEFTAIN.

**j.** Fixed Wing aircraft (all types) are not authorized to enter the R-5303 A/B/C and R-5304 A/B/C Airspace (GSRA) when activated. When the airspace defined by R-5303 A/B/C or R-5304 A/B/C Airspace (GSRA) is not activated, an Air Traffic Control (ATC) agency is the appropriate service agency and aircrews will be instructed to contact ATC. If an aircraft calls BLACKBURN for routing when these areas are not activated, BLACKBURN will collect usage data and coordinate a switch to ATC. When departing the area aircraft will contact BLACKBURN with departure usage data. After coordination with ATC, ATC may desire the aircraft stay with BLACKBURN. A NOTAM is required for both fixed and rotary wing parachute operations in the GSRA. Timely scheduling through RFMSS no later than 5 working days prior to the first day of the month the event is scheduled in, will allow Range Control to include the event on its monthly
<table>
<thead>
<tr>
<th>POINT</th>
<th>GRID WGS 84</th>
<th>LAT</th>
<th>LONG</th>
<th>AIRSPACE</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALFA</td>
<td>18S TD850355</td>
<td>34 deg 38’17”</td>
<td>77 deg 20’20”</td>
<td>R5306D</td>
<td>Weil Point</td>
</tr>
<tr>
<td>BRAVO</td>
<td>18S TD 810320</td>
<td>34 deg 36’07”</td>
<td>77 deg 23’29”</td>
<td>R5306D</td>
<td>Gillette Point</td>
</tr>
<tr>
<td>CHARLIE</td>
<td>18S TD 907305</td>
<td>34 deg 35’45”</td>
<td>77 deg 16’56”</td>
<td>R5306D</td>
<td>Intersection of Sneads Ferry Rd and Highway 172</td>
</tr>
<tr>
<td>DELTA</td>
<td>18S TD 970356</td>
<td>34 deg 38’45”</td>
<td>77 deg 12’54”</td>
<td>R5306D</td>
<td>Bear Creek at Willis Landing</td>
</tr>
<tr>
<td>ECHO</td>
<td>18S TD 947328</td>
<td>34 deg 37’09”</td>
<td>77 deg 14’14”</td>
<td>R5306D</td>
<td>Highway 172 at Range G-6 CBC</td>
</tr>
<tr>
<td>FOXTROT</td>
<td>18S TD 995332</td>
<td>34 deg 37’17”</td>
<td>77 deg 10’34”</td>
<td>R5306D</td>
<td>Bear Inlet</td>
</tr>
<tr>
<td>GOLF</td>
<td>18S TD 755267</td>
<td>34 deg 33’46”</td>
<td>77 deg 27’01”</td>
<td></td>
<td>Hatteras F MOA</td>
</tr>
<tr>
<td>INDIA</td>
<td>18S TD 845461</td>
<td>34 deg 44’03”</td>
<td>77 deg 21’13”</td>
<td></td>
<td>Route 24 Bridge</td>
</tr>
<tr>
<td>JULIET</td>
<td>18S TD 935435</td>
<td>34 deg 42’43”</td>
<td>77 deg 15’13”</td>
<td>R5306D</td>
<td>Hubert Fire Tower</td>
</tr>
<tr>
<td>HOTEL</td>
<td>18S TD 723331</td>
<td>34 deg 36’39”</td>
<td>77 deg 29’00”</td>
<td>R5306D</td>
<td>Dixon Fire Tower</td>
</tr>
<tr>
<td>KILO</td>
<td>18S TD 854230</td>
<td>34 deg 31’48”</td>
<td>77 deg 20’13”</td>
<td></td>
<td>Hatteras F MOA</td>
</tr>
<tr>
<td>LIMA</td>
<td>18S TD 822345</td>
<td>34 deg 40’24”</td>
<td>77 deg 22’41”</td>
<td></td>
<td>Hadnot Point (Old Hospital Point)</td>
</tr>
<tr>
<td>MIKE 1</td>
<td>18S UD 060350</td>
<td>34 deg 38’26”</td>
<td>77 deg 06’40”</td>
<td>R5306C</td>
<td>Bogue Inlet</td>
</tr>
<tr>
<td>NOVEMBER 1</td>
<td>18S UD 015486</td>
<td>34 deg 45’43”</td>
<td>77 deg 10’08”</td>
<td>R5306C</td>
<td>Silverdale RR Bridge</td>
</tr>
<tr>
<td>OSCAR 1</td>
<td>18S UD 014405</td>
<td>34 deg 41’11”</td>
<td>77 deg 10’05”</td>
<td>R5306C</td>
<td>Queens Creek Bridge</td>
</tr>
<tr>
<td>PAPA</td>
<td>18S TD 650410</td>
<td>34 deg 41’05”</td>
<td>77 deg 34’28”</td>
<td>R5303A/B</td>
<td>Power line road /C Junction</td>
</tr>
<tr>
<td>QUEBEC</td>
<td>18S TD 610353</td>
<td>34 deg 41’05”</td>
<td>77 deg 36’25”</td>
<td>R5303A/B</td>
<td>Road Junction /C</td>
</tr>
<tr>
<td>ROMEO</td>
<td>18S TD 636313</td>
<td>34 deg 36’15”</td>
<td>77 deg 34’39”</td>
<td>R5303A/B</td>
<td>Road Bend /C</td>
</tr>
<tr>
<td>SIERRA</td>
<td>18S TD 632234</td>
<td>34 deg 31’40”</td>
<td>77 deg 34’44”</td>
<td>R5303A/B</td>
<td>Road Bend/ Intersection /C</td>
</tr>
<tr>
<td>TANGO</td>
<td>18S TD 695230</td>
<td>34 deg 31’35”</td>
<td>77 deg 30’32”</td>
<td>R5303A/B</td>
<td>Road Bend/ Power Line /C</td>
</tr>
<tr>
<td>VICTOR</td>
<td>18S UD 028280</td>
<td>34 deg 34’31”</td>
<td>77 deg 08’59”</td>
<td>R5306D</td>
<td>Southern most corner of R5306D at sea</td>
</tr>
<tr>
<td>WHISKEY</td>
<td>18S TD 987252</td>
<td>34 deg 32’56”</td>
<td>77 deg 11’38”</td>
<td>R5306D</td>
<td>N1/BT-3</td>
</tr>
<tr>
<td>XRAY</td>
<td>18S TD 922206</td>
<td>34 deg 30’21”</td>
<td>77 deg 15’49”</td>
<td>R5306D</td>
<td>Eastern most corner of R5306D, N1/BT-3</td>
</tr>
</tbody>
</table>

**Figure 8-2.--Aircraft Control Points**

**NOTE 1:** Use at or above 1200 feet MSL requires advance coordination with Big Rock Range Control to activate R-5306C and the Hatteras Foxtrot MOA. Additional Control
Points, as required by DASC for a specific exercise, shall be published in the Exercise Air Ops Plan and Pilot-Controller Handbook after coordination with the RCO.

NOTAM request to Cherry Point. If the event is scheduled less than 5 days prior to the end of the month, it is the unit’s responsibility to request a NOTAM within the NET 72 hours and NLT 24 hours window. SUAs R-5303/5304 may be subdivided and de-activated to support fixed wing operations and aircraft recovery efforts to MCAS New River.

k. When R5306D/E SUA(s) are under BLACKBURN control, no more than one section (two aircraft) of fixed wing high performance jet aircraft (CAS or SIMCAS) will be allowed into the restricted airspace(s) at any one time. When a DASC (CHIEFTAIN) has control of the airspace quantities of aircraft are limited by DASC capabilities.

l. Figures 8-2 and 8-3 display the air control points used by BLACKBURN for aircraft utilizing MCB Camp Lejeune ranges and impact areas.

m. Simulated Close Air Support (SIMCAS) is authorized in the R-5306D and R-5306E for Fixed Wing Aircraft and all restricted airspace for helicopter and tiltrotor Aircraft. Aircraft conducting Simulated Close Air Support (SIMCAS) in support of the ground units shall maintain positive two-way communications with the terminal controller who, in turn, will have positive two-way communications with BLACKBURN (or appropriate controlling agency). SIMCAS aircraft shall adhere to the boundaries established to integrate SIMCAS simultaneous with other air operations - refer to Annex N (Offensive Air Support Appendix) of the Operation Plan and the Pilot-Controller Handbook for each specific exercise. Aircraft involved in SIMCAS can have inert/captive carrying ordnance items on the aircraft.

n. When departing the MCB special use airspace, aircraft must contact the controlling agency to check out.

m. Aircraft malfunctions, accidents, emergencies, near miss or precautionary landing shall be reported to BLACKBURN immediately. The RCO or Range Control Operations Officer (RCOO) shall be notified immediately and an incident report and other appropriate reports will be created.

3. Coordination and Control
a. Aircraft and Terminal Controllers

(1) Aircraft participating in live firing operations, bombing, close air support (live or simulated), or combined air-ground exercises require positive control by a FAC, FAC(A), or JTAC. FAC/JTAC and Drop Zone (DZ)/Landing Zone (LZ) control officers have the same responsibilities as an ROIC/RSO of firing units. Chapter 2, paragraphs discussing ROIC and RSO of this SOP apply.

Figure 8-3.--Map Showing Aircraft Control Points

(2) For units involved in training exercises (e.g. COMPTUEX, CERTEX, JTFEX, Major Joint or Combined Exercises), the unit Air Officer/FAC must meet with Range Control at least 10 days prior to the exercise to discuss air ops, use of FAC/JTAC, FAC(A)s, DASC or approved airspace control agency, and determine and resolve conflicts. Unit must provide Range Control/BLACKBURN a copy of the Air Tasking Order/SPINS for the exercise. Unit must provide updates to the Air Tasking Order/SPINS as required.

(3) FAC/JTAC, DZ Control Officers, and LZ Control Officers for multiple lifts are required to conduct a face-to-
face brief with Range Control and BLACKBURN, (Bldg 54) by 1400 the day prior to range use. FAC(A)s will receive the Range Safety Brief upon entering MCB, Camp Lejeune restricted airspaces.

(4) All aircraft shall contact the appropriate controlling agency to receive a range brief and authorization to enter the airspace. The controlling agency shall direct aircraft to switch to the FAC/JTAC upon entering the restricted airspace. If communications cannot be established, the pilot shall immediately contact the controlling agency for assistance and further instructions.

(5) Minimum altitude for fixed wing operations inside the restricted area is 3000’ AGL (coordinating altitude). Fixed wing operations below 3000’ AGL coordinating altitude (i.e. strafing runs/low altitude ingress) are authorized when deconflicted from rotary wing operations with lateral and altitude separation. Fixed wing shall not overfly occupied BPs and HAs. Absolute minimum altitude for fixed wing aircraft from Initial Point (IP) to Pop-up Point (PUP) is 1000 feet AGL outside the Base boundary and 700 feet AGL within the boundary. Helicopter and tiltrotor aircraft shall not exceed 2000 feet AGL when fixed-wing aircraft are operating in R5306D/E.

<table>
<thead>
<tr>
<th>Control Point</th>
<th>Altitude (AGL) Minimum</th>
<th>ATK Heading</th>
<th>Offset</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP-20</td>
<td>700 ft</td>
<td>340-070 degrees</td>
<td>Either</td>
</tr>
<tr>
<td>Bravo</td>
<td>700 ft;1000 ft off base</td>
<td>030-100 degrees</td>
<td>Either</td>
</tr>
<tr>
<td>November</td>
<td>1200ft</td>
<td>150-270 degrees</td>
<td>Either</td>
</tr>
<tr>
<td>Oscar</td>
<td>1200ft</td>
<td>150-270 degrees</td>
<td>Either</td>
</tr>
<tr>
<td>Mike</td>
<td>1200ft</td>
<td>150-300 degrees</td>
<td>Either</td>
</tr>
<tr>
<td>Foxtrot</td>
<td>1000 ft</td>
<td>206-360 degrees</td>
<td>Either</td>
</tr>
</tbody>
</table>

**IPs for G-10 Impact Area**

<table>
<thead>
<tr>
<th>Control Point</th>
<th>Altitude (AGL) Minimum</th>
<th>ATK Heading</th>
<th>Offset</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP-20</td>
<td>700 ft</td>
<td>000-120 degrees</td>
<td>Either</td>
</tr>
<tr>
<td>Bravo</td>
<td>700 ft;1000 ft off base</td>
<td>180-255 degrees</td>
<td>Either</td>
</tr>
<tr>
<td>November</td>
<td>1200ft</td>
<td>180-255 degrees</td>
<td>Either</td>
</tr>
<tr>
<td>Oscar</td>
<td>1200ft</td>
<td>180-255 degrees</td>
<td>Either</td>
</tr>
<tr>
<td>Mike</td>
<td>1200ft</td>
<td>215-255 degrees</td>
<td>Either</td>
</tr>
</tbody>
</table>
IPs FOR K-2 IMPACT AREA

<table>
<thead>
<tr>
<th>Control Point</th>
<th>Altitude (AGL) Minimum</th>
<th>ATK Heading</th>
<th>Offset</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP-20</td>
<td>700 ft</td>
<td>260-330 degrees</td>
<td>Either</td>
</tr>
<tr>
<td>Charlie</td>
<td>700 ft</td>
<td>260-330 degrees</td>
<td>Either</td>
</tr>
</tbody>
</table>

NOTE:
GP-20 is the replacement IP for the old Riseley Pier. GP-20 is located in the sandy area behind the old pier location in the vicinity of grid 90332677, Lat 34°33’35”, Long 77°12’13”. K-2 pull-offs are left; avoid over flight of the Base Rifle Range/SOTG/MARSOC ranges.

(6) CAS missions shall not over fly the Cantonment Area, Industrial Area (Mainside), MCB Ammunition Supply Point (ASP), or base housing areas. Aircraft must maintain a minimum of 1,000 feet AGL if over flying any civilian housing areas enroute to or exiting the R-5303, R-5304 (rotary wing CAS) and R-5306D/E airspaces.

(7) Upon mission completion and when control is released from the terminal controller, the pilot shall contact the Controlling Agency before exiting the area reporting number of personnel trained and number of rounds/missiles/bombs expended by DODIC.

(8) The charts above for the impact areas are the approved attack headings and altitudes from control points (all headings are magnetic).

(9) Appendix B offers further special instructions for CAS into impact areas N1/BT-3, K-2, and G-10. Appendix B describes Helicopter/tiltrotor Battle Positions (BPs) and Holding Areas (HAs) for these impact areas. Appendix B contains information on the use of the Urban CAS Facility. Aerial gunnery may be conducted at SR-7 and SR-10, see Appendix A.

(10) Weather restrictions for CAS missions into authorized impact areas are in accordance with this SOP (see paragraph 2).

(11) CAS and Simulated CAS (SIMCAS) missions in any training area or range shall remain clear of adjacent ranges or impact areas. When fixed wing aircraft cannot maintain flight within a scheduled SUA and spill into an adjacent SUA a “Whiskey Alert” call will be reported immediately to the controlling agency.
b. **Airspace Control Agencies**

(1) The Direct Air Support Center (DASC) is the principal air control agency responsible for the direction of air operations directly supporting ground forces. The role of the DASC is to provide the means to process immediate air support requests, coordinate aircraft employment with other supporting arms, manage terminal control assets supporting ground combat and combat service support forces, and control assigned aircraft and itinerant aircraft transiting through its area of responsibility (MCWP 3-25.5 Direct Air Support Center Handbook). The DASC ROIC/RSO will have the same responsibilities as a ROIC/RSO of a firing unit. Chapter 2, Figure 1, of this SOP states the DASC must have a minimum of two DASC trained ROIC/RSO qualified personnel on duty; a second set of eyes and ears to prevent mistakes. Training/familiarization of new DASC personnel is encouraged and can be arranged by contacting Range Control.

(2) During selected training exercises, the DASC is normally the primary airspace control agency responsible for the control and coordination of the restricted airspace. Other Airspace Control Agencies such as Air Support Elements (ASEs), Tactical Air Control Squadrons (TACRONs), or Airborne Airspace Control Platforms (E2C Hawkeye) may be authorized to control and coordinate the restricted airspace.

(3) The DASC (or other approved airspace control agency) will maintain positive two-way communications with BLACKBURN by radio on the range safety net (34.70). Two radios are required: primary and backup. If the airspace control agency is unable to maintain two-way communications with BLACKBURN, the airspace control agency will relinquish control and instruct all aircraft to contact BLACKBURN on primary air control UHF frequency (233.8), alternate air control/civilian aircraft VHF frequency (119.5), or the Range Control net (34.70 FM).

(4) When the DASC (or other approved airspace control agency) has control of the restricted airspace, it shall exercise procedural control over all aircraft within the restricted airspace. Other control agencies may exercise positive or procedural control based on controlling capabilities. The following procedures apply:

(a) The airspace control agency has the same responsibilities as BLACKBURN for airspace control and coordination.
(b) When the approved airspace control agency has control of the restricted airspace, multiple fixed-wing sections are authorized, as long as positive two-way communication is established with all participating flights on the Radio In and Out (RIO) frequency assigned for the exercise.

(c) Prior to entering the restricted airspace, all aircraft shall contact the airspace control agency to receive a range safety brief and authorization to enter the airspace. All aircraft will check in with call sign, number of aircraft, position, requested routing and destination. Exercise aircraft will add their mission event number with any exceptions.

(d) The airspace control agency shall switch the aircraft to their terminal controller, at which time the provisions of paragraph 3. Coordination and Control apply.

(e) CAS aircraft operating in an Impact Area must have positive two-way communication with the terminal controller who, in turn, must have positive two-way communications with the airspace control agency.

(f) Upon mission completion, when released from the terminal controller, the pilot shall contact the airspace control agency before exiting the restricted airspace. The FAC/JTAC conducting the event will provide the number of personnel trained and number of rounds/missiles/bombs expended by DODIC. The FAC/JTAC must obtain this information from the pilots before the aircraft departs.

(g) Helicopter and tiltrotor aircraft will contact the airspace controlling agency as soon as possible after lifting from each landing zone.

(h) Additional IPs, altitudes, attack headings, and offsets may be approved by Range Control/BLACKBURN and delineated in appropriate Exercise Operations Plans/Pilot Controller Handbook.

(i) Types I, II, and III CAS events are authorized in this facility per current JCAS manual. All restrictions must be read back to terminal controller by aircrew from each attacking aircraft. All attacks must comply with individual target set restrictions listed in the following paragraphs below. Additionally, for Type II and Type III operations on Camp Lejeune, each attack requires inbound with a heading call (in degrees).
a. Special Range Requests for CAS Types II and III attack profiles with munition combinations for target sets will be submitted to Range Control for approval. New profiles require a face-to-face brief with the Range Safety Specialist using the WDZ tool to receive approval. As profiles are approved, a list will be maintained for future training events. Contact Range Control for the current approved list.

b. For Type II and III attacks, FAC/JTAC shall confirm aircraft’s navigation system accuracy with aircrew prior to commencing the attack.

c. The airspace control agency and all ROICs and RSOs shall conduct a face-to-face brief with Range Control/BLACKBURN the day prior to commencement of any exercise involving the use of an agency in the restricted airspace. This brief shall provide an update of the range regulations, procedures as well as the current status of ranges, and current copy of SPINS to be used.

d. Once the airspace control agency has received control of the restricted airspace from Range Control/BLACKBURN, they shall retain control responsibility until completion of the exercise. BLACKBURN retains authority to take back the airspace at any time in the event of an emergency or as deemed necessary.

e. The airspace control agency shall be granted divert authority over all helicopter and tiltrotor aircraft operating in the MCB Camp Lejeune area for the conduct of actual medical evacuations from units in the field. The unit requesting the MEDEVAC/CASEVAC shall contact the controlling agency on 233.8 UHF, 119.5 VHF, 34.70 FM, or any other available means and provide the following:

(1) Pick up coordinates.
(2) Number of personnel injured.
(3) Type of injury/injuries.
(4) If on board medical assistance is required.
(5) LZ mark (smoke, panels, lights).
(6) Terminal controller and frequency.

4. Helicopter and Tiltrotor Operations
a. Helicopter and tiltrotor pilots shall inform BLACKBURN when entering, departing one training area for another, and exiting a restricted airspace.

b. Helicopters operating in the MCB Camp Lejeune area will normally transit at 1000 feet AGL. Once established in a working area, helicopters will operate at 500 feet AGL and below unless specifically cleared by BLACKBURN.

c. Tiltrotors operating in the MCB Camp Lejeune area will transit at 1500 feet AGL. Once established in a working area, tiltrotors operating in conversion or Vertical Take Off and Landing (VTOL) mode will comply with all helicopter regulations. Tiltrotor operations below 500 ft AGL shall not exceed 130 knots, except in an area approved by BLACKBURN for High Speed Approaches.

d. Helicopter and tiltrotor aircraft shall not exceed 2000 feet AGL when fixed-wing aircraft are operating in R5306D/E. Minimum altitude for fixed wing operations inside the restricted area is 3000’ AGL (coordinating altitude). Fixed wing operations below 3000’ AGL coordinating altitude (i.e. strafing runs/low altitude ingress) are authorized when deconflicted from rotary wing operations with lateral and altitude separation.

e. Transiting aircraft shall not overtake another aircraft without first establishing positive two-way communication with the other aircraft on the Range Control frequency (233.8 UHF).

f. Due to the high volume of flights within Camp Lejeune airspace mostly using night vision devices, rotary-wing and tilt-rotor aircraft operating within the Camp Lejeune Complex are required to operate a minimum of IR position lights and/or IR anti-collision lights during night flights. During periods of daytime low visibility, flights must operate position or anti-collision lights to prevent collision and provide other aircraft the opportunity see and avoid. Aircraft flying at night without night vision devices will operate position or anti-collision lights and announce they are flying unaided. For USMC aircraft external lighting outside the Camp Lejeune Range Complex, refer to FAA lighting exemption 8028C for USMC rotorcraft.

g. Helicopter and tiltrotor live firing shall engage targets near the center of the impact area. Helicopter and tiltrotor aircraft shall have positive identification prior to engagement. Aircraft which use lateral weapon engagements shall
be routed so as to present minimal hazard to ground troops. See Appendix B of this SOP for routes, headings, Battle Positions (BPs), and Holding Areas (HAs) when using G-10, K-2, and N1/BT-3 impact areas. See Appendix A of this SOP for use of G-10 Urban CAS procedures.

h. Range Control air requirements for FAC(A)

(1) These procedures are only for squadron specific CAS and FAC(A) training when no ground units are involved. Working CAS or SIMCAS with ground units will require standard ROIC, RSO, FAC, JTAC, DASC, G-10 Helo, G-10 Fixed, and G-10 Helo/Fixed procedures through the ground unit.

(2) Scheduling. Squadrons submit request for the range airspace (G-10 Helo, G-10 Fixed, G-10 Helo/Fixed, G-10 LASER) and an OP in RFMSS up to 90 days prior but NLT 48 hours prior to the event. Training areas must be scheduled and approved in RFMSS before submitting a Special Range Request (SRR). Occasionally G-10 is closed Friday through Monday for UXO clean up for near future. Contact RDD to coordinate weekend use.

(3) Submit SRR (Appendix J of this SOP) email to Range Safety Specialist.

(4) Lead Instructor Pilot (FAC and RSO qualified) for flight will be ROIC. RSO (RSO qualified) can be a squadron pilot, FAC qualified is desired but not required. RSO can be E-6 or above if JTAC qualified. RSO will be on the ground in an OP and have communications with BLACKBURN and the flight. RSO maintains target clearance. If LASERS are used, LRSO qualified person can be on the ground, in the air, and be ROIC or RSO.

(5) ROIC, RSO, and LRSO if required, must attend BLACKBURN face-to-face brief the day prior at Range Control. ROIC will give a copy of the SPINS to BLACKBURN/Range Control. SPINS must have ordnance type/DODIC/NALC.

(6) Issues with SRR

(a) Authorized ammo versus ordnance delivered

(b) Dive angle and airspeed

(c) HA used/BP to be used: Each BP has a set of restrictions based on ammo, SDZs, hover, running, and diving fires. See appendix B
(d) Altitude used

(e) Weather conditions/low ceiling

(f) Go-No-Go requirements

(g) LASERs – Certified LASER Range Safety Officer

(h) Highway closings – Road Guards/Gates

(7) Training. Squadrons send personnel (pilots, FACs, LRSOs, and JTACs E-6 and above) to Range Control Safety Officers Course. Completion of the TECOM Range Safety online course via MarineNet is required prior to Range Control Safety Officers Course. Personnel are required to bring TECOM course completion diploma to RSO course to attend.

(8) Commanding Officer’s Certification letter to Range Control. Letter needs to be signed by Squadron CO or By direction certifying ROICs and RSOs for their qualifications in the enclosure to the letter. Enclosure is also signed by CO or By direction. The letter with enclosure must be updated quarterly. Names and certifications are entered into the RFMSS data base at Range Control.

(9) Execution. Using units can check out scheduled ranges or training facilities up to eight (8) working days in advance (Mon-Thur) to the date of use. The ROIC (Only the ROIC can check out ranges) must check out the range or training facility from Range Control no later than 1200 the day prior to the scheduled event (Thursday for ranges Friday, Saturday, Sunday, Monday, and a federal holiday Tuesday). Ranges or training facilities not checked out by 1200 are cancelled and recorded as a unit no-show. Friday will be used to check out special events (TACPs) and write the weekend and federal holiday schedules. Those ranges and training facilities not checked out Mon-Thur could be checked out on a Friday if coordinated by the unit’s operation officer and approved with Range Control Operations Officer prior 1200 Thursday. RSO checks in from OP with BLACKBURN via normal procedures and receives a HOT range brief. Flight checks in with BLACKBURN and receives a HOT range brief and confirms number of aircraft and ordnance. RSO has communications with BLACKBURN and the flight (Squadron Common). Flight conducts range sweep (over flight) of target area and BPs being used. ROIC and RSO receive clearance from BLACKBURN to go HOT. Flight conducts training on squadron common tactical
frequency and monitors BLACKBURN throughout training in the event of check fire, emergency, etc..

(10) Flight lead IP (ROIC) and RSO is responsible for the safe conduct of fires on range, adherence to range fans, SDZs, Range Control SOP Chapter 8, and Appendix B.

(11) Upon completion of the training event, the flight will check out with BLACKBURN. ROIC or RSO will report ordnance expended by DODIC/NALC, type and number of aircraft, number of personnel trained, and request to go COLD. RSO will coordinate with BLACKBURN for a range inspection of the OP.

i. External lifts are not authorized from Administrative Landing Zones (except ALZ-22). Aircraft with external cargo shall not fly over built-up areas on MCB Camp Lejeune or over the trailer park at center grid 800285 when transiting the New River (Blue Line). Contact BLACKBURN immediately in the event cargo is accidentally dropped, giving the grid coordinates and type of cargo dropped.

5. Helicopter/Tiltrotor Landing Zones

a. Tactical Landing Zones (TLZs). All TLZs must be scheduled whenever troops are in the TLZ; external lifts, rappelling, fast rope, SPIE Rig training, troop lifts, etc. (See Chapter 3 for scheduling procedures). Scheduling all TLZ use is encouraged for availability and tracking usage. Pilots may conduct unscheduled helicopter/tiltrotor confined area landing and takeoff operations into TLZs only after authorization is granted by BLACKBURN and the pilot has ensured, by cold pass, that the TLZ is not occupied. When a TLZ is used for multiple troop lifts, a LZ Control Officer (Sgt or above) shall be established and will maintain communications with BLACKBURN; paragraph 3 applies.

<table>
<thead>
<tr>
<th>TLZ</th>
<th>GRID 18S TD</th>
<th>LAT (N)</th>
<th>LONG (W)</th>
<th>TRNG AREA</th>
<th>CO-LOCATED DZ/GP/MP/RWY</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALBATROSS</td>
<td>89622754</td>
<td>34 34’06”</td>
<td>77 17’36”</td>
<td>IG</td>
<td>DZ, GP-18</td>
</tr>
<tr>
<td>BAT</td>
<td>94257827</td>
<td>35 01’32”</td>
<td>77 15’20”</td>
<td>Oak Grove OLF</td>
<td>Between Oak Grove Runways</td>
</tr>
<tr>
<td>BLUEBIRD</td>
<td>87372597</td>
<td>34 33’13”</td>
<td>77 19’02”</td>
<td>ID</td>
<td>DZ, GP-22A/B</td>
</tr>
<tr>
<td>CANARY</td>
<td>85312856</td>
<td>34 34’35”</td>
<td>77 20’25”</td>
<td>IF</td>
<td>GP-27</td>
</tr>
<tr>
<td>CARDINAL</td>
<td>78393689</td>
<td>34 39’00”</td>
<td>77 25’05”</td>
<td>KB</td>
<td></td>
</tr>
<tr>
<td>CONDOR</td>
<td>75773544</td>
<td>34 38’11”</td>
<td>77 26’46”</td>
<td>MF</td>
<td>DZ</td>
</tr>
<tr>
<td>COOT</td>
<td>90944274</td>
<td>34 42’19”</td>
<td>77 16’58”</td>
<td>FA</td>
<td></td>
</tr>
<tr>
<td>CRANE</td>
<td>96203559</td>
<td>34 38’31”</td>
<td>77 13’25”</td>
<td>GE</td>
<td>GP-7</td>
</tr>
<tr>
<td>DODO</td>
<td>88733098</td>
<td>34 35’56”</td>
<td>77 18’13”</td>
<td>HB</td>
<td>DZ, GP-16</td>
</tr>
<tr>
<td>DOVE</td>
<td>85883094</td>
<td>34 35’53”</td>
<td>77 20’05”</td>
<td>HB</td>
<td>GP-25</td>
</tr>
</tbody>
</table>
Figure 8-4.—Tactical Landing Zones

NOTE(S):
1. TLZs DOVE and HAWK contain a large amount of loose sand, which can impact/limit CH-53 and V-22 operations.
2. Scheduling must be coordinated through the OIC, Special Operations Training Group.
3. Approach TLZ LARK from North, South, or West. Approaches from the East across Highway 172 will be made only in the case of emergencies.
4. Located on top of Hotel at MOUT CTF; capable of supporting the landing of one UH-1N/Y or CH-46 Helicopter. Approaches to TLZ Pigeon for landings and HRST should be
made from the NE to minimize roof damage to buildings directly South of TLZ Pigeon.

b. The following Airspace Control Points may be utilized to provide procedural control of aircraft operating feet wet off the coast of MCB Camp Lejeune for Tactical Approaches:

| VICTOR | 18S UD 028280 | 34 deg 34’31” | 77 deg 08’59” | R5306D | Southern most corner of R5306D at sea |
| WHISKEY | 18S TD 987252 | 34 deg 32’56” | 77 deg 11’38” | R5306D | N1/BT-3 |
| XRAY | 18S TD 922206 | 34 deg 30’21” | 77 deg 15’49” | R5306D | Eastern most corner of R5306D, N1/BT-3 |

c. Administrative Landing Zones (ALZs). Units shall schedule ALZs using procedures in Chapter 3, after coordination through the Area Commander. ALZ-2, is located at II MEF HQ. It is the requesting unit’s responsibility to coordinate with key personnel or acting representative of II MEF G-3 (Air Officer) at 451-8487 prior to using ALZ-2. As with any request, II MEF G-3 is the (primary/secondary) user for time and date requests. Should dual use of ALZ-2 be requested, II MEF will deconflict and approve co-use. Those units requesting ALZ-2 marking lights to be turned on for night operations should make it known on the Training Area Request (TAR) form in RFMSS. Requesting unit is responsible to coordinate safety, security, and traffic control issues. ALZ-4 and ALZ-33 are scheduled through MCB S-3 Operations, 451-0375. Requesting units should contact MCB S-3 for a copy of the SOP for ALZ-4 and ALZ-33. ALZ-32 is scheduled through MARSOC G-3 Air, 440-0863/0862.

<table>
<thead>
<tr>
<th>ALZ NUMBER</th>
<th>GRID 18S TD</th>
<th>LAT (N)</th>
<th>LONG (W)</th>
<th>LOCATION</th>
<th>AREA COMMANDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A</td>
<td>79644566</td>
<td>34 43’45”</td>
<td>77 24’24”</td>
<td>HQ Camp Johnson</td>
<td>CO, MCCCCSS</td>
</tr>
<tr>
<td>1B</td>
<td>79024488</td>
<td>34 43’20”</td>
<td>77 24’48”</td>
<td>Camp Johnson South</td>
<td>CO, MCCCCSS</td>
</tr>
<tr>
<td>2</td>
<td>82843950</td>
<td>34 40’28”</td>
<td>77 22’13”</td>
<td>II MEF HQ</td>
<td>CG, II MEF</td>
</tr>
<tr>
<td>3</td>
<td>83533938</td>
<td>34 40’25”</td>
<td>77 21’45”</td>
<td>Area One River Road</td>
<td>CO, 8th Mar</td>
</tr>
<tr>
<td>4</td>
<td>85063840</td>
<td>34 39’54”</td>
<td>77 20’45”</td>
<td>WPT Hill Field</td>
<td>MCB S-3</td>
</tr>
<tr>
<td>5</td>
<td>84083793</td>
<td>34 39’38”</td>
<td>77 21’22”</td>
<td>HQ 2D MLG</td>
<td>CG, 2d MLG</td>
</tr>
<tr>
<td>6</td>
<td>84773720</td>
<td>34 39’15”</td>
<td>77 20’55”</td>
<td>10th Marines Area</td>
<td>CO, 10th Mar</td>
</tr>
<tr>
<td>7</td>
<td>91573769</td>
<td>34 39’36”</td>
<td>77 16’28”</td>
<td>OP2 (Restricted)</td>
<td>RCO, S-3</td>
</tr>
<tr>
<td>8</td>
<td>83472961</td>
<td>34 35’08”</td>
<td>77 21’39”</td>
<td>Courthouse Bay</td>
<td>CO, MCES</td>
</tr>
<tr>
<td>10</td>
<td>82484237</td>
<td>34 42’01”</td>
<td>77 22’29”</td>
<td>Tennis Courts Paradise Point (Restricted)</td>
<td>MCB S-3</td>
</tr>
<tr>
<td>12</td>
<td>80784388</td>
<td>34 42’49”</td>
<td>77 23’38”</td>
<td>Golf Course West</td>
<td>MCB S-3</td>
</tr>
</tbody>
</table>
6. Parachute Operations and Drop Zones (DZ)

DZs must be scheduled in RFMSS for troop lifts, paroaps, rappelling, fast rope, and SPIE Rig training. Units performing paraops must request a NOTAM (see Chapter 3 paragraph 10). Range Control maintains copies of all DZ surveys (AF Form 3823).

<table>
<thead>
<tr>
<th>DZ</th>
<th>GRID 18S TD</th>
<th>LAT (N)</th>
<th>LONG (W)</th>
<th>TRAINING AREA</th>
<th>TLZ/GP/MP/RWY CO-LOCATED</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALBATROSS (1)</td>
<td>89652752</td>
<td>34 34’ 05”</td>
<td>77 17’ 35”</td>
<td>IB</td>
<td>TLZ, GP-18</td>
</tr>
<tr>
<td>BLUEBIRD (1)</td>
<td>87382599</td>
<td>34 33’ 19”</td>
<td>77 19’ 02”</td>
<td>ID</td>
<td>TLZ, GP-22</td>
</tr>
<tr>
<td>CANARY</td>
<td>85342855</td>
<td>34 34’ 58”</td>
<td>77 20’ 41”</td>
<td>IF</td>
<td>TLZ, GP-27</td>
</tr>
<tr>
<td>CONDOR (2)</td>
<td>75793543</td>
<td>34 38’ 11”</td>
<td>77 26’ 45”</td>
<td>MF</td>
<td>TLZ</td>
</tr>
<tr>
<td>FALCON (1)</td>
<td>91512926</td>
<td>34 35’ 03”</td>
<td>77 16’ 23”</td>
<td>GG</td>
<td>TLZ</td>
</tr>
<tr>
<td>GOOSE</td>
<td>91983098</td>
<td>34 35’ 59”</td>
<td>77 16’ 06”</td>
<td>GG</td>
<td>TLZ, GP-10</td>
</tr>
<tr>
<td>LARK (3)</td>
<td>94763886</td>
<td>34 40’ 16”</td>
<td>77 14’ 29”</td>
<td>FC</td>
<td>TLZ</td>
</tr>
<tr>
<td>PENGUIN</td>
<td>90033769</td>
<td>34 39’ 35”</td>
<td>77 17’ 29”</td>
<td>FD</td>
<td>TLZ</td>
</tr>
<tr>
<td>PHEASANT</td>
<td>66692361</td>
<td>34 31’ 40”</td>
<td>77 32’ 31”</td>
<td>SV</td>
<td>TLZ, Camp Davis N</td>
</tr>
<tr>
<td>PLOVER</td>
<td>85423229</td>
<td>34 36’ 36”</td>
<td>77 20’ 25”</td>
<td>HC</td>
<td>TLZ, GP-29</td>
</tr>
</tbody>
</table>

Figure 8-6.—Parachute Drop Zones

NOTE(S):
1. Requires safety/recovery boats. Boat support is using unit responsibility but support from Range Control Navy Safety Boat unit may be requested. Safety Swimmers are a
unit responsibility.
2. Requires coordination through MCAS, New River Operations prior to use and scheduling with Range Control.
3. Only Ram Air parachute operations are authorized.

7. **Water Drop Zones (WDZs)**

   a. WDZs must be scheduled three weeks in advance to permit publication of a Notice to Mariners. (See Chapter 3 for scheduling procedures). Safety recovery boats and safety swimmers are required and must be provided by using units.

<table>
<thead>
<tr>
<th>DESIGNATION</th>
<th>Grids</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>WDZ Farnell Bay</td>
<td>18STD 8436</td>
<td>Farnell Bay, New River</td>
</tr>
<tr>
<td>WDZ Gator</td>
<td>18STD 9326</td>
<td>Onslow Bay</td>
</tr>
<tr>
<td>WDZ Morgan Bay</td>
<td>18STD 8141</td>
<td>Morgan Bay, New River</td>
</tr>
<tr>
<td>WDZ Shark</td>
<td>18STD 8722</td>
<td>Onslow Bay</td>
</tr>
<tr>
<td>WDZ Stone Bay</td>
<td>18STD 8336</td>
<td>Stone Bay, New River</td>
</tr>
</tbody>
</table>

   **Figure 8-7.--Water Drop Zones**

   b. **WDZ Special Instructions**

      (1) **WDZ Farnell Bay.** Maximum altitude for jumpers to exit is 1500 ft AGL. Minimum water depth is 10 ft.

      (2) **WDZ Morgan Bay.** Coordinate use with the New River Operations Officer at DSN 484-6316/6317. Maximum altitude for jumpers to exit the aircraft is 1500 ft AGL. Minimum water depth is 10 ft.

      (3) **WDZ Stone Bay.** Maximum altitude for jumpers to exit is 1500 ft AGL. Minimum water depth is 10 ft.

8. **Drop Zone Control**

   a. A DZ/WDZ Drop Zone Safety Officer (DZSO) Jumpmaster (Sgt or above) will be assigned for parachute operations. DZSO must be current and a certified jumpmaster on the command certification letter. DZSO shall:

      (1) Carry out the duties normally associated with a FAC/Terminal Controller, to include signing for the DZ, conducting an advance face-to-face coordination meeting with BLACKBURN and creating/releasing a NOTAMs. Paragraph 2 applies.

      (2) Check-in with BLACKBURN at start of operations and monitor the range safety/control net throughout parachute operations.
(3) Inform BLACKBURN of any periods when aircraft are not on station, when operations resume, and when operations are complete with the number of personnel trained and number of jumps.

(4) Contact BLACKBURN to ensure all aircraft exit the R-5304, R-5306D, and R-5306E NOTAM airspace during High Altitude, Low Opening (HALO) jumps within these areas.

(5) If any part of the DZ is within 1000 meters of a body of water that is 4 feet or deeper, must have the required safety boats and safety swimmers to support the number of jumpers.

b. Use of DZs on the west side of the New River must also be coordinated in advance by the using unit with MCAS, New River Operations and the Tower (360.2 UHF or 120.0 VHF).

9. Unmanned Aerial System (UAS) Operations

a. UAS operations represent a special airspace coordination challenge. According to FAA regulations, UAS operations must be conducted within Special Use Airspace or Warning Areas. Due to this restriction, UAS operations cannot originate from TLZs Cardinal, Condor, Eagle, Owl, Parrot, Vulture or Bat and Emu at Oak Grove. UAS operations are permitted in the GSRA Special Use Airspace with the exception of the Holly Ridge airport exclusion area in the vicinity of Camp Davis. Once airborne, UASs cannot depart the Special Use Airspace except under special circumstances that have been coordinated with the FAA and ATC. All UAS operations will be conducted in accordance with TECOM Safety of Use Memorandum (SOUM) 3-08 which provides institutional range safety guidance and direction for units training with and or testing UASs on operational training ranges and FAA/J0 7610.4M applies at all times. SOUM 3-08 can be found on the RCD website.

b. TLZ Bluebird has a UAS Facility (hard packed gravel runway) designed for the larger UASs like the Shadow. This Facility was designed to meet the requirements for UASs that need a runway to take off and land on. Units with larger UASs that need this Facility to operate at MCB Camp Lejeune are required to schedule it in RFMSS.

c. UAS operations will be scheduled in accordance with Chapter 3, with the following additions.
(1) The Estimated Time of Arrival (ETA) block shall correspond to the time the UAS unit assumes responsibility for an area.

(2) The ETD (Estimated Time of Departure) block shall correspond to the time the UAS unit shall complete training.

(3) The Fire Start/End blocks shall be used for planning and shall correspond to the estimated daily start and end times of UAS operations.

(4) Location of Ground Control Station and Portable Control Station (split site operations only).

(5) Transponder code (if available).

(6) The end of training report to BLACKBURN must include type of UAS, total number of personnel trained, and total number of landings.

d. Range Officer In Charge (ROIC) and Range Safety Officer (RSO)
(1) Commanding Officer of the UAS unit shall designate certified and qualified Mission Commanders and External Pilots/UAS Operator for unit exercises, responsible for the overall conduct of UAS operations.

(2) Mission Commander, as designated by the flight schedule, shall assume all ROIC responsibilities, as defined in Chapter 2 of this SOP and SOUM 3-08, for scheduled UAS flight operations.

(3) External Pilots/UAS Operators may assume all Range Safety Officer (RSO) responsibilities as defined in Chapter 2 of this SOP and SOUM 3-08.

e. Pre-Flight Preparations. Prior to UAS operations, the Mission Commander shall complete the following actions:

(1) Receive transponder code from Cherry Point ATC.

(2) Schedule adjacent airspace, submit NOTAM information, submit NOTAM worksheet.

(3) Conduct a face-to-face range brief with Range Control/BLACKBURN on the day prior to the UAS flights and assume
training area responsibilities for the scheduled UAS operations. Units (VMU) from Cherry Point can conduct the face to face brief via phone the day before but must sign for the event at Range Control the day of if the UAS is landing in or taking off from MCB Camp Lejeune.

(4) Brief UAS missions for the following day with BLACKBURN using the following information:

   (a) UAS mission (i.e., test flight, training flight, flight in support of, etc.).

   (b) Location of the Ground Control Station (GCS) and the Portable Control Station (PCS).

   (c) Take-off and landing times.

   (d) Duration of flight.

   (e) Altitude block for flight operations.

   (f) Intended UAS route.

   (g) Transponder code.

   (h) Review Emergency/Down UAS Procedures.

   (i) Any other pertinent information on the conduct of the flight.

(5) For split site operations, establish communications between PCS and GCS on UAS TAC net.

(6) Establish communication between GCS and BLACKBURN, (233.8 UHF), 34.70 FM, phone 451-3064).

(7) Obtain a current and forecasted weather brief from MCAS, New River. BLACKBURN will provide updates upon request.

f. Weather Minimums

(1) Group 1 weather minimums for all UAS operations are 500 feet and 1.5 miles visibility.

(2) Group 2 and 3 take-off weather minimums for pattern work are 1000 foot ceiling and 3 statute miles visibility.
<table>
<thead>
<tr>
<th>UAS Category</th>
<th>UASs in this category</th>
<th>Max Wt (lbs) (Max gross take off weight)</th>
<th>Normal Operating Altitude</th>
<th>Speed Kias</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>Raven Wasp Dragon Eye</td>
<td>0-20</td>
<td>Less than 1200 feet AGL</td>
<td>Less than 250</td>
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<tr>
<td>Group 2</td>
<td>Scan Eagle</td>
<td>21-55</td>
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<tr>
<td>Group 3</td>
<td>Scan Eagle (with T/O wt over 55 lbs) Shadow</td>
<td>Less than 1320</td>
<td>Less than 18,000 feet MSL</td>
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<tr>
<td>Group 4</td>
<td>Predator Reaper</td>
<td>Greater than 1320</td>
<td>Less than 18,000 feet MSL</td>
<td>Any airspeed</td>
</tr>
<tr>
<td>Group 5</td>
<td>Global Hawk Global Observer</td>
<td>Greater than 1320</td>
<td>Greater than 18,000 feet MSL</td>
<td>Any airspeed</td>
</tr>
</tbody>
</table>

Figure 8-8.--Categories of UASs

(3) Group 2 and 3 weather minimums for all other UAS operations in the restricted areas are 3000 foot ceiling and 3 statute miles visibility.

g. Flight Operations

(1) 30 minutes prior to take-off, the Mission Commander shall contact BLACKBURN and request take-off clearance and Range Control brief.

(2) BLACKBURN shall activate the UAS operating area (defined by grid squares in RFMSS request and presented as an overlay at BLACKBURN face-to-face brief) and give clearance for take-off. The UAS operating area for Group 1 is defined as an LZ surrounded by a number of grid squares the UAS will operate in. The UAS operating area for Groups 2 and 3 is defined as that airspace from the surface to 2000 feet AGL within a 1.5 nautical mile radius from the center of the UAS launch/recovery site. 2000 feet is the minimum altitude for UAS operations outside the Groups 2 and 3 operating area.
(3) BLACKBURN provides clearance into the operating area.

(4) Ascent and descent of the UAS into (or out of) the operating area shall be conducted enroute or in a holding pattern, depending on the aircraft traffic situation.

(5) The UAS Mission Commander shall request clearance from BLACKBURN before changing the UAS position, altitude and/or route.

(6) UAS operations in conjunction with other aircraft are permitted but a safe separation distance of 1000 meters laterally and 1000 feet vertically should be maintained. As mentioned above, for safety of flight with other aircraft, it is recommended the unit use grid points (or squares) to define a box (operating area) the UAS will operate within.

(7) Maximum altitude for UAS operations is up to 10,000 feet. The maximum altitude can change according to the type of UAS platform and the mission.

(8) Flights over impact areas and through weapons safety fans shall be conducted only after determining the flight path of projectiles and coordinating with BLACKBURN and the firing unit. Flights on the gun-target line must be deconflicted with the firing unit.

(9) The Mission Commander shall notify BLACKBURN when the UAS is "Safe on Deck." When training is complete for the day, contact BLACKBURN to de-activate UAS operating area and report the number of personnel trained and the number of landings (sorties).

h. In-Flight Emergencies. Keeping in mind that the safety of manned aircraft, personnel and property is paramount, the Mission Commander shall adhere to all safety precautions prescribed in this chapter, managing emergencies IAW the UAS Emergency Procedure Checklist and the following range procedures:

(1) In the event of lost communication with BLACKBURN, the Mission Commander shall:

(a) Follow the last clearance received.
(b) Maintain orbit at the position of last clearance.

(c) Try to re-establish contact with BLACKBURN via any means (alternate radio, land line, cell phone, etc.). BLACKBURN shall advise all other aircraft in the R5306D/E airspace and contact New River Air Station ATC.

(d) For Group 1 UASs, if communications have not been re-established with BLACKBURN after 30 minutes or bingo fuel (battery life) has been achieved (whichever is first), remain in the operating area and land as soon as practicable.

(e) For Groups 2 and 3, spiral climb to 6,000 feet and return directly to the recovery site. If operating above 6,000 feet, maintain last altitude assigned. Descend using a spiral approach when inside 1.5 nautical miles from the recovery site.

(2) In case of engine/motor cut, the Mission Commander shall:

(a) Notify BLACKBURN immediately.

(b) Maintain the UAS inside the restricted airspace.

(c) Select and clear the ditching area with BLACKBURN.

(d) Advise BLACKBURN of the location of the ditching point and recovery procedures taken.

(3) Loss of controlling up-link to the UAS aircraft shall initiate an automatic return home flight program. The Mission Commander shall ensure that the return home point of this program will allow UAS recovery in the vicinity of the operating area not to interfere with any other training operations or grid coordinate 920350 (G-10). If UAS is ditched in the G-10 impact area, EOD support is required prior to entry into G-10.

(4) Emergency Recovery. The Mission Commander may declare an emergency recovery whenever conditions require the UAS to land as soon as possible. He shall:

(a) Contact BLACKBURN; declare an emergency recovery.
(b) BLACKBURN shall clear the UAS through the most direct route to the recovery site. Clearance from BLACKBURN shall be obtained prior to initiating UAS recovery. BLACKBURN shall divert all other aircraft from the projected UAS flight path.

(c) When within 1.5 nautical miles from the recovery site, the UAS shall commence descent for landing.

10. Lyman Road Operations

a. Prior to Day of Event, mission planners should contact Cherry Point Central Scheduling Office at (252) 466-4040/4041 (DSN: 582) to de-conflict R-5306C. Day of Event, contact Big Rock Range Control to de-conflict R-5306C at (252) 466-2936/5127.

b. ROIC will check out Lyman Road the morning of the first day of training (Check out on Friday for Monday operations).

c. ROIC will have a face-to-face brief with BLACKBURN after checkout. ROIC may check out Lyman Road for the entire scheduled period; subsequent safety briefs for the original ROIC shall be done between ROIC and BLACKBURN by radio or telephone.

d. Should there be a change of ROIC, Lyman Road shall have to be checked out again by the new ROIC and a face-to-face with BLACKBURN conducted.

e. ROIC shall have two radios tuned to 34.70 FM at all times and shall use the call sign “PADDLES.”

f. Lyman Road shall be closed to traffic at two intersections (Sneads Ferry Road-Lyman Rd; Hwy 172-Lyman Rd) for the entire period of operations. In addition, all access trails must be closed to traffic. Road guards must have communications with ROIC (PADDLES) at all times.

11. Concurrent Lyman Road and G-10 Operations. In addition to the instructions in paragraph 10 above:

a. Prior to Day of Event, mission planners should contact Cherry Point Central Scheduling Office at (252) 466-4040/4041 (DSN: 582) to de-conflict R-5306C. Day of Event, contact Big Rock Range Control at (252) 466-2936/5127 to de-conflict R-5306C.
b. Lyman Road aircraft shall check in with the airspace control agency only at Point November and hold at 3500 ft MSL.

c. After the standard brief, aircraft shall switch to PADDLES. ROIC (PADDLES) and all road guards must maintain communications on a frequency other than 34.70 FM or 233.8 UHF.

d. PADDLES shall route aircraft to “JULIET” (must be at or above 4000 ft MSL at JULIET) and then into the landing pattern, either in a clockwise or counter-clockwise pattern north of Lyman Road depending on wind direction.

e. Lyman Road aircraft shall be restricted from flying south of Lyman Road (including the takeoff). All AV-8B operations must remain within R-5306D airspace and are not authorized to enter New River Air Station controlled airspace unless coordinated.

f. When Lyman Road is in use, CAS aircraft into the G-10 shall not use control point November and will be restricted from flying North of the G-10 Impact Area.

g. If an AV-8B on Lyman Road is armed for CAS into G-10 when it is launched from Lyman Road, it must switch to BLACKBURN/CHIEFTAIN, briefed by BLACKBURN/CHIEFTAIN, and be cleared to an IP outside the restricted airspace. The aircraft will then be switched to a FAC/Joint Terminal Attack Controller/Universal Ground Spotters.

h. Requests for vehicles to traverse Lyman Road to the MOUT or OP-2 while AV-8B operations are in progress shall be coordinated by the road guard and the ROIC (PADDLES). All traffic requiring entrance to the MOUT or OP-2 shall approach from the Highway 172 intersection only or use the gate at LZ Lark.

12. **Forward Arming and Refueling Point (FARP) Operations**

   a. FARP operations are authorized at TLZs Crane, Swan, Woodpecker, Gull, Osprey, Albatross, Bluebird, Dodo, Plover, Penguin, Condor, Camp Davis (North), and Lyman Road. Refueling operations only are authorized at Oak Grove with an Special Range Request (SRR) and Request for Environmental Impact Review (REIR). These areas must be scheduled for FARP operations and signed for, including a Face-to-Face brief with BLACKBURN. Upon completion, the TLZ must be inspected and cleared by a Range
b. The Commander of the unit conducting FARP operations has ultimate responsibility for the safe conduct of operations within the site and must adhere to all governing policies, orders and unit SOPs. Unit commanders shall ensure training areas forward of the FARP site are clear of troops and personnel and that orientation of the FARP site does not pose a danger to facilities or vehicle traffic.

c. Lyman Road FARP operations are limited to AV-8B’s only. FARP operations shall be conducted from existing sites along Lyman Road. All access roads leading to Lyman Road to include all tank trails will be closed and the unit will provide road guards as required during the FARP operations.

d. Hot refueling with ordnance is authorized. Appropriate NATOPS/NAVAIR instructions apply. The complete surface danger zone must be cleared of all unauthorized personnel at all times.

e. Aviation ordnance (Training Practice Only) is authorized for all FARP sites. In addition, 2.75 Inert Rockets, 20mm TP, MK 76, and MK 80 (inert) bombs are authorized on Lyman Road. Commanders shall adhere to all policies and guidelines as set forth in governing documents, this SOP, and unit SOPs.

f. If the FARP operations require berm construction, excavations, vegetation removal, or anything with potentially significant impact to the environmental integrity of the site, a special range request must be submitted to CO, MCB Camp Lejeune (attn: S-3 RCD) with a request for an environmental impact review (REIR). A special range request and REIR must also be submitted if the unit proposes to FARP at a location other than those already approved above. The REIR must be submitted 30 days prior to the scheduled FARP activities.

g. **Ground Safety Measures**

   (1) Using unit shall secure a perimeter around the FARP site in order to exclude non-exercise personnel from entering the FARP site. The area forward of the aircraft shall be cleared and maintained clear until completion of the loading, unloading, arming and de-arming.

   (2) Fuels and ordnance storage and activities shall be separated by a minimum of 300 ft.
(3) In the event of a spill of any quantity, units shall immediately contact MCB, Camp Lejeune Fire Department by calling 911 and BLACKBURN. Units shall promptly implement spill contingency/containment procedures as listed in unit SOP and other governing documents.

h. Scheduling FARP Operations

(1) Units shall schedule authorized FARP sites and/or TLZs via the RFMSS. Units requesting the authorized sites or TLZs via RFMSS will select event type “flight operations.” In the “additional information” block of the RFMSS screen, using units will indicate “FARP operations (HOT or COLD, with or without ordnance).” Units shall also schedule the surrounding training area(s) for exclusive use to assist the commander in ensuring non-exercise personnel do not enter the FARP site.

(2) Once scheduled, units shall notify MCB Camp Lejeune, Director, Installations and Environment, Resource Conservation and Recovery Section (RCRS) at DSN 751-1482/commercial (910) 451-1482 and Environmental Conservation Branch (ECON) DSN 751-5063/commercial (910) 451-5063 of their intention to conduct FARP operations. Notification shall include type of ordnance, amount of fuel to be used in gallons, tactical refueling systems to be used, location of refueling points by grid coordinate, and dates and times of FARP operations.

(3) Units shall coordinate a face-to-face brief with Resource Conservation and Recovery Section (RCRS), Environmental Conservation Branch (ECON), and Range Control. The face-to-face brief is a protective measure to ensure the unit is aware of all governing regulations, changes to regulations, and requirements. The face-to-face brief shall take place at a minimum of 15 days prior to execution. During the face-to-face brief, units shall brief:

(a) Operations Order or Letter of Instruction.

(b) Spill response plan, equipment and containment procedures.

(c) Type and quantities of fuel and ordnance.

(d) ARFF assets/equipment.
(e) C2 and communications plan.

(f) Medical.

(g) FARP site diagram.

(h) Security/road guard plan.

i. Communications Procedures

(1) ROIC/RSO shall check out the FARP site from Range Control scheduling, Bldg 54, NLT 1200 the day prior to execution of FARP operations.

(2) ROIC/RSO shall call the RCDO (BLACKBURN) on 34.70 to request authorization to go “HOT.”

(3) In order to go “HOT,” the ROIC/RSO shall ensure all orders/publication/SOPs concerning FARP operations are followed. Additionally, the ROIC/RSO shall, at a minimum:

   (a) Establish communications with range control (34.70).

   (b) Ensure appropriate medical personnel and support vehicle are on site.

   (c) Ensure spill response equipment is on site and response personnel know the spill response plan.

   (d) Ensure aircraft rescue firefighting personnel and equipment are on site and know the response plan.

   (e) Ensure training areas forward of the FARP site are clear of training units/personnel.

   (f) Establish road guards as required with proper communications.

(4) Once authorization to go “HOT” is received from BLACKBURN, the ROIC/RSO will make normal radio checks on the half hour and hour.

(5) Upon completion of training, the RSO will request to “go COLD.” BLACKBURN will dispatch a Range Inspector to the position and place the unit in a cold status; all FARP operations shall then be terminated.

13. Chaff and Flare Training
a. Chaff/Flare training is not authorized in the GSRA or the K-2 impact area. Chaff and flares are authorized in the G-10 impact area if properly scheduled in RFMSS and a SRR is submitted within 10 working days of the event. Two critical factors need to be considered; wind direction and current fire condition. Units must submit a Special Range Request (SRR) as per Appendix J. The SRR process will allow Range Control to:

(1) Notify local FAA authorities.

(2) Provide public notice as necessary.

(3) Notify Base Fire Protection and Base Forestry in order to allow for appropriate safety measures.

b. Flare use is never authorized during Fire Condition 5 or higher. Other fire hazard conditions may restrict/modify flare use throughout the Camp Lejeune Range Complex.

c. Training units must monitor wind speeds and directions to ensure chaff fiber or flare debris does not migrate out of the G-10 impact area and possibly off-base.

14. LHD Deck

a. The LHD Deck was designed to resemble a Wasp Class LHD to allow pilots to meet their required Field Carrier Landing Practice (FCLP), approaches and landings, prior to going to a ship. The Deck has 4 lighted spots with the same dimensions as spots 2, 4, 5, and 6 on the Wasp Class LHD, 114.5 feet between spots. Total LHD Deck length is 495 feet and width is 62 feet (width to center line of Wasp Class LHD).

b. The LHD deck has Pilot Activated Lighting System (PALS) to activate the deck lighting system similar to an uncontrolled airfield. To activate the deck lights use the following procedures.

(1) Pilot turns tactical radio to 30.55 FM.

(2) Pilot depresses mike button three (3) times to turn on landing lights to low intensity.

(3) Pilot depresses mike button five (5) time times to turn on landing lights to medium intensity.
(4) Pilot depresses mike button seven (7) time times to turn on landing lights to high intensity.

(5) Lights will stay on for fifteen minutes.

(6) The same desired number of button depressions will reactivate the lights as needed.

c. LHD Deck maintenance. Periodic scheduled maintenance of the LHD Deck will occur on the first Wednesday of every month. Duration of inspection depends on whether it is for a monthly (2 hours), semi-annual (4 hours), or annual (6 hours) inspection. Unscheduled maintenance will occasionally occur when immediate repair is necessary for safe use of the LHD Deck. It is incumbent on all using units to report any damage or inoperable systems to Range Control/BLACKBURN as soon as possible to maintain the LHD Deck in a safe operable condition.

d. The LHD Deck may be scheduled in RFMSS 2-90 days or NLT 48 hours prior to the training event. When not scheduled, the LHD Deck will be considered an LZ of opportunity. A Special Range Request is required for external loads to be lifted from the LHD Deck. No special use will be granted unless prior approval from RCO by Special Range Request (SRR).

e. The LHD Deck may be scheduled in RFMSS like any other training facility. If the LHD Deck is scheduled and another squadron desires to use it at the same time, the second squadron must contact the scheduled squadron and deconflict times. Once times are deconflicted, the scheduled squadron must submit a Range Modification ETAR to Range Scheduling denoting the times on the scheduled date they will give up to allow another squadron the opportunity to train on the LHD Deck. The second squadron then has to schedule the deconflicted times in RFMSS. Scheduled times for both squadrons cannot overlap. The Range Modification E-TAR and second squadron's RFMSS request must reach Range Scheduling NLT 1200 the day prior to the event to allow range control the opportunity to release the Daily Range Firing Notice on time and have the scheduled events entered in RFMSS to collect usage data.

f. When scheduled, BLACKBURN will clear all scheduled aircraft (either single aircraft or flight lead) into the LHD Deck. When used as an LZ of opportunity, aircraft will call Blackburn and request the LHD Deck. Blackburn will deconflict airspace and clear aircraft into the LHD Deck.
g. Aircraft shall maintain communications with BLACKBURN while training at the LHD Deck. Communication between aircraft in the LHD pattern will be on a frequency other than BLACKBURN.

h. Procedures when aircraft are using the LHD Deck without Zone Control Officer:

(1) LHD Deck may be scheduled and approved but does not have to be signed out at Range Control for FCLPs. This is similar to a reserved TLZ or TTA, there are no ROIC or RSO requirements. If conducting externals, by using an approved Special Range Request, the HST unit must sign out the LHD Deck similar to using a TLZ for externals.

(2) Aircraft shall check in on UHF 233.8 or FM 34.70 with BLACKBURN upon entering/exiting the R-5306D/E airspace and announce operating intentions.

(3) BLACKBURN will advise of other aircraft operations, hot firing ranges, and active gun/mortar positions.

(4) At the conclusion of training, aircraft will report; any damage or light outage, number of aircraft, landings, and personnel trained.

i. Procedures when aircraft are using the LHD Deck with Zone Control Officer (simulating ship's Primary-Flight Officer):

(1) LHD deck requires a ROIC who is certified by the unit CO to act as Zone Control Officer and annotated in the enclosure to the CO Certification letter. The ROIC must sign for the LHD Deck at Range Control up to 5 days in advance and NLT 1200 the day prior. The NLT 1200 Thursday rule applies to weekend, Monday, and Tuesday training events following a Holiday Monday. A designated vehicle parking area will be discussed when the ROIC signs for the LHD Deck at Range Control. The ROIC shall assume all the responsibilities and duties as defined in Chapter 2 of this SOP. If Landing Signal Enlisted personnel (LSE) will to be used, the unit CO is responsible for their training as well as certified in the enclosure to CO certification letter. Lead Instructor Pilot aircraft commander will assume the RSO responsibilities for the flight but will not have to be RSO qualified.

(2) LHD Deck Zone Control Officer shall request permission to clear the LHD Deck "HOT" from BLACKBURN, on the Range Control safety net (UHF 233.8 or FM 34.70).
(3) LHD Deck Zone Control Officer shall maintain radio communications with BLACKBURN during the period the LHD Deck is "HOT" for training by reporting in on the half hour and hour.

(4) LHD Deck Zone Control Officer shall work aircraft on a frequency other than the range control safety nets.

(5) At the conclusion of training, Zone Control shall request permission to go "COLD" from BLACKBURN and report; any damage or light outage, number of aircraft, landings, and personnel trained.

j. Pattern restrictions.

(1) Maximum of two aircraft in LHD pattern. This assumes one aircraft on deck and one in the downwind. If both aircraft desire to be on deck at the same time an empty spot will be between the aircraft. If more than two aircraft are requested for the use of the LHD deck a SRR and ORM matrix mitigating the risk of landing on adjacent spots will be submitted to Range Control for approval.

(2) Aircraft shall turn to downwind no farther than 1000 meters upwind. The turn to base leg shall be initiated prior to arriving abeam the Sneads Ferry Bridge.

(3) Maximum pattern altitude is 400 feet.

(4) Aircraft will maintain a 250 meter buffer from Bald Eagle nesting area (approx 500 meters SE at grid 803297) when using the LHD Deck IAW Chapter 6 of this SOP.

15. MCOLF Camp Davis

a. General. MCOLF Camp Davis (34°31′N/77°33′W, grid 18STD 665225) is an unmanned, uncontrolled airstrip situated in the extreme southeast corner of the Greater Sandy Run Area (GSRA) under the R5304 restricted area. The FAA identifier is 14NC. The airfield is one nautical mile northeast of the town of Holly Ridge and 13 nm south (205 radial) of MCAS New River. The landing areas consist of two separate numbered, concrete runways. Runway 05/23 is 5000 feet long by 250 feet wide. Runway 01/19 is 5047 feet long by 150 feet wide. Airfield elevation at MCOLF Camp Davis is 60 feet MSL. TLZs Phoenix, Swallow, Duck and TLZ/DZ Pheasant are also located in the Camp Davis area. The R-5304A contains a 3 mile, 1500 ft AGL
exclusionary zone for Holly Ridge Air Park; a grass strip located east of the town of Holly Ridge (Approx 2 nm SE of Camp Davis). This exclusion zone allows civilian traffic to enter the Camp Davis area below 1500 feet whether R-5304A is HOT or COLD. This exclusion zone is not Special Use Airspace.

b. Scheduling. The Commanding Officer, MCB Camp Lejeune is the scheduling agent for training operations at MCOLF Camp Davis.

(1) 2d MAW units, specifically MAG-26 and MAG-29, are the primary users of Camp Davis runways and TLZs Pheasant, Phoenix, Swallow, and Duck. The only exceptions are prioritized Joint, Combined, or MAGTF Exercises.

(2) All aviation air capable units (to include fixed wing) and parachute capable units desiring exclusive use of MCOLF Camp Davis must submit a TAR via RFMSS from 2 to 90 working days prior to the requested training date to Commanding Officer, MCB Camp Lejeune (S-3 Range Control). Requesting units are responsible for meeting and deconflicting 2d MAW requirements before scheduling the event. TARs must indicate type of training requested. MAG-26 and MAG-29 will send a deconfliction email approving use to MCB Range Scheduling.

(3) Any unit requiring exclusive use of Camp Davis must ensure all issues are deconflicted and the exclusive use requirement is highlighted and fully justified in their TAR.

(4) The MCB Camp Lejeune Range Firing Notice and Airspace Utilization Order will include the scheduling and maintenance status of MCOLF Camp Davis. The monthly NOTAM request, which includes the GSRA and MCOLF Camp Davis, is prepared and sent to Cherry Point using RFMSS approved events in accordance with Chapter 3. If an event is not included in the monthly NOTAM request to Cherry Point, due to scheduling within 35 days of the date of the event, the unit is responsible for contacting Cherry Point and requesting a NOTAM.

(5) All squadrons should consult the Camp Lejeune Range Control daily “Range Firing Warning and Airspace Utilization Order” during flight planning to avoid conflicts. Tenant squadrons may conduct unscheduled helicopter and tilt-rotor operations at the Camp Davis airstrip or TLZs Pheasant, Phoenix, Swallow, and Duck by communicating with BLACKBURN (233.8 UHF). Once authorization has been granted by BLACKBURN and the pilot has ensured, by cold pass, that the runway or TLZ requested is
not occupied, the training can be conducted. Upon departure from the Camp Davis area, aircraft shall notify BLACKBURN of completion of training and what training was conducted (i.e. number of personnel trained, number of aircraft, number of landings, etc).

(6) MCOLF Camp Davis is an uncontrolled airstrip. Pilots are responsible to see and avoid other aircraft and for strict adherence to the course rules. ATC, ARFF, and ground support services are not available.

c. Obstructions to Flight. There are multiple towers around MCOLF Camp Davis:

(1) Two towers within six tenths of a nm southeast of the departure end of runway 23. One tower is 311 ft MSL and the other is 364 ft MSL.

(2) One tower is 3 nm due east of Camp Davis at 1043 ft MSL. (Has extensive support cable network)

(3) One tower is 6 nm due east of Camp Davis at 829 ft MSL. (Has extensive support cable network)

(4) One tower is 7 tenths of a nm SSE of the departure end of 19 at 300 ft MSL.

d. Noise Abatement/Avoidance Areas

(1) Pilots shall avoid over flight of residences and livestock containment areas in the vicinity of Camp Davis and shall adhere to rules of the road (right side) along U.S. Highway 17 when transiting between MCAS New River and MCOLF Camp Davis (Avoid over flight of Dixon Middle/High Schools by one half mile horizontal and 1000 ft vertical).

(2) Pilots entering or departing Camp Davis shall remain north and west of U.S. Highway 17 when within a three nautical mile radius of Camp Davis to avoid civilian air traffic conflicts and for noise abatement over the town of Holly Ridge. NOTAMS will advise civilian traffic when PARAOPS are scheduled.

e. Course Rules

(1) The Camp Davis Area includes all restricted airspace within the GSRA boundary south of grid line 25. This area is carved out of R-5304 for OLF air operations. BLACKBURN
approval to operate in the Camp Davis Area equals the procedural control needed to resolve conflict with R-5304 activities north of 25 grid line. In effect, from Camp Davis Area check in through check out with BLACKBURN, air operation responsibilities revert to aircrews. This resolves aircrew direct communication need with BLACKBURN once approved to operate in the Camp Davis Area. Conversely, if flight activities require transit north of the 25 grid line where shooting occurs, BLACKBURN and aircrews must maintain direct communication.

(2) Pilots shall remain clear of the Camp Davis area unless intending to enter for training purposes.

(3) Pilots intending to operate at Camp Davis shall check-in with BLACKBURN for approval into and out of the Camp Davis Area on 233.8 (UHF). Pilots will also check-in on and monitor traffic on OLF Common on 322.1 (UHF).

(4) The Camp Davis operating area is sub-divided into two areas by an imaginary line drawn from Highway 17 to the communication tower southeast of the approach end of runway 01. Sub Area Camp Davis North includes runways 1/19 and sub-area Camp Davis South includes runways 5/23. Aircraft shall not cross the dividing line. Pilots desiring to change sub-areas shall depart and re-enter in accordance with para 15f., 15g., and 15h. below. Pilots conducting external operations or Confined Area Landings in TLZ Phoenix need to ensure they remain clear of the Camp Davis South (runway 5/23) pattern.

f. Entry Procedures. When approved to enter the Camp Davis Area by BLACKBURN, pilots shall switch to and monitor Outlying Field (OLF) Common Frequency 322.1 (UHF) for traffic deconfliction. This applies to MV-22s in CONV mode. Aircraft already on station will respond to the inbound traffic call with their current location and pattern parameters.

(1) **MV-22s/tiltrotors** in APLN mode shall enter the Camp Davis Area from a one mile initial point (IP) either from the NE CP Hotel, SE CP Tango, or SW CP Sierra of the field at 1500 ft AGL, as depicted on Figure 8-9. Pilots shall announce their intentions for entering at the IP on OLF Common, and also subsequent pattern altitude (300–500 ft AGL). Aircrews already on station will exchange operating parameters with arriving traffic. **Helicopters** (MV-22s in CONV mode) shall enter the Camp Davis Area from a one mile initial point (IP) either from the NE CP Hotel, SE CP Tango, or SW CP Sierra of the field at 700 ft AGL, as depicted on Figure 8-9. Pilots shall announce their
intentions for entering at the IP on OLF Common, and also subsequent pattern altitude (300–500 ft AGL). Aircrews already on station will exchange operating parameters with arriving traffic.

(2) Runway 19 Pattern (Davis North). **Tiltrotors** enter the pattern for runway 19 via the CP Hotel or Tango, overfly the runway at 1500 ft AGL and announce the intended turn (see Figure 8-9). Execute a descending left turn to 1000 ft setting up a wide left downwind, maintaining 1000 ft AGL until midfield and then begin a descent to pattern altitude. If entering from the CP Sierra, maintain 1500 ft AGL and 1 nm north of LZ Phoenix until on extended centerline for over flight of the runway. Overfly the runway at 1500 ft and execute a descending left turn to 1000 ft setting up a wide left downwind, maintaining 1000 ft AGL until midfield and then begin a descent to pattern altitude. **Helicopters** (MV-22s in CONV mode) enter the pattern for runway 19 via the CP Hotel or Tango, overfly the runway at 700 ft AGL and announce the intended turn (see Figure 8-9). Maintain 700 ft setting up a wide left downwind, maintaining 700 ft AGL until midfield and then begin a descent to pattern altitude. If entering from the CP Sierra, maintain 700 ft AGL and 1 nm north of LZ Phoenix until on extended centerline for over flight of the runway. Overfly the runway at 700 ft and execute level left turn setting up a wide left downwind, maintaining 700 ft AGL until midfield and then begin a descent to pattern altitude.

(3) Runway 01 Pattern (Davis North). **Tiltrotors** enter the pattern for runway 01 via CPs Hotel or Tango at 1500 ft and announce entering the downwind from a 45 degree intercept at 1500 ft AGL (see Figure 8-9). Fly a wide right downwind descending to 1000 ft AGL until the midfield and then begin a descent to pattern altitude. If entering from the CP Sierra maintain 1500 ft AGL and 1 nm north of LZ Phoenix until on right downwind. Fly a wide right downwind descending to 1000 ft AGL until the midfield and then begin a descent to pattern altitude. **Helicopters** (MV-22s in CONV mode) enter the pattern for runway 01 via CPs Hotel or Tango at 700 ft and announce entering the downwind from a 45 degree intercept at 700 ft AGL (see Figure 8-9). Fly a wide right downwind until the midfield and then begin a descent to pattern altitude. If entering from the CP Sierra maintain 700 ft AGL and 1 nm north of LZ Phoenix until on right downwind. Fly a wide right downwind maintaining 700 ft AGL until the midfield and then begin a descent to pattern altitude.

(4) Runway 23 Pattern (Davis South). **Tiltrotors** enter
the pattern for runway 23 via CP Sierra at 1500 ft and announce entering downwind (see Figure 8-9). Fly a wide downwind maintaining 1500 ft AGL until midfield and then begin a descent to pattern altitude. If entering from CPs Hotel or Tango, maintain 1500 ft AGL and 1 nm north of departure end of Runway 01 until established on downwind. Fly a wide downwind maintaining 1500 ft AGL until midfield and then begin a descent to pattern altitude. **Helicopters** (MV-22s in CONV mode) enter the pattern for runway 23 via CP Sierra at 700 ft and announce entering downwind (see Figure 8-9). Fly a wide downwind maintaining 700 ft AGL until midfield and then begin a descent to pattern altitude. If entering from CPs Hotel or Tango, maintain 700 ft AGL and 1 nm north of departure end of Runway 01 until established on downwind. Fly a wide downwind maintaining 700 ft AGL until midfield and then begin a descent to pattern altitude.

(5) Runway 05 Pattern (Davis South). **Tiltrotors** enter the pattern for runway 05 via the CP Sierra, overflying the runway at 1500 ft AGL and announce the intended turn (see Figure 8-9). Execute a level left turn to set up a wide left downwind maintaining 1500 ft AGL until midfield and then begin a descent to pattern altitude. If entering from the CPs Hotel or Tango, maintain 1500 ft AGL and 1 nm north of departure end of Runway 01 and TLZ Phoenix until on extended centerline. Overfly the runway at 1500 ft AGL and announce the intended turn (see Figure 8-9). Execute a level left turn to set up a wide left downwind maintaining 1500 ft AGL until midfield and then begin a descent to pattern altitude. **Helicopters** (MV-22s in CONV mode) enter the pattern for runway 05 via the CP Sierra, overflying the runway at 700 ft AGL and announce the intended turn (see Figure 8-5). Execute a level left turn to set up a wide left downwind maintaining 700 ft AGL until midfield and then begin a descent to pattern altitude. If entering from the CPs Hotel or Tango, maintain 700 ft AGL and 1 nm north of departure end of Runway 01 and TLZ Phoenix until on extended centerline. Overfly the runway at 700 ft AGL and announce the intended turn (see Figure 8-9). Execute a level left turn to set up a wide left downwind maintaining 700 ft AGL until midfield and then begin a descent to pattern altitude.
g. Optional Tiltrotor Entry Procedures. When approved to enter the Camp Davis Area by BLACKBURN, pilots shall switch to and monitor OLF Common Frequency 322.1 (UHF) for traffic deconfliction. Aircraft already on station will respond to the inbound traffic call with their current location and pattern parameters.

(1) Pilots shall enter the Camp Davis Area from CP Tango or a 3 nm extended runway centerline for runway 05 (See Figure 8-9). Prior to entry pilots shall announce their intentions at the IP on OLF common.

   (a) Over-head Break

      1. Overfly runway at 1500 ft AGL and announce the intended break.

      2. Execute a level break.

      3. Descend on downwind to arrive at the 180 degree position at 1000 ft, 1.0 nm abeam.

   (b) Downwind Entry
1. Maintain 1500 ft AGL until abeam the upwind numbers.

2. Descend to join the desired traffic pattern. Tiltrotor aircraft will descend to 1000 ft AGL on the downwind leg.

h. Departure Procedures

(1) Pilots of departing helicopters shall maintain 500 ft AGL until clear of the Camp Davis Area. Departing tiltrotor traffic will maintain a minimum of 1,000 feet AGL until clear of the Camp Davis Area.

(2) Runway 05 Departure (Davis South). Pilots departing runway 05 shall announce their intent to depart prior to reaching the upwind end and depart toward the NW out of the crosswind turn remaining clear of TLZ Phoenix.

(3) Runway 23 Departure (Davis South). Pilots departing runway 23 shall announce the intent to depart prior to reaching the upwind end of the runway and depart maintaining runway heading until outside the Camp Davis Area.

(4) Runway 01 Departure (Davis North). Pilots departing runway 01 shall announce their intent to depart prior to reaching the upwind end and depart toward the east out of the crosswind turn. Pilots shall maneuver their aircraft to remain west of Highway 17 until two miles from Camp Davis.

(5) Runway 19 Departure (Davis North). Pilots departing runway 19 shall announce their intent to depart prior to reaching the upwind end and depart toward the east out of the crosswind turn.

(6) Pilots shall report the number of operations conducted to BLACKBURN upon departing Camp Davis Area.

i. Traffic Pattern

(1) Pattern Altitude. Pattern altitude for all runways is 500 ft AGL for helicopter and MV-22 CONV and 1,000 ft AGL for MV-22 APLN unless a different altitude is required and broadcast. Pattern altitude for CAIs is 300 ft AGL. Pattern altitude for a Tactical Approach is from 300-500 ft AGL. Intent to deviate from pattern altitude shall be broadcasted on OLF.
common prior to deviation from normal pattern altitude.

(2) Pilots operating from runways 05/19 shall make left hand traffic.

(3) Pilots operating from runways 23/01 shall make right hand traffic.

(4) Pilots shall execute the upwind turn when reaching 200 ft AGL or at the departure end of the runway which ever comes first. Pilots shall maneuver their aircraft so as to not cross the line dividing Camp Davis North and South.

(5) Low work is restricted to the upwind one third of the runway in use.

(6) No more than four aircraft are permitted in each runway traffic pattern. No more than eight aircraft shall operate at Camp Davis Area at one time. This applies to aircraft intending to conduct; CALs, Tactical Approaches, and the Emergency Landing Pattern (ELP). Intent to change traffic pattern will be broadcast via OLF Common. Course rules changes must be agreed to by all aircraft operating there.

(7) MV-22s conducting ELPs in the Camp Davis Area will comply with the following procedures:

(a) Contact Cherry Point Approach or New River Arrival Control for approval to conduct ELP approaches.

(b) ELPs shall not be conducted to the same runway as other traffic in the pattern.

(c) Have positive two-way communication with other traffic in the pattern.

(d) Make the appropriate “High key at 9,000 ft, “Low key at 4,500 ft and “Base at 2,300 ft radio calls over OLF Common.

(e) If aircraft conducting the ELP lose sight of other aircraft in the pattern, an immediate wave off will be executed, turning away from the last know position of the traffic.

j. Tactical Approaches (straight-in, 90 and 180 degree offsets) will be conducted between the airfield and 5 nm, from
300 to 500 ft AGL. The objective of a MV-22 Tactical Approach is to efficiently transition an aircraft or a flight from the enroute ingress phase (220 KCAS) to the landing phase (150 ft AGL/50 knots ground speed (KGS) at 0.2 nm) of the mission. Tactical Approaches provide training on how, when, and where to convert and configure the aircraft or flight for landing following precise navigation to a predetermined conversion point (CvP). The CvP is a designated point relative to the intended landing area where the conversion is initiated. The initiation of the conversion begins with the reduction in power with intent for landing. Each Tactical Approach type will result in the aircraft or flight being established in a familiar flight profile on short final (e.g., 150 ft AGL/50 KGS at 0.2 nm) to intercept the glide slope to a runway or TLZ.

k. Ground Training. All units desiring to use any portion of, or exclusive use of MCOLF Camp Davis for ground operations, must submit a Special Range Request (SRR) from 45 to 14 working days prior to the requested date to Commanding Officer, MCB Camp Lejeune (S-3 Range Control). Requesting unit will coordinate with MAG-26/MAG-29 operations and MEF G-3(T) to deconflict requirements and approve/disapprove SRR accordingly. MAG-26 and MAG-29 must send deconfliction emails to MCB Range Scheduling. SRR must indicate exactly the type of training requested.

16. MCOLF Oak Grove

a. General. The MCOLF Oak Grove airstrip (35°02'N/77°15'W, grid 18STD 946779) is part of a 962 acre training and recreational facility located near the town of Pollocksville, North Carolina. The FAA identifier is 13NC and the airfield elevation is 27 feet MSL. The landing areas consist of two separate runways, 05/23, and 01/19. Runway 05/23 is 4000 feet long by 150 feet wide. Runway 01/19 is 4200 feet long by 150 feet wide. TLZ Bat (18S TD 942 781) is midfield between the runways and TLZ Emu (18S TD 930 774) lies 800 m SW of runway 5/23. Runway 09/27 is available for ground taxi/hover/low work. The northern apex joining the two runways is available for ground taxi/hover/low work as well (see Figure 8-10 for avoid areas when utilizing the northern apex). Fixed wing and UAS operations are not authorized at Oak Grove. Memorandums of Agreement (MOA) between MCB Camp Lejeune and the Pollocksville Fire and Rescue Department exist regarding medical assistance, hazardous spills, and fire fighting assistance. Calling 911 in the Oak Grove Area will connect the unit with them.
b. Scheduling. The Commanding Officer, Camp Lejeune is the scheduling agent for tactical operations at MCOLF Oak Grove.

(1) 2d MAW units, specifically MAG-26 and MAG-29, are the primary users of Oak Grove runways, TLZ Bat and TLZ Emu. The only exceptions are prioritized Joint, Combined, or MAGTF Exercises. Oak Grove runways will typically be available for exclusive aviation operations whenever MCAS New River is open for operations.

(2) All aviation air units desiring to schedule any portion of MCOLF Oak Grove must submit a TAR via RFMSS 2-90 working days prior to the requested training date to Commanding Officer, MCB Camp Lejeune (S-3 Range Control). Requesting units are responsible for meeting and deconflicting all 2d MAW requirements before scheduling the event. TARs must indicate type of training requested. MAG-26 and MAG-29 will send a deconfliction email approving use to MCB Range Scheduling.

(3) Any unit requiring exclusive use of MCOLF Oak Grove must ensure all conflicts are deconflicted and the exclusive use requirement is highlighted and fully justified in their TAR.
(4) MCOLF Oak Grove is an uncontrolled airstrip. Pilots are responsible to see and avoid other aircraft and for strict adherence to the course rules. Airport ATC, ARFF, and ground support services are not available. However, radar ATC services are available.

(5) All squadrons should consult the MCB Camp Lejeune Range Control daily "Range Firing Warning and Airspace Utilization Order" during flight planning to avoid conflicts. Unscheduled helicopter and tiltrotor operations into MCOLF Oak Grove or TLZs Bat and Emu can still be deconflicted and accomplished through communications with BLACKBURN. Currently Communications with aircraft on the ground and in the pattern at Oak Grove is difficult. Aircraft shall check in with BLACKBURN on UHF 233.8 while enroute to Oak Grove and announce operating intentions; BLACKBURN will advise of any other aircraft or ground operations. Once authorization has been granted by BLACKBURN and the pilot has ensured by cold pass, the runway or TLZ requested is not occupied, training can be conducted.

(6) Upon departure from MCOLF Oak Grove, aircraft shall notify BLACKBURN of completion of training and what training was conducted (i.e. number of aircraft, number of landings, etc).

(7) The MCB Camp Lejeune NOTAMS will include the scheduling and maintenance status of MCOLF Oak Grove.

(8) Obstructions to Flight. There are two tall transmission towers northwest of Oak Grove. Both towers have an extensive support cable network. One tower (35°03′N/77°22′W) is 985 ft MSL and located 5.5 nm west-northwest of the airfield. The other tower (35°06′N/77°21′W) is 2035 ft MSL and located 6.5 nm from Oak Grove. Several other 300 ft MSL towers are also present 3-5 miles south of the airfield.

(9) Noise Abatement and Avoidance Areas. Pilots shall avoid over flight of residences and livestock containment areas and shall remain clear of the town of Pollocksville (three miles SE). Aircraft shall avoid Pollocksville (35°00′28″N, 077°13′24″W or grid 18STD 97397582) by 1 nm latterly or by flying above the town at 1,000 ft AGL.

c. Course Rules. Oak Grove is an unmanned and uncontrolled airstrip. Pilots operating at MCOLF Oak Grove are responsible to see and avoid other aircraft and for strict adherence to the course rules. A five mile operating radius exists around the Oak Grove field boundary. Call BLACKBURN
prior to entering. In effect, from Oak Grove Area check in through check out with BLACKBURN, air operation responsibilities revert to aircrews. This resolves aircrew direct communication need with BLACKBURN once approved to operate in the Oak Grove Area.

(1) Operational Limitations. Fixed wing operations are not authorized. Tiltrotor airplane (APLN) mode operations are authorized.

(2) Pilots shall remain clear of the Oak Grove Area unless intending to enter for training purposes.

(3) Pilots desiring to change runways shall depart and re-enter the operating area in accordance with para 16d, 16e, and 16f below.

d. Helicopter Entry Procedures. Pilots shall maneuver their aircraft to remain clear of the Oak Grove Area unless intending to enter for training purposes. Pilots will check-in on and monitor traffic on OLF Common on 322.1 (UHF). Aircraft already on station will respond to the inbound traffic call with their current location and pattern parameters.

Figure 8-11.—Oak Grove TLZs and Landing Patterns
(1) Pilots shall enter the Oak Grove Area at 700 ft and proceed to the appropriate 1 nm initial point (IP) (see Figure 8-11). The IP for runway 23 is 1 nm SW of the field and offset west of runway centerline. The IP for runway 19 is 1 nm south of the field and offset east of runway centerline. The IP for runway 05/01 is 1 nm due south of the field and centered between the two runways. Pilots shall announce their intentions at the IP on OLF Common. This applies to MV-22 in CONV mode. Aircraft already on station will respond to the inbound traffic call with their current location and pattern parameters.

(2) Pilots shall proceed at 700 ft AGL and announce the mid-field entry, or downwind entry.

(3) For entry to runways 05/01, pilots shall split the two runways at 700 ft and execute a left or right level turn at the departure end. This will allow for a wide 180 degree position for runways 05/01. Pilots will then descend to join the traffic pattern. BE COGNIZANT OF TRAFFIC IN LZ BAT.

(4) For a downwind entry for runways 19/23, maintain 700 ft AGL until abeam the midfield, then descend to join the desired traffic pattern.

e. Tiltrotor Entry Procedures. Pilots shall maneuver their aircraft to remain clear of the Oak Grove Area unless intending to enter for training purposes. Pilots intending to operate at Oak Grove shall check-in with BLACKBURN for approval into and out of the Oak Grove Area on 233.8 (UHF). Pilots will also check-in on and monitor traffic on OLF Common on 322.1 (UHF). Aircraft already on station will respond to the inbound traffic call with their current location and pattern parameters.

(1) Pilots shall enter the Oak Grove Area and proceed to the appropriate three mile IP from the North or South. Pilots shall announce their intentions at the IP on OLF common. Aircraft already on station will respond to the inbound traffic call with their current location and pattern parameters.

(2) Pilots shall proceed at 1500 feet AGL and announce the Over Head break or Downwind Entry.

(a) Over Head Break

1. Overfly runway at 1500 ft AGL and announce the intended break.
2. Execute a level break.

3. Descend on downwind to arrive at the 180 degree position at 1000 ft, 1.0 nm abeam.

(b) **Downwind Entry**

1. Maintain 1500 ft AGL until abeam the upwind numbers.

2. Descend to join the desired traffic pattern. Tiltrotor aircraft will descend to 1000 ft AGL on the downwind leg.

f. **Departure Procedures**

(1) Pilots departing runways 05/01 shall make the normal crosswind turn, announce the intent to depart, and depart the operating area from the downwind leg to the southwest and south respectively.

(2) Pilots departing runways 19/23 shall announce the intent to depart prior to reaching the upwind end of the runway and depart by maintaining runway heading until outside the operating area.

(3) Pilots of departing aircraft shall maintain 500 feet AGL until outside the operating area.

(4) Pilots shall report the number of aircraft operations conducted to BLACKBURN upon departing Oak Grove.

h. **Traffic Patterns**

(1) **Pattern Altitude.** Pattern altitude for all runways is 500 ft AGL for helicopter and MV-22 CONV, and 1000 ft AGL for MV-22 APLN (see Figure 8-11). Intent to deviate from pattern altitude shall be broadcasted on OLF Common prior to deviation from normal pattern altitude.

(2) Runway 09/27 is authorized for ground taxi, hover, and low work. Utilization of this runway for pattern work will be limited to aircraft with Engine Air Particle Separator (EAPS) that are inoperable, or significant winds restrict the use of the other runways. Patterns will be right or left as deconflicted with other traffic in the area.
(3) Pilots using runways 05 and 19 shall make left hand traffic. See figure 8-11.

(4) Pilots using runways 23 and 01 shall make right hand traffic. See Figure 8-11.

(5) Pilots shall execute the upwind turn at 200 feet AGL or at the end of the runway, whichever comes first. Pilots shall maneuver their aircraft not to cross the imaginary line dividing the field.

(6) No more than four aircraft are allowed in each runway traffic pattern. No more than eight aircraft shall operate at Oak Grove Area at one time. This applies to aircraft intending to conduct; CALs, Tactical Approaches, and the Emergency Landing Pattern (ELP).

   i. **Intent to deviate from course rules will be broadcast via OLF Common.** This also applies to MV-22 aircraft intending to conduct tactical approaches and ELPs. Course rules changes must be agreed to by all aircraft operating in the area.

   j. **Tactical Approaches (straight-in, 90 and 180 degree offsets) will be conducted between the airfield and 5 nm, from 300 to 500 ft AGL.** The objective of a MV-22 Tactical Approach is to efficiently transition an aircraft or a flight from the enroute ingress phase (220 KCAS) to the landing phase (150 ft AGL/50 knots ground speed (KGS) at 0.2 nm) of the mission. Tactical Approaches provide training on how, when, and where to convert and configure the aircraft or flight for landing following precise navigation to a predetermined conversion point (CvP). The CvP is a designated point relative to the intended landing area where the conversion is initiated. The initiation of the conversion begins with the reduction in power with intent for landing. Each Tactical Approach type will result in the aircraft or flight being established in a familiar flight profile on short final (e.g., 150 ft AGL/50 KGS at 0.2 nm) to intercept the glide slope to a runway or TLZ.

   k. MV-22s conducting ELPs in the Oak Grove area will comply with the following procedures:

      (1) Contact BLACKBURN, Cherry Point ATC, or New Bern Arrival prior to commencing climb for ELPs to ensure airspace is clear of traffic.

      (2) ELPs shall not be conducted to the same runway as
other traffic in the pattern.

(3) Have positive two-way communication with other traffic in the pattern.

(4) Make the appropriate "High key at 9,000 ft, "Low key at 4,500 ft and "Base at 2,300 ft radio calls over OLF Common.

(5) If aircraft conducting the ELP lose sight of other aircraft in the pattern, an immediate wave off will be executed, turning away from the last know position of the traffic.

d. Ground Training. The Commanding Officer, MCB Camp Lejeune is the scheduling agent for tactical operations at MCOLF Oak Grove.

(1) Limited areas are available for ground training. All units desiring to use any portion of or exclusive use of MCOLF Oak Grove for ground operations must submit a Special Range Request (SRR) from 45 to 14 working days prior to the requested date to Commanding Officer, MCB Camp Lejeune, S-3 Range Control. Requesting units will coordinate with MAG-26/MAG-29 operations and MEF G-3(T) to deconflict with 2d MAW requirements and approve/disapprove SRR accordingly. MAG-26 and MAG-29 will send a deconfliction email approving use to MCB Range Scheduling. SRR must indicate exactly the type of training requested. The written request must contain the following:

(a) Name, rank, phone number of unit CO.

(b) Name, rank, phone number of principle point of contact for the unit, officer or SNCO.

(c) Date and time requested, to include dates for advance, main, and rear parties arrival/departures.

(d) Specific areas requested.

(e) Number of personnel involved.

(f) The scope and nature of training to be conducted and unique requirement, including any aircraft operations associated with training.

(g) A signed copy of Tab (1) by ROIC.
(2) The check in and check out procedures are as follows.

(a) The training unit meets with maintenance crew at Oak Grove to discuss the training to take place and the do's and don'ts at Oak Grove.

(b) The training unit signs the Statement of Understanding (tab (1)).

(c) The training unit brings the signed Statement of Understanding to building 54 (scheduling) and checks out the training areas; scheduling issues a key to Oak Grove (Gate 1) and a red range flag.

(d) The training unit conducts training at Oak Grove.

(e) At the conclusion of training maintenance crew signs the Statement of Understanding clearing the unit to depart Oak Grove.

(f) The training unit brings the signed Statement of Understanding, range flag, and the key back to scheduling ending the training evolution.

(3) Units are encouraged to coordinate informally with MAG-26/29 S-3 and MCB, Camp Lejeune Range Control prior to submitting an SRR.

(4) Current scheduling information is available in RFMSS.

(5) Units requesting to establish a FARP must first coordinate with MCB Camp Lejeune Environmental Management Division to determine if an environmental review is required. Follow this coordination with an SRR.

(6) Units approved for exclusive use of MCOLF Oak Grove shall conduct a face-to-face brief with BLACKBURN and Oak Grove Maintenance Manager prior to proceeding with training. The Oak Grove Maintenance Crew has an extensive working knowledge of environmental considerations and ground training usage of MCOLF Oak Grove, therefore they have the final say on operations at MCOLF Oak Grove.
e. **Recreational Activities**

(1) Active Duty, retired military, their dependents, and federal government employees are authorized to utilize the recreational facilities at MCOLF Oak Grove.

(2) All personnel entering and leaving Oak Grove for recreational purposes will travel through Gate 2 and will register in the appropriate log book at the gate house. All personnel will comply with instructions posted at the check in/out station and in Tab (2).

(3) Hunting is permitted only on weekends and holidays if a unit is not training during these periods. Hunting is only permitted in training areas OA, OB, OC, OD, OE, OF. Hunting is prohibited on the airfield, Oak Grove OLF, and in recreational areas 1 and 2. Hunters will call the Game Warden’s phone messaging system (451-3794) for availability of hunting.

(4) Fire wood gathering will be permitted only on weekends and holidays if a unit is not training during these periods. Fire wood gathering will be limited to downed trees and branches. Live trees and vegetation will not be disturbed.

(5) Requests for group recreational activities will be sent to CO, MCB Camp Lejeune S-3.

(6) Recreational activities will not be authorized during military training operations.
MCOLF Oak Grove Statement of Understanding

I understand and will ensure compliance with the requirements of the MCB Camp Lejeune Range SOP governing the use of MCOLF Oak Grove for ground training. The following items are restated for emphasis:

a. All aircraft have the right of way.

b. Using units will check in and out with the MCOLF Oak Grove Maintenance Crew located at building 8500.

c. All vehicles and personnel are prohibited from using the runways except appropriate aircraft crash rescue equipment.

d. Vehicle traffic is restricted to current road system. No off-road vehicle traffic is authorized. Do not drive around barriers, cables, or gates. Do not use fire breaks as roads. Do not drive on or near wildlife food plots. Food plots are identified by appropriate signage.

e. All trash and waste must be collected and removed upon departure.

f. Digging is prohibited. Fighting/Fox holes, cat holes, and straddle trenches are not authorized.

g. The use of open fires is prohibited. (No warming fires are permitted).

h. The use of concertina wire is prohibited unless it is used for physical security.

i. Communication wires will be removed by the using unit. Wire or cable may not be hung by driving nails or spikes into trees.

j. No live firing is authorized. No pyrotechnics or flares are authorized. Use of blanks up to .50 cal is authorized. Units will police up and remove all empty brass casings and links.

k. Training outside the perimeter road is prohibited in order to preserve environmentally sensitive areas of the Trent River.

l. Cutting and clearing of trees or brush is prohibited.

Tab (1)
m. Extreme care will be taken to prevent damage to trees and the environment.

n. During emergencies, all access roads will be cleared for emergency vehicles. Units will be required to assist during emergency situations such as the containment of brush fires.

   (1) For any emergencies contact Pollocksville Fire Department at 911.

   (2) Contact BLACKBURN via radio 34.70 or phone 910-451-3064.

   (3) A land line phone is available at the maintenance work shop, building 8500, phone # (252) 466-3817.

o. Squadron/Company or larger units will provide gate guards for Gate 1 upon arrival of advanced party or arrival of any attached units until departure of all personnel.

p. Training units will not use the areas designated for recreation.

q. Using units will provide one portable toilet per 25 troops and toilets will be serviced every day. Access to MCOLF Oak Grove will not be permitted until portable toilets are in place.

r. Portable generators will have drip pans placed under them before starting, and shall remain under them while in operation. A satisfactory system for draining drip pans into a container for removal from Oak Grove will be provided by the using unit in the SRR and Unit Level Contingency Plan (ULCP).

s. All units are required to have drip pans under vehicles if they are in the field for over 24 hours, also all units must contact their Environmental Compliance Officer and notify Blackburn if there is a spill or release. Reference the BO 5090.9 and the MCB Range Control SOP 3570.1C for all Environmental concerns.

Print Rank/Name________________________Unit____________________
Phone______________________Date____________________________

________________________________  _________________________
Signature Unit POC     Signature Oak Grove Crew 

Tab (1)
Recreational Regulations for MCOLF Oak Grove

1. Active Duty, retired personnel, their dependents, and civil service personnel are authorized to use Oak Grove recreational areas. Availability of recreation areas will be subject to military operational requirements. The Game Warden will maintain a call in messaging system with the hours of operation and recreation area availability.

2. Recreation Regulations

   a. Check in and out in the recreation log book located in the gate house.

   b. Vehicle traffic is restricted to current road system. No off-road vehicle traffic is authorized. Do not drive around barriers, cables, or gates.

   c. Dogs and cats will be kept on a leash or under immediate supervision (voice control) at all times.

   d. Children will be supervised at all times.

   e. Swimming is allowed only in recreation area 2. No ropes will be installed in trees.

   f. Fires shall be built only in barbecues using charcoal.

   g. Firewood collection for home use is authorized from trees on the ground. Live vegetation, trees, etc., will not be cut or damaged.

   h. All vehicles and boat trailers will be removed from boat ramp area in recreation areas 1 and 2.

   i. Soft drinks are permitted in cans only. No glass containers are permitted in recreation areas.

   j. Litter barrels will be used and area cleaned of all trash.

   k. Cleaning fish on piers or picnic tables is prohibited.
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Chapter 9

Light Amplification Stimulated Emission Radiation (LASER) Operations

1. General.

a. Military LASERs are being integrated into many aspects of military training aboard MCB Camp Lejeune. Although LASERs are prohibited from being used directly as a weapon, they enhance the target designating and range finding capability of many of the weapon systems in the current DOD/Navy/Marine Corps arsenal, including ground and airborne systems.

(1) LASER safety is a unit/command responsibility. Commanders are responsible for ensuring their subordinates understand all of the potential hazards of training with all laser systems currently approved. No one may act as LASER Range Safety Officer (LRSO) until certified in writing by the Battalion/Squadron Commander or separate Company Commander as qualified to perform duties and trained as LRSO for the LASER to be fired.

(2) LRSOs must attend the Administrative Laser Safety Officer (ALSO) Course at Camp Lejeune or Cherry Point to be properly trained. Contact Range Control at 451-1240 for class schedule.

b. All LASERs are currently divided into four classes: (I, II, IIIa, IIIb, IV). All military LASERs must be labeled with their appropriate warning and classifications.

(1) Class I LASERs. LASERs, which by inherent design cannot emit radiation levels in excess of the maximum permissible exposure (MPE) limits (safe limits for each wavelength and emission duration are defined in 21 CFR). Only a certification caution label is required.

(2) Class II LASERs. Low-power visible LASERs and LASER systems with wavelengths greater than 0.400 micrometers (um) and less than 0.700 um and duration of greater than 0.25 second which can emit a power exceeding the Class I limits but not in excess of one milliwatt. Reflexes cause a person to blink and look away before eye damage is done by this class LASER. The signal word “Caution” shall be used with all signs and labels associated with the Class II LASERs. Class II LASERs in the
wavelength range 0.400 um to 0.700 um having an accessible output power between one and five milliwatts.

(3) Class III a/b LASERs. Medium power LASERs and LASER systems (LASERs which cannot produce a hazardous diffuse reflection). This Class LASER is subdivided further into Class IIIa and Class IIIb. See ANSIZ-136.1 for a detailed explanation. Class IIIa LASERs with irradiance less than 2.5 mw/cm2 will be marked with a caution label. Class IIIa LASERs with irradiance greater than 2.5 mw/cm2 and all Class IIIb LASERs will be marked with a danger label.

<table>
<thead>
<tr>
<th>Class</th>
<th>Power</th>
<th>Hazard</th>
<th>Safety Control</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class I</td>
<td>Very Low</td>
<td>None-Incapable of producing damaging radiation</td>
<td>None - Exempt from control measures or surveillance</td>
<td></td>
</tr>
<tr>
<td>Class II</td>
<td>Low up to 1mw</td>
<td>Incapable of causing accidental eye injury with continuous intrabeam viewing</td>
<td>Must have CAUTION label affixed to an external surface</td>
<td>Visible LASERs</td>
</tr>
<tr>
<td>Class IIIa</td>
<td>Medium up to 5mw</td>
<td>Incapable of causing injury within a blink of the eye (about .25 sec.) May cause injury through optical devices, intrabeam viewing, or off specular reflections</td>
<td>Must have a CAUTION Safety label affixed to an external surface. Some have a DANGER label and should be treated as class IIIb.</td>
<td>Eye wear recommended. Visible LASERs</td>
</tr>
<tr>
<td>Class IIIb</td>
<td>Medium up to 5w</td>
<td>Capable of causing injury within a blink of the eye (about .25 sec.) May cause injury through optical devices, intrabeam viewing, or off specular reflections</td>
<td>Must have a DANGER Safety label affixed to an external surface</td>
<td>Eye wear required. Invisible LASERs</td>
</tr>
<tr>
<td>Class IV</td>
<td>High over 5w</td>
<td>Will cause injury to eye or skin, fire hazard</td>
<td>Must have a DANGER label affixed to an external surface</td>
<td>Safety eye wear required. Skin covering recommended</td>
</tr>
</tbody>
</table>

Figure 9-1.--Classes of LASERs
(4) Class IV LASERs. High Power LASERs and LASER Systems. This includes all LASERs in excess of Class III limitations. The signal word “Danger” shall be used on all signed and labels associated with the Class IV LASER.

c. All LASERs have potential hazards. General LASER Safety Rules of employment are:

(1) All LASERS systems must be approved by the LASER Safety Review Board (LSRB), with a copy of the approval on file at Range Control, prior to use. This is particularly important when employing emerging technologies or commercially available lasers. Do not assume that just because you have it, the Laser Safety Review Board has reviewed it. Units can contact Range Control at 451-1240 if they have any questions.

(2) The laser system will be treated like any direct fire line-of-sight weapon, such as a rifle or machinegun. The same safety hazard control precautions will be taken in order to provide a safe operating environment.

(3) Only remove the lens cap when ready to fire the LASER down range. Remove the lens cap before applying power source.

(4) Do not leave the power source connected to the LASER device while not lasing. LASER Systems that do not have lens caps or disconnects from power source, the operator must ensure the down range area of the LASER is clear, the system is safe, and the operator is not touching the trigger to the LASER system.

(5) Ensure all personnel using the LASER are completely familiar/trained with its operation and the associated laser hazards and all safety procedures.

(6) All Marines/Sailors who operate or supervise the operation of laser equipment will be laser safety certified as Laser Range Safety Officer (LRSO) per MCO 5104.1C, Military Handbook 828B, MCO 3570.1B/DA PAM 385-63 and this Chapter (Chapter 9) of this SOP.

d. Class I, Class II, and Class IIIa LASERs are authorized in all training areas, ranges, and training facilities aboard MCB Camp Lejeune. The using unit must be completely familiar
with the operation and the safety requirements for the LASER device and the Non-Ocular Hazard Distance (NOHD).

e. Class IIIb and Class IV LASERs are restricted to OPs 2, 3, and 5 and Ranges K211, SR-7, SR-8, SR-10 and other as listed in the current copy of Camp Lejeune Laser Survey. All Range Safety Officers for Class IIIb and Class IV LASERs must be designated an ALSO and be familiar with the MCB Camp Lejeune LASER Range Safety binder and this chapter on lasers.

2. Unit LASER Safety Program

a. General. Prior to conducting any LASER operations, units must establish a local LASER safety program. This program shall be established as directed by MCO 5104.1C and the other listed references that are listed in MCO 5104.1C. A certified ALSO/Technical LASER Safety Officer (TLSO) will manage this program. At a minimum, the program will include:

(1) A local LASER safety organization.
(2) Local LASER safety regulations (LASER SOP).
(3) Activity audit of the LASERs.
(4) LASER safety-training program.
(5) LASER protective eye wear/equipment program.
(6) Medical surveillance program if required.
(7) Accident investigation/reporting procedures.
(8) Record keeping/documentation file (Records and rosters of annual laser safety training.)
(9) Reporting of annual inventories.

b. In addition to the above, the Commanding Officer/Officer in Charge of the lasing unit will:

(1) Select, train, and certify safety personnel as necessary to assist in complying with the provisions of the MCO 3570.1B, DA PAM 385-63, MCO 5104.1C, MILHDBK-828B and all other applicable LASER regulations. All LRSOs at MCB Camp Lejeune must be trained ALSOs as a minimum.
(2) Provide adequate control of the target area to prohibit entry of unauthorized personnel or aircraft.

(3) Designate a LRSO for each lasing site (The LRSO can be the ROIC/RSO of Firing/Range Safety Officer provided he is present at the lasing site and is LASER safety qualified/certified). The LRSO must have experience appropriate to the exercise or operation and shall be present during all LASER operations.

(4) Pilots of aircraft both fixed wing and rotor wing that are conducting laser operations from that aircraft into the G-10 Impact Area must be qualified and trained on that laser device to ensure that it is operated safely at all times.

3. LASER Range Safety Officer (LRSO). LRSO duties shall not be delegated. The LRSO will:

   a. Conduct a Face-to-Face LASER Range Safety Officer Brief with Range Control.

   b. Be knowledgeable of and ensure compliance with this SOP, MCO 3570.1B, MCO 5104.1C, BUMEDINSTs 6470.19A & 6470.23, SECNAVINST 5100.14D, MIL HDBK-828B and applicable FM/TM's and other applicable LASER references.

   c. Brief personnel working with LASER devices and any LASER range support personnel on LASER related hazards and safety devices, procedures, and measures.

   d. Know the azimuths, elevations and lateral limits of each LASER range, each firing position, and targets to be used.

   e. Ensure protective eyewear is used when required. Be sure that unprotected personnel are not exposed to either direct beam or a beam reflected from a specular (reflective) surface.

   f. Maintain continuous communication with BLACKBURN and any personnel in the target area. Notify BLACKBURN when lasing operations commence; stop lasing immediately if communications are lost.

   g. Stop lasing immediately if positive control of the LASER beam is lost. Approve each specific LASER firing.
h. Ensure no specular surfaces are within 30 meters of the target area and only diffuse reflectors are along the LASER line of sight.

i. Ensure controls are in place (range guards/barriers with LASER warning signs) to prohibit unauthorized personnel entry into the LASER surface danger zone (LSDZ). LASER warning signs are available from Range Control. Ensure signs are emplaced at safe distances and locations to prevent unsafe practices and laser accidents.

j. Record all LASER firings (time, location of LASER, and target, azimuth to target, type LASER) for unit records in accordance with MCO 5104.1C/OPNAVINST 5100.27A. Unit LASER firing logs will be maintained for five years by the using unit.

k. Comply with all applicable duties of the ROIC/RSO as listed in Chapter 2 this SOP.

4. Range Control LASER Procedures

a. All LASER operations must be scheduled through Range Control.

b. All LASERs will be treated as direct fire weapons. The underlying concept of LASER safety is to prevent intrabeam viewing by unprotected personnel. This is done by locating target areas where no line of sight exists between LASERs and uncontrolled potentially occupied areas and by removing specular surfaces from targets. The controls to prevent exposure to hazardous levels of LASER radiation are:

(1) Beam stops.

(2) Controlled access.

(3) Restricted airspace.

(4) A buffer zone around the target area.

c. To provide these controls to prevent exposure, the following apply to all LASER operations:

(1) The LASER range boundary must be marked with signs (DANGER, LASER Range in Use, DO NOT ENTER) and access roads blocked by signs/barricades or radio-equipped personnel to ensure that unprotected personnel do not enter the range area.
(2) Prior to lasing, the target and range area must be visually inspected to ensure no unauthorized personnel, aircraft or water vessels are in the hazard area.

(3) LASERs will not be activated until the operator has positively identified the target.

(4) Never designate aircraft, moving vehicles, or personnel. Never designate specular reflectors such as Plexiglas, water, mirrors, unpainted metal, etc.

(5) Only the specific designated run-in headings/flight profiles/LASER range parameters will be utilized.

(6) LASER operations shall cease in fog, rain or other inclement weather conditions.

(7) The beam must be terminated on government owned or controlled property and within the LSDZ. LASERs will not be directed at or above the horizon.

(8) Personnel movements in areas adjacent to the range area should be known by lasing safety personnel. ROIC of the movement or occupied position adjacent to or across from the lasing range shall be advised of the hazards.

(9) When LASER-equipped vehicles travel on range roads or public highways or are not engaged in tactical/operations, the LASER exit port must be covered. This includes all ground mounted/handheld systems. The LRSO must ensure lens caps are in place. Tanks must turn LASER systems off when personnel are working or operating in front of the tank.

   d. MILES 2000 is a Class IIIa LASER; treat this system with caution and ensure all LASER safety procedures are in place.

   e. All LASERs used aboard this MCB must be in compliance with the LASER Range Safety Certification, latest MCB Camp Lejeune LASER Survey and this SOP at all times. A copy of these documents will be handed out to each LRSO when a LASER range is signed for at Range Control. These documents provide the user with specific information such as authorized lasers, lasing points, laser principal direction of fire (PDF) and right and left lateral limits of fire for day specific and night specific target areas.
5. **LASER Incidents**

   a. Personnel suspected of experiencing potentially damaging eye exposure from laser radiation will be evacuated immediately to the nearest medical facility and undergo an eye examination. Pertinent medical guidance for such emergencies is available per the MCO 5105.1B and BUMEDINST 6470.23. The expeditious examination and treatment of laser eye injuries is critical in minimizing loss of visual acuity.

   b. Report laser overexposure incidents immediately to the MCB Range Control/Unit chain of command. Subsequent reporting will be as per MCO 5104.1C and BUMEDINST 6470.23.

   c. **Medical Surveillance.** First Aid for Eye Injury from Laser Energy. First aid should not be attempted for damage produced by laser energy to the eye; therefore, prompt reporting to a medical treatment facility is imperative known or suspected eye injuries constitute an “Emergency” MEDEVAC. MEDEVAC procedures can be found in the Range Control SOP, Chapter 4. Immediate examination will be given when there is known or suspected laser overexposure.
1. General
   
a. The Commanding Officer, MCB, Camp Lejeune, exercises authority to control access to certain navigable waters to prevent injuries from live fire operations as described in United States Coast Pilot 4 (USCP 4) and 33 CFR 334.440. These waters include:

   (1) **Atlantic Coast Sector (ACS)**. Danger Area boundaries are described as below:

   (a) On the north, follow a line bearing 105 degrees (true meridian) from grid coordinate 00503328.

   (b) On the east and south, follow the arc having a radius of 25,000 yards centered at 91872765.

   (c) On the west, follow a line bearing 205 degrees from 88092475.

   (d) On the northwest, follow the shore.

   (e) Sector warning buoys are located as follows:

   1. Lighted Buoy A (LLNR-631.00) in position 34-36-19 N and 77-05-34 W.

   2. Lighted Buoy B (LLNR-631.01) in position 34-35-22 N and 77-01-28 W.

   3. Lighted Buoy C (LLNR-631.02) in position 34-30-01 N and 70-02-04 W.

   4. Lighted Buoy D (LLNR-631.03) in position 34-25-28 N and 77-05-35 W.

   5. Lighted Buoy E (LLNR-631.04) in position 34-22-34 N and 77-11-00 W.

   6. Lighted Buoy F (LLNR-631.05) in position 34-21-55 N and 77-17-28 W.
7. Lighted Buoy G (LLNR-631.06) in position 34-23-36 N and 77-23-35 W.

8. Lighted Buoy H (LLNR-631.07) in position 34-27-57 N and 77-21-08 W.

(2) New River Danger Area. This area is comprised of eight sectors outlined on the National Oceanic and Atmospheric Administration (NOAA), United States, East Coast, North Carolina, New River, chart number 11542 – Approaches to New River. All water sector must be scheduled in RFMSS.

(a) Traps Bay Sector
(b) Courthouse Bay Sector
(c) Stone Bay Sector
(d) Stone Creek Sector
(e) Grey Point Sector
(f) Farnell Bay Sector
(g) Morgan Bay Sector
(h) Jacksonville Sector
(i) French Creek Sector
(j) New River Sector
(k) New River Inlet Sector

(3) Atlantic Intracoastal Waterway (AIWW). This area includes all navigable waters from Bear Creek through Onslow Beach bridge to the New River Inlet to include all creeks, streams, bays and the water contained therein.

b. Regulations

(1) Vessels may proceed along established waterways except during live fire training periods. Warning of military training periods will be given through Notices to Mariners and by displaying, one hour before firing, a red danger streamer during daylight hours or a red light at night the range towers/poles specified in Appendix A for each range. When these
signals are displayed, vessels shall clear the sector immediately.

(2) The ACS and AIWW areas will be searched by aircraft prior to bombing and firing operations. Watercraft in the area will be warned of the impending live fire by aircraft "buzzing", the sounding of a siren located atop the observation towers, and by safety/guard boats from RCD. When warned, vessels will leave the area as quickly as possible by the most direct route.

(3) Prior to any firing over New River sectors, the area will be visually inspected to ensure it is clear of personnel or vessels. In addition to the above warning streamer/light requirement, see instructions for firing artillery across the New River in Appendix B of this SOP.

(4) When firing into the N-1/BT-3 impact area Brown’s Island the training unit will provide tower guards and will be in place and in communications with the ROIC/RSO and Navy Safety Boat Crew radio operators before the aircraft range sweep.

(5) All navigable waters between Browns Island and the AIWW (bounded by Browns Inlet and Bear Inlet) are open to navigation only: no anchoring, fishing, cast netting, wading or swimming. No bottom disturbing activity is authorized; clamming, oystering, or crabbing are examples of activities not allowed. There are highly sensitive unexploded projectiles within the limits of this area. Notice to Mariners will close this area when military live fire training is scheduled. Avoid areas where MCB has posted signs identifying the danger/hazardous areas.

(6) The waters of the AIWW and connecting waters from Bogue Sound–New River Light 58 [(LLNR 39210) at approximate position 34 Degrees 37 Minutes 57 Seconds North, 77 Degrees 12 Minutes 18 Seconds West, Bear Creek Grid Coordinates 9785-3445] and continuing in the AIWW Southwest to Bogue Sound–New River Day beacon 70 [(LLNR 39290) at approximate position 34 Degrees 33 Minutes 7 Seconds North, 77 Degrees 20 Minutes 30 Seconds West (Cedar Point Grid Coordinates 8540-2500)], comprise a Safety Zone approximately 10 Nautical Miles long. Weapons firing on authorized ranges, G-5/G-6/G-7/H-1, will be allowed on even hours (e.g., 0800-1000-1200 and so on). Vessels may transit the range area on the odd hours (e.g., 0900-1100-1300 and so on) and will proceed without stopping, except in an emergency. When Naval Vessels are firing from Fire Support Area at sea into G-10, the AIWW will close for 4 hours (0800-1200 and
(7) Brown’s Island and the surrounding waterways were used as an impact area for high explosives ordnance for many years in the past. The dangers of unexploded ordnance are prevalent throughout the island and surrounding waterways to include the AIWW. Brown’s Island is closed to any and all recreational use. All civilian watercraft shall not beach or drop anchors on or near restricted areas that are posted with proper warning signs stating “Danger Impact Area, Do Not Enter”. Foot traffic is prohibited on any of the land/marsh areas of Brown’s Island at all times.

(8) Each willful violation of the regulations prohibiting entry into the impact/target area(s) during military use (live firing) and Brown’s Island at any time is punishable in U.S. District Court by confinement or a fine.

c. Military Operations on the waters of and surrounding MCB Camp Lejeune

(1) All operations involving military watercraft in the MCB Camp Lejeune area, to include but not limited to U.S. Navy ships, Navy and Marine Corps small boats, and military swimmers fall under the jurisdiction of this SOP.

(2) Military operations involving Assault Amphibious Vehicles (AAVs), Light Armored Vehicles (LAVs), small boats, swimmers, LCU’s, LCACs, etc. in waters surrounding MCB Camp Lejeune must be scheduled through RFMSS a minimum of 21 working days prior to use. Chapter 3 of this SOP applies. This time frame is required to permit the coordination mandated by Federal Law with appropriate agencies external to the Marine Corps and to permit the publication of the appropriate Notice to Mariners as required. Any unauthorized military waterborne operations conducted without a published Notice to Mariners which injures civilians or damages civilian property could result in the training unit commander being held personally liable in Federal Court.

(3) LCAC route to and from Mile Hammock Bay is: Entry point approaching from the sea – 855243; Exit point towards Mile Hammock Bay -- 864255. LCACs requesting to cross Onslow Beach must coordinate operations at least 21 working days in advance with the RCO and Base EMD.
(4) Refueling on or within 100 ft of water requires a SRR and a FEREIR. Point of contact for FEREIRs is the Base NEPA section, Environmental Conservative Branch at 451-5063.

(5) Requests to place floating bridges, wires, cables, fuel hoses, pipes, etc. across navigable waters must be submitted 30 working days in advance of the scheduled event to CO, MCB Camp Lejeune via Director S-3, Range Control Division. Requests must contain grid coordinates of obstruction, type of obstruction, and dates and times of emplacement and removal. Obstructions must be manned on both sides, easily removed to allow waterborne traffic to proceed, and completely removed upon completion of training.

(6) All naval and coast guard vessels involved in operations in Onslow Bay and adjacent waters falling under the jurisdiction of the Commanding Officer, MCB must request area clearance prior to entry. Area clearance is required because three of Camp Lejeune ranges fire into the Atlantic Coast Sector. Message address is: CO MCB CAMP LEJEUNE NC S3(UC).

(7) Units conducting training in State waters must be vigilant and yield to hunters/boaters in the area to prevent conflicts.

2. **Navy Safety/Guard Boat Crew**

   a. **General.** The Navy Boat Crew is organized, staffed, and equipped to support training involving the navigable waters within the jurisdiction of the Commanding Officer, MCB Camp Lejeune. Boats are equipped with marine band radios and the capability to communicate with BLACKBURN, ROICs, and RSOs on 34.70 FM. Coxswains will operate their boats in accordance with this SOP, Coast Guard, and all other applicable regulations. Routine support includes:

   (1) Downrange safety/guard boats on the NE (Bear Tower) and SW (Onslow North Tower) points of the AIWW to ensure boat traffic safety during live firing into the N-1/BT-3 Impact Area, Range H-1, Brown’s Island and Naval Gunfire. As a small craft, they will always adhere to applicable storm/sea warnings and the senior Navy Boat Coxswain on station will make the final decision to secure Navy Safety boat operations or to seek temporary safe harbor in the event of foul weather and high sea state. If Boat Crew must secure, BLACKBURN will place the range
supported in a "cold" status until the weather condition or sea warning is lifted.

(2) Safety/guard boat may provide back-up support for parachute operations into or near navigable waters of MCB, Camp Lejeune. The Boat Crew provides this service on an "as available" basis and is not equipped for recovery operations (Safety Swimmers with proper gear) that require special equipment; such equipment and personnel must be provided by the unit requesting the support.

(3) Escort or guide boat service for amphibious vehicles (AAVs or LAVs) transiting navigable waters, primarily New River.

(4) All other assignments as directed by the Range Control Officer.

b. Areas of responsibility. The Navy Boat Crew operates within the jurisdictional control of the CO, MCB as defined in U.S. Coast Pilot 4 and 33 CFR 334.440. This is generally defined as the New River Inlet; the Atlantic Ocean sector from the New River Inlet to Bear Inlet and seaward 25,000 yards; the AIWW within MCB Camp Lejeune boundaries, and the New River.

c. Requesting Procedures

(1) For scheduled firing into the N-1/BT-3 Impact Area H-1, Naval Gunfire, Brown’s Island and artillery fire across the New River into the K-2 impact area, RCO will routinely provide Navy Guard Boat support; separate unit requests are not required but detailed coordination must be conducted between all agencies.

(2) For all other boat support, unit requests must be submitted via the chain of command to CO, MCB Camp Lejeune (S-3 RCD) 15 working days in advance of the Monday of the training week.

d. Emergency support may be requested directly from BLACKBURN on 34.70 FM or at 451-3064/451-4449. Navy Boat crew is not manned for emergency 24 hour response, so its off-duty response times will vary. The Base Fire Department is the primary source of water rescue assistance on MCB; at sea, the Coast Guard Station at Fort Macon (252) 247-4570, Emerald Isle (252) 354-2719, Wilmington (910) 256-2615, (910) 256-4224, (910) 509-0779, or Channels 16, 83A, or 22. USMC Search and Rescue (PEDRO) helicopter can be reached at (252) 466-5745 (DSN 582-
e. All units that operate military small boats or amphibious crafts must ensure they comply with all standard procedures and common courtesy such as no wake zones, water craft speed, trash, with particular attention to the entire New River, AIWW, Sneads Ferry Bridge, Onslow Beach Bridge, and Mile Hammock Bay to prevent damaging civilian watercraft and property. At no time will any trash, ammunition dunnage such as brass, links, or live ammunition be disposed of by dumping in the water.

f. VHF Channel 16 is not authorized for general communication on the water while conducting the range sweep. VHF Channel 16 is for Hailing and Distress communication only for short and direct communications and then shift to other assigned frequencies.

3. H Ranges, N-1/BT-3, and Naval Gunfire Range Sweeps. When the H ranges, N-1/BT-3 impact area, or naval gunfire are scheduled in RFMSS, BLACKBURN will coordinate a range sweep in accordance with the following procedures:

a. When the sweep aircraft checks in with BLACKBURN on 233.8 UHF (primary), 119.5 (alternate), or 34.70 VHF, BLACKBURN will contact the Navy Guard Boats and the shooting unit, providing the sweep bird’s call sign.

b. Navy Guard Boat 1 will be located in the vicinity of grid 932295 in the AIWW abeam Onslow North Tower. It will have a Blue flashing light and flying the Bravo Flag (red flag).

c. Navy Guard Boat 2 will be located in the vicinity of Bear Tower Grid 976341 in the AIWW. It will have a blue flashing light and flying the Bravo flag.

d. Navy Speedboat (Speedy) will be located in the AIWW during the sweep.

e. BLACKBURN will read the following safety brief to the sweep bird: "Sweep the N1/BT-3 impact area from the AIWW to 4 miles seaward. Sweep the marshes, creeks, and AIWW between North Onslow Beach Tower (Grid 931288), Bear Tower (grid 974342), and Bear Inlet (Grid 955332). Sweep the beach between North Onslow Beach Tower and Bear Inlet as well as four miles..."
seaward. Report any sea mammal sightings to BLACKBURN. Report personnel and surface craft contacts to Navy Guard Boat with minimum four (4) digit grid. Do you have any questions at this time?"

f. BLACKBURN will ask the sweep aircraft to contact the Navy Guard Boat on CH 16 (Marine VHF common) expecting a further switch to CH 72 to discuss contacts. If unable to establish/maintain communication with Navy Boats on CH-16 (156.800) or CH-72 (156.625) the sweep aircraft will contact BLACKBURN. Military aircraft without Marine VHF radio capability may establish communications the Navy Boats on 34.70 FM. If any aircraft is unable to establish communications with Navy Boats, BLACKBURN will relay all findings to Navy Boats.

g. When the sweep is complete, the aircraft will be held on station until BLACKBURN can verify with the Range OIC/RSO and the Navy Guard Boat the area is clear and they are satisfied with the sweep. If the ROIC/RSO and the Navy Guard Boat are satisfied with the sweep, BLACKBURN will state to the aircraft: "I understand you had positive communication with the Navy Guard Boats. Confirm you have identified all sea mammal sightings to BLACKBURN and all personnel and surface craft contacts to Navy Guard Boats."

h. Chapter 6 discusses the rules for avoiding marine/sea mammals in and around the water impact area.

i. BLACKBURN will ask the sweep aircraft for requested route and clear if possible.

j. A map representation of the range sweep is available on the Range Control Website or Range Control.

4. Amphibious Vehicle Splash Points. 41 numbered splash points (SP) have been established for amphibious vehicles to enter or leave the water (the gaps in the numeric sequence are due to the deletion of inactive splash points). Use only existing splash points. Do not widen existing splash points. Do not make new splash points. If an authorized splash point is eroded or needs repairs report it to Range Control at 451-1240.

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<tr>
<th>SP</th>
<th>Grid</th>
<th>Description</th>
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<tr>
<td>1</td>
<td>18S TD 9756 3407</td>
<td>SP Bear Tower</td>
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<tr>
<td>2</td>
<td>18S TD 9591 3227</td>
<td>SP Old Brown’s Tower</td>
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**NOTE(S):**

**Most Splash Points listed above are not useable.**

1. TLZ Falcon - use extreme caution; avoid damage to telephone cable.
2. TLZ Bluebird - Avoid the waterfowl improvement area.
3. Everett Creek - use extreme caution; avoid damage to telephone cable.
5. Some of the above splash points are not usable.
Chapter 11

Range Policies

1. Establishment of Ranges, Training Facilities

   a. Only the Commanding Officer, MCB Camp Lejeune, can establish live fire ranges or training facilities. No other individual or organization will establish new ranges, training facilities, or alter existing ranges or training facilities except with prior approval of the Commanding Officer, MCB Camp Lejeune via Range Control and Range Development Divisions. This does not preclude units from placing suitable targets on existing live fire ranges within the approved SDZ for that range to enhance the target array, assuming all safety precautions and regulations are observed and EOD support is provided if required. All unit-emplaced targets must be removed upon the completion of training.

   b. Recommendations to improve ranges and training facilities are invited, and should be provided to the Commanding Officer, MCB Camp Lejeune, (Director, S-3) and Range Development Division per Base Order 1540.1D (Training Resources Development Program).

2. Modification of Ranges

   a. Requests for minor modifications to facilities, such as fencing, minor erosion control efforts, range road improvements, vegetation management and small construction projects shall be submitted to the MCB Range Control Officer.

   b. Requests for major modifications to existing facilities and all construction projects must be submitted to Director, Range Development Division (RDD) via Director, S-3. Project submission under $300,000.00 must include complete justification based on a training requirement/training standard, (T&R Manuals, ITS, POI, or METL) duration and frequency of use projections, and a request for environmental impact review (REIR). Projects in excess of $300,000.00 require additional documentation and justification. A complete project narrative will be provided and will address the following:

      (1) Training requirements
(2) Current situation

(3) Impacts

(4) Consideration of alternatives

(5) Analysis of deficiency

(6) REIR

c. New ranges or major range alterations require review by the Environmental Impact Working Group for possible impact, per paragraph 12104.5.A (8) of MCO P5090.2 and Base Order 1540.1D.

3. Maintenance and Operation of Ranges

a. Maintenance of Ranges. The maintenance of ranges, training areas, and training facilities will be accomplished by Director, S-3 or by Director, Installation and Environment (I&E) as required. No other unit or individual is authorized to perform structural maintenance on any range, training area or training facility unless the work is first approved by the Commanding Officer, MCB Camp Lejeune (Director, S-3 or Director, I&E).

b. Units (ROIC/RSO) will report all range maintenance issues and other problems to Range Control/Range Inspectors and or by filling out the ICE range report at the conclusion of training. Other requests for repairs of existing training complex facilities can be submitted by memorandum to MCB, Director, Range Control Division/Range Maintenance Officer.

c. The ROIC/RSO of the unit on live fire ranges and training facilities is responsible for all damage incurred during the scheduled period. If damage to or poor police of a range or training area is observed upon arrival, the ROIC/RSO must notify BLACKBURN/Range Inspectors immediately and note such damage/police problems on the Range Report to be turned into Range Control. Failure to report damage/poor police problems will be considered as having assumed responsibilities for all damages/poor police problems by the using unit.

d. Operation of Ranges

(1) All ranges, training areas, and facilities are assigned to the Commanding Officer, MCB Camp Lejeune. Units that are primary users of certain ranges inherit no title to
those ranges and possess no authority to modify nomenclature, purpose, or design of any range or facility without prior approval as listed in this SOP.

(2) MCB Range Control personnel are authorized access to all live fire ranges, training areas, and training facilities for the purpose of inspection, operation, safety, or required maintenance at all times. Range Control personnel will not disrupt unit training in the performance of these duties; training units will likewise not interfere with these personnel as they conduct normal inspections/safety surveys. Range Inspectors will conduct random inspections of ranges, training areas, and training facilities during their daily operations to verify strict adherence to all range safety regulations, other MCB orders and policies, and report any and all violations to the RCO as required/directed.

(3) The MCB Ammunition & Explosives Safety Officer (AESO) and other designated personnel will be granted access to all ranges for explosives safety matters to ensure units are abiding by all required/approved regulations regarding the safe transportation and storage of ammunition and explosives. Units must notify the AESO at 451-6281 when they intend to store/stage ammunition on a range for more than 24 hours. The temporary storage of ammunition and explosives for more than 14 consecutive days requires approval, in writing, from the Commanding Officer MCB Camp Lejeune.

4. Authorization to Fire. A Range Firing Warning and Airspace Utilization message will be produced daily by the Range Control Officer and promulgated by Naval Message. No firing will be conducted unless it is specifically listed in the Range Firing Warning Order, or as authorized by the Range Control Officer. In addition, authorization to fire must be obtained from BLACKBURN immediately prior to firing. Procedures for requesting and scheduling ranges, training areas, and training facilities are contained in Chapter 3 of this SOP.

5. Restrictions

a. Unauthorized persons are not allowed within the range complex. Civilians and military personnel not specifically scheduled to be on ranges are not authorized. Unit-sponsored/command-sponsored functions, which include civilian participation in training, may be requested through units chain of command to the Commanding Officer, MCB Camp Lejeune, (Director, Base S-3). See Chapter 1 for guidance on requesting
special events like Jane Wayne Days or other special events which include civilians. No personnel will enter a designated buffer zone or impact area (see Appendix B) without prior approval of the Range Control Officer and escorted by EOD.

b. The use of all chemical ammunition/training devices will be in strict compliance with Chapter 5 of this SOP.

c. Firing must conform to all airspace restrictions contained in Chapter 8 and Appendix B of this SOP.

d. Privately owned weapons (Shotguns Only) are only authorized on the designated MCCS range (D-9/R-100) and only during stated times when MCCS personnel are operating this range. They are not allowed on other live fire ranges unless specifically authorized by the Commanding Officer, MCB Camp Lejeune (Director, Base S-3/Range Control Officer).

e. Transporting military weapons and military ammunition in privately owned vehicles (POVs) is not authorized aboard MCB Camp Lejeune.

f. Using units are not authorized to bivouac on any of MCB Camp Lejeune’s live fire ranges without first submitting a Special Range Request via e-mail at least 10 working days prior to the event to the Base Range Safety Specialist, 451-1240.

g. Digging is not authorized on any live fire range except such as is required for the safe emplacement of the weapon system. All holes must be filled in after the training event. Unit must remove all sandbags used on the range.

h. Warming fires are never authorized on any live fire ranges, gun positions, mortar positions, or landing zones. Warming fires may be granted by e-mail only in training areas when authorized by Range Control and all requirements set forth in the warming fire checklist have been accomplished. Warming fire checklist can be provided on request from Range Control.

6. Ranges and Firing Positions

a. Live Fire Ranges are described in detail in Appendix A of this order. All dud-producing ordnance must be fired into one of the two designated impact areas (G-10, K-2) as described in Appendix B of this order. Dud-producing ordnance will not be fired into the N-1/BT-3 (Brown’s Island) impact area.
b. Vehicular and foot traffic approaches to ranges and impact areas will be secured by road guards, gates, or barriers during live fire operations as required and listed on Road Guard Maps. Road guards must be properly instructed in their duties/assignments. All specific range road guard positions and gate locations requirements are described in Appendix A and are marked on maps provided when the range is signed for by the ROIC/RSO.

c. Firing may be conducted from alternate positions as long as such positions are within the approved SDZ and meets all safety criteria set forth in MCO 3570.1B/DA-PAM 385-63 and this SOP. In such cases, a Special Range Request, including reviewed and signed ORM worksheet, attached overlays illustrating the proposed SDZ and scheme of maneuver, and safety plan will be provided to the Commanding Officer, MCB Camp Lejeune (RCO) for approval 10 working days prior to the first date of the requested training.

d. Deviations from the MCO 3570.1B/DA PAM 385-63 or this SOP may be authorized for special circumstances. Requests for a deviation of these orders will follow the format sited in MCO 3570.1B/DA PAM 385-63 (Chapter 1, paragraph 6). Such deviations must be approved via the unit’s chain of command up to the CO MCB. All approvals of deviations require the signature of the Commanding Officer, MCB Camp Lejeune. Annual waivers must be resubmitted for review/approval every year as directed in the approval letter. Requests/resubmittions for deviations of these orders must be submitted at least 30 days or more in advance.

e. Access to all training area, ranges and training facilities including tank trails and perimeter gravel roads is restricted to authorized personnel only. No running, driving POV, biking in any training area without proper clearance from Range Control. Violators will be cited.

7. Range Signs and Markers

a. The range signs and markers provided on all ranges, MPs, and GPs provide important information. If range signs are damaged/missing report it immediately to BLACKBURN or to the Range Inspectors.

b. Surveyed points are placed near the center of all firing lines, GPs, and MPs. Do not remove, destroy, cover up any survey points.
c. Funding, fabrication, and installation of range signs and markers are the responsibilities of the RCO.

d. Lateral Limits. Direct live fire ranges include lateral limit markers. Lateral Limit Markers are not to be used as targets.

   (1) Left Lateral Limit Marker. 4 ft x 8 ft or smaller black background with international orange diagonal stripes pointed inward to the right.

   (2) Right Lateral Limit Marker. 4 ft x 8 ft or smaller black background with international orange diagonal stripes pointed inward to the left.

e. All range signs and markers are essential for safe and effective training and will not be removed or otherwise disturbed. Additional self-explanatory signs with specific instructions or precautionary measures will be posted on certain ranges as deemed necessary by the RCO.

f. Training units who accidentally damage a range sign or marker or discover one which has been removed or disturbed should report the discrepancy to the RCO or Range Inspectors as soon as possible.

8. Police of Ranges, Training/Maneuver Areas, and all Training Facilities

   a. Unit Commanders, ROICs, and RSOs are responsible for police of their ranges, training/maneuver areas, and all training facilities that are scheduled and used by that unit for training.

   b. Units should conduct an inspection of the area upon arriving at a range, training area, or training facility. If it is in an unsatisfactory state of police, the unit ROIC should immediately report the discrepancy to a Range Inspector and/or BLACKBURN so corrective action may be promptly initiated. Units that fail to report such discrepancies have de facto accepted the range as is and, as such, the responsibility for taking corrective action.

   c. Before securing from a range, training/maneuver area or training facility, each using unit will thoroughly police the entire area and remove all trash/dunnage/target material. At no
time will a unit burn trash or bury trash aboard MCB Camp Lejeune.

d. The ROIC/RSO of units on live fire ranges, training area and training facilities will request a Range Inspector from BLACKBURN for final inspection prior to securing from the range/facility/training area. BLACKBURN will coordinate the inspection time and will instruct the ROIC/RSO to have a SNCO or Officer (ROIC/RSO) available to meet the Range Inspector. The inspection will be scheduled for as soon as possible after firing is completed. Units securing from their live fire range or training facility after dark will be inspected the following morning. Training/maneuver areas are also inspected; the last scheduled unit will be notified of any and all discrepancies.

f. Units are required to carry trash bags for policing the area; deposit the trash bags in the unit’s trash receptacle /dumpster. Do not deposit trash in dumpsters that do not belong to your unit, i.e. contractors/construction company dumpsters on ranges.

g. Wood products will be taken to the MCB landfill. Scrap metal, plastic items will be placed in the MCB recycling program containers at the MCB Recycling Center. Metal, wood products, or ammunition dunnage will not be placed in dumpsters. At no time will ammunition related items be placed in a dumpster or left on live fire ranges/training areas/training facilities.

9. Privately Owned Vehicles (POVs)

a. POVs are not authorized; in training areas, on training facilities, on tank trails, barricaded roads, live-fire ranges, live fire back blast areas, live fire hazard zones, impact areas and the surrounding buffer areas, all HOT SDZs, security areas, TLZs, ALZs, GPs, MPs, PDZs, behind locked range gates, Camp Davis North/South runways/taxiways, or in any other areas posted with signs prohibiting entry. POVs are not authorized to park along tank trails and paved roads on base or off base, blocking entrances to ranges, training facilities, GPs, MPs, and TLZs/ALZs.

   (1) SNCOs and above may request a Range Control POV pass (issued at Range Control) for visiting training events. E-5s and below will not be issued Range POV passes unless escorted to Range Control by a SNCO or above. POV use requires a valid requirement approved by their command to have a POV in a training area, on a training facility, or on ranges. Convenience is not justification for using POVs. Units must control, enforce, and supervise POVs.
being used as a means of transportation to ranges and training areas. POVs if assigned RC POV Passes cannot park within 50 meters of the firing line. RC POV Passes must be turned in on the due date.

(2) POVs are only authorized in unscheduled training areas for certain specific activities such as; hunting, fishing, wood cutting, and environmental surveys. Recreational POV use governed by this SOP is authorized by the following Base Orders:

(a) Base Order 5090.111 (Off Road Recreational Vehicles).

(b) Base Order 5090.115 (Hunting/Fishing Regulations).

(3) During the period 1 September through 1 June (Hunting Season), all POV use off hard surface roads, not specifically authorized above, must be by permit issued by the Game Warden. The Game Warden’s telephone number is 451-5226/2196. The Game Warden permit must be placed in the vehicle dash and must be visible.

b. Special events (i.e., CAPEX, CERTEX) POV use/parking instructions are published by special bulletin.

c. Motorcycles, dirt bikes, ATVs, and four-wheel drive vehicles are not authorized on ranges, training areas, training facilities, tank trails, LZs, and all other areas posted with signs prohibiting entry unless by an approved SRR. Violators will be prosecuted.

d. School of Infantry and MC Engineer School have, by special agreement with CO MCB, the authority to park POVs in certain designated areas within the Verona Loop area, ETA-7 and ETA-4 area, and other approved areas. All POVs parked in these areas must display the SOI Parking Permit or Engineer School Parking Permit. No other units are authorized POV parking in these areas unless issued a Range Control POV pass.

e. Units that require the inclusion of POVs in their training to add realism, etc, should contact Range Control for special approval prior to the training event. Range Control POV Passes must be issued and a waiver of liability and assumption of risk is filled out and signed.

10. Recreational Use of Ranges, Training Areas, and Facilities
a. Requests for recreational firing of weapons on ranges by military personnel, their dependents, and guests, will be in accordance with paragraph 11004.

b. Presently only D-9/R-100 (Skeet Range) is available for recreational shooting. Recreational shooters under the age of 18 must be accompanied by an adult at all times. Contact Director, MCCS at 451-2525 for times and information. MCCS maintains a separate SOP for recreational shooting procedures for D-9/R-100.

c. The MCB Weapons Training Battalion sponsors National Rifle Association and other civilian team shooting events. Contact Weapons Training Battalion S-3 or Chief Range Officer at 440-2687/2917 for more information.

d. Unscheduled training areas are turned over to the Conservation Law Enforcement Office (Game Warden) for recreational use. The Game Warden will control hunting and hunt scouting, fishing, trapping, shell gathering, fire wood gathering, and bird watching recreational use of training areas. Hunters are not authorized to hunt from or within any range proper complex as defined by MCO 3570.1B which includes the cleared range footprint defined by the assembly area, firing positions, left and right lateral limit signs, and the last row of targets. Hunters are not authorized to hunt from or within TLZs, runways, training facilities/complexes (classrooms, towers, and road networks), or inside and near buildings. Hunters are not authorized to hunt or travel along Hwy 172 between the Hubert/Triangle Gate and Sneads Ferry Road when noted as “Closed.” Hunters are not authorized on Lyman road between the Hubert/Triangle Gate and Sneads Ferry Road when noted as “Closed.” When GH/GI training areas are marked “HOT” the AIWW and N-1/BT-3 are “Closed” from the Onslow North Tower to Bear Inlet. A special access permit is required for all personnel using boat launches. Hunters are not authorized to park on Freeman Creek Access Road or surrounding areas. Hunters within the Weapons Training Battalion’s area to include LC, LD, and LG training areas must check in/out with Rifle Range Security at building RR-11. GSRA hunters are not authorized to unlock gates or access CC Road when noted as “Closed.” Hunters within the MCOLF Oak Grove are not authorized to hunt on runways, TLZs, or in the recreation areas.

e. When not in use for training, the EB training beach is available for recreational use. Refer to the flip sign on the
road at the entrance of EB training area for the availability of recreational use. Range Inspectors will flip the sign to recreational use after the training unit passes the required inspection. Recreational users may call BLACKBURN, 451-3064, to check on the use of the EB training beach. MCCS and the Game Warden are responsible for advising its patrons on the environmental rules of the beach and cleaning up after its use. All recreational users (other than approved family days) are responsible to sign in/out at the Game Warden’s shack by the entrance to EB. Game Warden will periodically check the log to verify recreational users have checked in/out of the area. All domesticated animals accompanying recreational users must be held on a leash/reins and any defecation by these animals must be bagged and removed with the patron from the beach. If any portion of the EB training area is desired to be used for a family day/unit party, the requesting unit must submit a SRR through their chain of command to arrive at MCB S-3 via Range Control 30 working days in advance of the date of the event.

11. Hazards of Electromagnetic Radiation to Ordnance

a. Hazards of Electromagnetic Radiation to Ordnance (HERO) concerns the accidental actuation of electrically initiated ordnance due to radio frequency electromagnetic fields.

b. Electro Explosive Devices (EEDs). EEDs such as squibs, blasting caps, igniters, and similar explosive devices are particularly susceptible to initiation when exposed to radio frequency fields. These devices will remain packaged and in completely enclosed metal containers until just prior to use.

c. Ammunition and Explosives must be protected from the hazards of electromagnetic radiation to ordnance. It is imperative that all commands transporting, or training with ammunition and explosives, especially aviation ordnance, comply with the requirements of NAVSEA OP 3565, Volumes I and II/NAVAIR 16-1-529 Vol 2.

d. Below are the most often used HERO sensitive DODICs; this list is not all-inclusive and could include new items. Units are responsible to understand all capabilities and limitations of the ammunition they train with. Refer to NAVSEA OP 3565 Volumes I and II for a full list of HERO UNSAFE/SUSCEPTIBLE ORDNANCE.
12. Explosive Ordnance Disposal (EOD)

a. Base EOD is organized, staffed and equipped to support training on the live fire ranges and training areas at MCB Camp Lejeune and MCAS New River. EOD is under the cognizance of the MCB Director, Range Control Division. Emergency Assistance is available on a 24-hour basis to all units/organizations located at MCB Camp Lejeune and local law enforcement agencies on request by Base PMO to BLACKBURN. Contact Base EOD through the BLACKBURN at 34.70 FM or 451-3064/4449 for emergencies and all off base requests for support.

b. The MCB EOD Team operates within the MCB Camp Lejeune Military Reservation or other locations as directed. MCB EOD is equipped with Motorola Radios and the capability to communicate with BLACKBURN, ROICs, RSOs on 34.70 FM. MCB EOD Technicians will operate in accordance with this order and all applicable references pertaining to EOD operations. When involved in demolitions they will adhere to applicable warnings and secure from operations as directed by safety/weather as required. The
senior EOD Technician on site will make the final decision to secure from operations in the event of foul weather. He will inform BLACKBURN of his decision and ensure the range/impact area is “cold” before leaving.

c. Routine requests for EOD support should be submitted in writing at least 10 working days in advance of the requested date for support to Director, Range Control Division. Range Control scheduling will notify EOD and de-conflict with any other units. The day prior to requested support or last working day before weekend support, the unit should contact EOD directly for final coordination. The EOD Office is located at Building G800 at Camp Geiger and can be contacted during normal working hours at extension 449-0558/0334. After normal working hours, weekends, and holidays contact EOD through BLACKBURN. Examples of routine EOD support are:

   (1) Downrange escort forward of any live firing range within the N-1/BT-3 (Brown’s Island), G-10, or K-2 impact areas.

   (2) Escort vehicles through impact areas for range maintenance, target replacements, Environmental Management Division, Wildlife Management, or others as directed.

   (3) Provide unclassified information on ordnance. This information is available to the ROIC’s and RSO’s who desire a better understanding of the ordnance they will encounter when firing. This information may be obtained at Building G800 during normal duty hours, Monday through Friday.

d. Emergency Support. Contact EOD through BLACKBURN at 34.70 FM or 451-3064/4449. Examples of emergency support are:

   (1) Located unexploded ordnance aboard Camp Lejeune and MCAS New River installations.

   (2) Lodged, stuck, or hung ordnance that cannot be removed from any gun/weapon system, or aircraft safely by the using unit.

   (3) Hazardous munitions not serviceable or damaged and cannot be turned into the Ammunition Supply Point or Station Weapons.

   (4) Any suspicious item, ordnance or improvised explosive device (IED) found or placed on or near training
facilities or ranges and poses a threat to personnel and property.

(5) Any suspicious item, ordnance, or IED found off MCB, should be reported to PMO, BLACKBURN, or MCB CDO. Normally the local police department, fire department, or sheriff will contact MCB PMO initiating the EOD request.

e. **Required EOD Support**

(1) EOD must be “on call” when high explosive hand grenades are thrown on any hand grenade range for the safe disposal of unexploded ordnance incurred during scheduled training. When a unit schedules a grenade range, Range Control will contact EOD to coordinate this support. It is the responsibility of the ROIC/RSO to notify EOD prior to calling the range in “hot” so an EOD team can be placed on alert. The ROIC/RSO will obtain the sunset time and provide EOD with enough time to search and clear the downrange area in compliance with the order. All handling of hand grenades must cease one hour prior to sunset.

(2) EOD Personnel are required to escort any unit/individual that desires to enter a designated impact area; G-10, K-2, N-1/BT3. The only exceptions are ranges with limited troop penetration beyond the firing line, as authorized by this SOP.

f. **Unexploded Ordnance (UXO).** UXO within a designated impact area, with the exception of hand grenade ranges, do not require an immediate EOD response. Duds and other UXO should be reported to BLACKBURN as required. UXO outside an impact area poses a threat to personnel and property and must be reported immediately to BLACKBURN or directly to MCB EOD. Units must include an exact location of the UXO and provide a guide if possible. UXO should be clearly marked with a visible item approximately 5 feet away; all personnel shall be kept clear of the area. **DO NOT DISTURB UXO IN ANY MANNER.**

g. **Explosive Actuated Tools.** Explosive actuated tools may be used in the performance of proficiency training by EOD aboard MCB Camp Lejeune and MCAS New River and during Anti-Terrorism/Force Protection Exercises. This SOP and all applicable EOD publications regarding safety will be followed. EOD training with these tools, such as .50 caliber de-armer, water jet remote opening device (JROD), robot disrupters and rocket wrench, must have the approval of the RCO. Request for approval will contain the following:
(1) Date, Time, and Location.

(2) Exact placement, quantity and composition of set-up (Electric or non-electric).

(3) Measures for control, and safety of personnel, property and surrounding area (Distance X).

h. EOD Range Sweeps. Impact areas are periodically swept by EOD to remove UXO and in conjunction with semi-annual retargeting operations for purposes of neutralizing hazards associated with UXO. Ranges that have a high frequency of use, or accumulate an excessive number of UXO will be swept as often as scheduling permits. The OIC, Base EOD Team will schedule such sweeps and inform the RCO of the results.

13. Road Crossing Procedures

a. These procedures are in place to enhance safety at paved roadway tactical vehicle crossing sites for both tracked and wheeled vehicles. All commands should review and change their actions at the crossing sites and adjust unit SOPs to reflect the following procedures. These procedures are also found in the 2d Marine Division Training SOP P1540.28B.

b. Units will post road guards with safety vests at all paved road crossing points. Road Guards will stand on both sides of the paved road and cover both directions from the crossing point. Road Guards will be posted a minimum distance of 100 meters from the crossing point on all 55 MPH roads and 50 meters on all other paved roads aboard MCB Camp Lejeune. Tracked Vehicles will only cross at the designated concrete crossing pads.

c. Road Guards will wear reflective vests both day and night. Road Guards will have some means of signaling their tactical vehicles to proceed or stop them from crossing the paved road. All tactical vehicles must go admin at the crossing location by turning on all lights/flashing lights before crossing. Road Guards must ensure all traffic is stopped before any tactical vehicle (wheeled/tracked) starts crossing the paved road. Road Guards must always be aware of all on coming traffic and have an escape route from the roadway in case the traffic does not stop.
d. Road Guards will remain in position for the entire crossing period and will stay in place until the using unit removes all debris (dirt, rocks, mud) from the paved road.

e. During the hours of darkness or reduced visibility, Road Guards will be equipped with a visible lighting system like flares, distress markers, chemical lights, DOT Reflective triangles and must have a flashlight in their hand pointed in the direction of the on coming traffic. The safety lighting system should be placed in front of the road guards at least ten (10) meters to warn the on coming traffic of the Road Guard position.

14. Lost Marine/Sailor Procedures

a. Lost Marine, Sailor, Soldier, Airman, Coast Guardsman, or any other person aboard MCB Camp Lejeune must be reported to BLACKBURN immediately by the command/unit and remain in contact with BLACKBURN at all times.

b. The following information must be reported as required.

(1) Name, rank, unit, last four of the SSN, and description.

(2) Date, time, location (Grid/Training Area) last seen.

(3) Marine/Sailor/person physical and medical status (injured/uninjured).

(4) Type of training being conducted at the time disappearance.

(5) Known sensitive items being carried by the Marine/Sailor/person like weapons, night vision devices, etc.

(6) Request for assistance (PMO, PEDRO, Fire Department, etc).

(7) Follow up information as required.

c. The lost Marine’s/Sailor’s/person’s unit is responsible for conducting the search and notifying BLACKBURN once the Marine/Sailor/person is found.

15. Vehicle Training Procedures (Road March Safety Issues)
a. Allocation of a scheduled training area does not include the exclusive use of that tank trail/gravel road located therein. Any commander desiring exclusive use of any portion of a tank trail/gravel road/paved road must specifically request the desired portion and include a complete justification to the Range Control. Unit must provide required road guards.

b. All tracked vehicles are prohibited from operating on all hard-surfaced roads and the maintained shoulders adjacent to the hard surface roads. **Tank/AAV units must coordinate with Range Control and MCB Facilities at least 1 working day before crossing Onslow Beach Bridge (see paragraph 21).** The unit must have a plan to remove and clean up all dirt, gravel, and mud from the hard-surface road and bridge.

c. Units are authorized to conduct blackout/night vision vehicle training on the tank trails/gravel roads if properly scheduled in RFMSS. **Blackout/night vision training is prohibited on any of the hard-surface roads of MCB Camp Lejeune.** At least one person (A-Driver) will not have any night vision devices on during training and act as a safety person. Standard non-tactical vehicles while working to support training or other requirements will have all lights on at all times and upon encountering a unit conducting blackout/night vision training will yield the right of way, stop, or pull over and switch to parking lights only until the unit/vehicles are cleared. Units using night vision devices to drive during hours of reduced visibility will ensure the devices are removed and standard vehicle lights are turned on before crossing any hard-surfaced roads. Blackout/night vision speeds will be consistent with the weather, terrain, road conditions, and nocturnal light conditions but at no time will speed limits exceed 15 MPH.

d. **Stopping, off-loading of passengers, and scheduled halts will not occur on any hard-surfaced roads.** Vehicles halted due to break down will be marked with reflective triangles and or red chemical lights as required. **Tactical vehicle events/procedures other than convoy movement are NOT AUTHORIZED on the hard surface roads of MCB Camp Lejeune.**

e. The below listed speed limits will be adhered to by all tactical vehicle drivers operating aboard MCB Camp Lejeune’s training areas. Light conditions, road conditions, dust and weather may dictate a more prudent and reasonable speed limit.

(1) Hard-surfaced roads as posted.
(2) Tank Trails/gravel roads 25 MPH unless otherwise posted or as road conditions/weather will permit.

(3) All other dirt trails 15 MPH or less as road conditions/weather will permit.

(4) All vehicles will reduce speed to 5 MPH when passing a military formation or a marching unit on all hard-surface roads, tank trails, gravel roads, and dirt trails.

f. All tactical vehicle accidents within the training areas, live fire ranges, or training facilities must be reported to the BLACKBURN immediately, then to the Road Masters, and the unit chain of command.

g. Tactical wheeled vehicles with crew served weapons mounted. Units are authorized to mount and man crew served weapons stations on all assigned wheeled vehicles as long as all protective gear is worn like helmets, body armor, and eye protection aboard MCB Camp Lejeune. Blank ammunition can not be mounted, loaded or fired while the vehicle is on any of the hard-surfaced roads aboard the MCB. Once the wheeled vehicle with mounted weapon system enters the scheduled training area on the tank trails/gravel roads the weapon can be loaded with blank ammunition only and used. Live ammunition can only be mounted, loaded and used on the scheduled live fire ranges aboard MCB. If the wheeled vehicle departs MCB and travels on civilian controlled roads/highways the weapon system must be directed toward the front of the vehicle and locked down, ammunition removed, and placed in the vehicle. The weapon system operator (gunner) must be inside the vehicle with required safety gear on and seat belt used.

16. Cellular Phones. Cellular phones do not meet communication requirements and are not authorized as the primary or alternate means of communication with BLACKBURN. If requested by the using unit, MCB Range Safety Specialist may approve the use of cellular phones for the ROIC’s/RSO’s required communication with road guards and support personnel only. That link must be checked every hour by the unit ROIC/RSO and reported to Blackburn.

17. Inadvertent Over-Flight of Aircraft. The unit on the ground must immediately go into a check-fire whenever an aircraft is spotted within the assigned SDZ or gun target line. Firing can be resumed once the aircraft has departed the area.
a. Contact BLACKBURN immediately and report the incident.

b. Report the type of aircraft if possible and, if close enough, report aircraft tail number.

c. Report other information as available; approximate altitude, direction of flight, etc..

18. Rounds Out of Safe. All rounds fired must impact within the designated safety limits/SDZ/impact area. On the established direct fire ranges, left and right lateral limits will be clearly marked as described in the range descriptions. If rounds land outside of the safety limits, the firing unit will immediately CEASE FIRE, FALL BACK TO THE REAR OF THE WEAPON/WEAPON SYSTEM, and report the incident immediately to BLACKBURN. All rounds fired out of safe aboard MCB Camp Lejeune must be investigated by the firing unit/command and the results of that investigation must be reported in writing to CO, MCB, via the Range Control Officer.

19. Public Affairs and Range Operations

a. General

(1) Range operations and training accidents are of high visibility and attract a great deal of public and military interest.

(2) The public has a right to know about accidents and incidents. Procedures must be followed to ensure the rights and privacy of personnel involved are not denied, an investigation is not hampered by release of speculative or unrelated remarks, and the information presented to the public is as factual as possible.

b. Basic Requirements

(1) In accordance with this SOP, any visits to live fire ranges, training facilities, and training areas must be coordinated through Range Control. CO MCB Camp Lejeune policy states news gathering media may be invited on the installation through the MCB Public Affairs Office (PAO). If a unit desires media coverage of training, coordination must be made with the MCB PAO and Range Control at least 72 to 48 hours in advance for both internal and external media coverage.
(2) In the event of an accident/incident, personnel must refrain from making comments, answering questions, or engaging in speculation with all members of the media. If approached by a member of the media, personnel involved must refer the question or questions to a MCB PAO representative. If there is no PAO representative present, firmly and politely reply with “I will refer your query to the MCB Public Affairs Office”.

(3) At no time should excessive force or abusive language be directed against the news media representative (NMR). Separation of NMRs and personnel involved in the accident or incident should be accomplished through traffic control points or by sealing off the accident site to prevent unauthorized release of information. Keep in mind a camera does not need to be focused directly on its subject and video cameras and tape recorders will pick up audio signals quite clearly from a distance.

(4) Following an accident or incident, anyone that identifies himself as a NMR must be escorted by a MCB PAO designated escort or PAO representative. Make positive identification of official personnel before volunteering information.

20. Bivouacking on a Range or Training Area

a. Units/commands desiring to bivouac on a live fire range or training area must include that information on the RFMSS request in the remarks box. Units must send an e-mail SRR to MCB Range Safety Specialist to request to bivouac on a live fire range only.

b. When signing for a live fire range the ROIC/RSO needs to confirm the unit’s bivouac intentions and, after arriving on site, call back a six-digit grid location to BLACKBURN.

c. Units bivouacking anywhere on the MCB Camp Lejeune range complex are required to maintain two way communications with BLACKBURN on frequency FM 34.70 at all times. Radio checks with BLACKBURN must be conduct at minimum at 0600, 1400, and 2200 daily.

d. Bivouacking inside a training facility like Combat Town, MOUT Complex and Mobile MOUT is not authorized. Unit must schedule a surrounding training area for bivouacking.
21. **Onslow Beach Bridge Crossing Procedures:** The following procedures will be used for all tracked vehicle (Tanks/AAVs) crossings of the Onslow Beach Bridge to enhance safety and minimize any damage to the bridge. Unit conducting the crossing must contact Range Control (451-1240) one (1) working day before and the day of the crossing during normal working hours Monday through Friday to ensure the proper personnel are contacted beforehand. If after normal working hours the unit should contact BLACKBURN directly so a phone call can be made to the Bridge Operator at 440-7376 before hand ensuring the proper coordination takes place between the unit and the Bridge Operator before any crossing is attempted.

   a. The unit must provide Ground Guides (front and back) with road guard vests for each tracked vehicle crossing the bridge.

   b. The tracked vehicle must cross at a slow speed (5 MPH or less). All POVs must be stopped before attempting any crossing.

   c. Only one tracked vehicle at a time and the tracked vehicle must be in the center of the bridge. If a tracked vehicle is towing another disabled tracked vehicle this must be briefed to the bridge operator beforehand.

   d. The unit must sweep off any dirt, mud, or gravel from the paved roadway of the bridge after the crossing is completed.

22. **John E. Waters Jr Wildlife Viewing Area:** The following procedures will be used by all units and commands aboard Camp Lejeune. The John E. Waters Jr Wildlife Viewing Area located by the Sneads Ferry Gate at grid 79992915 near the LE Training Area is off limits to all tactical vehicles. Units/commands are not authorized to enter this area with any tactical vehicle/vehicles or use this area for any military training.
APPENDIX A

LIVE FIRE RANGES AND TRAINING FACILITIES

1. General

   a. Safety regulations for firing on live fire ranges and training facilities are contained in this SOP and the MCO 3570.1B/DA PAM 385-63.

   b. All ranges and firing positions are "off limits" to all personnel and units except when scheduled in RFMSS, signed for, and listed in the Range Firing Warning Order (AMHS Message) and signed for by the using unit or when authorized by the MCB Range Control Officer. Requests to conduct live firing on ranges and Gun/Mortar positions/training facilities will be submitted in accordance with Chapter 3 of this SOP.

   c. All personnel must have sleeves down, wearing helmets, flak jackets, and hearing/eyeware protection on all live fire ranges, in engineer training areas (ETAs), on observation posts (OPs), and artillery(GPs)/mortar positions (MPs) when in a "HOT" status except where otherwise specified in this Appendix and this SOP. Requests to deviate from this policy must be submitted via the unit’s chain of command, including the first General Officer in the chain of command of the firing unit, to the Commanding Officer, Marine Corps Base, (Director, S-3), at least 30 days in advance of the first day of scheduled training event.

   d. Medical personnel (Corpman/Medic) that are properly trained with the proper first-aid equipment will be present on all live fire ranges, training facilities/training areas when training is in progress. A safety vehicle (Government Vehicle) must be located on all live fire ranges, training areas and facilities during training. Vehicle operators will be familiar with the primary routes to the nearest medical facility. Whenever possible, this vehicle should be an ambulance. However, any military or GSA vehicle capable of transporting a casualty or casualties may be utilized. The presence of at least one hospital Navy corpsman and one safety vehicle is the minimum requirement. Use of POVs as safety vehicles for training events is not authorized. Government Rental Vehicles can be used if assigned/issued a Range Control POV Pass.

   e. All directions of fire are listed in magnetic azimuths. Direction of fire must remain within the limits of the SDZ at all times and at distances up to and including the maximum range
of allowable ammunition/charge (NEW) restrictions for that live fire range. All live fire and the effect of live fire will be at all time in the approved surface danger zone/impact area for that range as per this SOP.

f. The MCB Range Control Officer is authorized to permit deviations from this SOP with regards to allowable weapons and ammunition, when such deviations are for a specific purpose to enhance training and within established range safety criteria. A Special Range Request (SRR) must be submitted within 10 working days for this training requirement as per Appendix J.

g. Any movement on a static firing ranges beyond the firing line or on a maneuver ranges beyond the limits designated into a impact area must be approved by RCO and Base EOD.

h. Information concerning range operators and maintenance are contained in Chapter 11 of this SOP.

i. Range Officers in Charge (Range OIC) and Range Safety Officers (RSO) must remain alert to low-flying aircraft at all times while conducting live fire. When low-flying aircraft are observed approaching the limits of any range/gun position/mortar position, the Range OIC/RSO of firing unit will command "cease firing" until the aircraft clears the limits of the range/gun/mortar target line. Unit must contact BLACKBURN immediately with the type of aircraft and tail number of the aircraft that violated the surface danger zone if possible. These procedures also apply to all Engineer Training Areas (ETA’s), Gun Positions (GP’s) and Mortar Positions (MP’s) aboard MC Base Camp Lejeune.

j. Chapter 11 of this SOP governs range use for recreational shooting and must be approved by the Range Control Officer via a formal request.

k. When checking out a live fire range, the Range OIC must indicate anticipated time of use and the type of training to be conducted, type of ordnance and weapons to be used at the time of check-out. Request to extend range-firing times will be submitted to BLACKBURN. BLACKBURN has the authority to extend range firing times up to one hour. Requests for extension beyond one hour will be submitted to the RCO. Requests for extensions on all contracted run ranges must be submitted at least (4) hour in advance for approval during normal working hours.
1. Requests to fire anything above small arms (50 cal and below) beyond 2400 except SR-7 will be submitted via the chain of command using a naval letter format to Range Control within thirty (30) working days of the scheduled live fire event.

2. Communications

   a. Training units must maintain two means of communication between the unit and BLACKBURN (Range Control). Radio is the primary means of communication with BLACKBURN. If a landline telephone is available on the range, it can be used as the secondary means of communication if working properly both ways. Cellular Phones are not authorized as a means of communication with BLACKBURN.

   b. If a unit fails to maintain the required communications, BLACKBURN will place that unit in a “CHECK FIRE” status until satisfactory communications are reestablished and maintained. If a unit cannot maintain satisfactory communications, BLACKBURN will place that unit "COLD" for the remainder of the day and will so notify the Range Control Operations Officer/Base Range Safety Officer. Units must ensure that the squelch is off on the radio. BLACKBURN cannot communicate with the unit conducting the training when the unit has the squelch on the radio.

   c. The responsibility for proper communication with BLACKBURN rests with the unit, the unit commander and the Range OIC/RSO. Range Control will not issue communication gear (Radios) to using units.

   d. Emergency Procedures. During any MEDEVAC/CASEVAC, all other units will be directed by BLACKBURN to suspend radio checks until the situation is resolved with the unit having the emergency/situation. All units will continue to monitor the range safety/control net as required. Training may continue unless BLACKBURN issues a "Check Fire" order to all other firing/training units. Units will render assistance as requested by BLACKBURN and the unit if required. Further guidance on MEDEVAC/CASEVAC can be found in Chapter 4 of this SOP.

   e. Units conducting non-live fire in training areas must check in at the beginning of all training and at the completion of all training. Mandatory radio checks must be completed while in a training area, training facility when training is started.
and when completed and also at the following times at 0600, 1400, and 2200 daily while conducting non-live fire training. Units are required to conduct radio checks with BLACKBURN, and must monitor the Range Control/BLACKBURN net, 34.70 FM, for safety purposes at all times. Simunitions (SESAMS) training and other high risk training is treated the same as live fire training and radio checks are required every thirty (30) minutes on the hour and the half hour.

3. Safety Equipment

   a. Commanding Officers must conduct an Operational Risk Assessment/Worksheet and implement the proper safety procedures to mitigate all safety concerns not addressed by higher authority, such as MCO 3570.1B/DA PAM 385-63. Units are required to have a copy of the reviewed, signed, and approved ORM Worksheet on site/on the range for that scheduled live fire training, training area and training facility for high risk events.

   b. Red range flag or red flashing lights (for night firing) must be displayed from range flag poles and light poles when the live fire range goes “HOT”. If any of these items are taken down, the range will cease firing until they are replaced.

   c. Red smoke grenades and red pyrotechnics will only be used as emergency signaling devices. These safety devices are not a requirement for live fire training at Camp Lejeune but are highly recommended for live fire and movement/maneuver type training events.

   d. All forward observers/tower guards and air sentries will use binoculars when observing airspace and navigable waters to include the ocean. At night, night vision devices will need to be on hand and used by the using unit to ensure the SDZ are clear.

4. Barricades, Road Guards, and Tower Guards

   a. Using units are responsible for closing the approaches to the live fire range surface danger zones/areas created by their live fire training events. In many cases, barricades, gates and appropriate warning signs are adequate. In those cases that require road guards, Range Control will provide a road guard map showing all road guard positions to the Range OIC when he/she checks out the live fire range. It is the Range
OIC/RSO responsibility to ensure that all barriers/gates with locks and road guards are in the correct position to prevent anyone from inadvertently entering the live fire range surface danger area/zone.

b. Barricades

(1) There are two types of barricades:

(a) Portable barricades consisting of a sawhorse-like structure or plastic barriers that are at least two feet high placed directly across the road. The barricades should be painted a bright color.

(b) Permanent barricades consisting of range gates will be locked in place or have a sentry on duty at that location. Permanent barricades are emplaced on all major road and trails leading into the impact areas. Other permanent barricades are emplaced on various ranges to prevent down range movement or lateral movement into danger areas. Permanent barricades must be kept closed at all times except when authorized access is required. Using unit should never remove a permanent barricade or if using a vehicle or vehicles drive around them. Firing units must ensure that barricades are in place prior to commencing any live fire. Specific requirements for each range/training facility are listed in this Appendix.

(2) Range Control maintains portable barricades for placement as required or on request. Units requiring portable barricades will return the barricades to the Range Maintenance Section upon completion of use. Report damaged permanent barricades/gates to Range Control.

(3) At no time will anyone, any vehicle, any unit drive around a locked gate without checking in with BLACKBURN. If properly scheduled, the unit will be given the required keys to unlock the range gate or gates. Report all damaged gates or locks that are not working properly to Range Control.

c. Road and Tower Guards

(1) Road guards will be posted by firing units to prevent entry into the danger areas of that specific range. Ordinarily, most range access roads do not require a road guard or road guards.
(2) The Range OIC or RSO may post other road guards as deemed necessary to ensure safety; however, the arbitrary blocking of roads will not be permitted. At no time will units stop a Range Control, Range Inspector or any other authorized section like Base EMD of MC Base from entering a range, training area, or training facility.

(3) Road guards must have positive means of communication with the firing unit Range OIC/RSO at all times and must wear a reflective road guard vest at all time while assigned as a Road Guard.

(4) Tower guards will be posted when firing over or into the waterways/ocean adjacent to Camp Lejeune, as specified in Chapter 3, paragraph 3008. Road guards and tower guards must be competent personnel who are familiar with the range procedures and capable of taking immediate, positive action in emergency situations. Tower guards must be familiar with all communication procedures, thoroughly briefed and equipped with binoculars and at night with night vision devices. Units will conduct a police call of the tower/tower guard area.

5. Vehicles

a. Military vehicle speed limit is 25 miles per hour or less for all wheeled and tracked vehicles while off the hard/paved surfaced roads, like the tank trails/gravel roads, and in the all training areas unless posted otherwise aboard MC Base Camp Lejeune. Speed limits will not exceed what is safe for, conditions like adverse road conditions, weather conditions, and night driving conditions. Vehicle speed will be reduced as required to operate the vehicle safely at all times.

b. Night vision goggles driving will be in accordance with MEF/Division/MARSOC/TECOM orders/policies, with a maximum speed of no more than 15 mph while wearing night vision goggles. Night vision driving/night tactical driving will only take place on scheduled/approved training areas/tank trails in RFMSS. At no time will this type of vehicle training take place on any hard/paved surfaced roads. Speed limits when passing troops that are conducting training like hikes is limited to no faster then 5 mph.

c. Use of Privately Owned Vehicles (POVs) is severely limited. POVs are prohibited in all tactical training areas, bivouac areas, live fire ranges, training facilities, and impact areas. POVs are prohibited from parking on all roads traversing
or providing access to these areas. POVs are prohibited from parking on all live fire ranges or roads adjacent to ranges and will not be used for transporting of military personnel, weapons, ammunition, and equipment to or from ranges, training areas and training facility. No privately owned motorcycles, dirt bikes, three, or four wheeled all terrain vehicles (ATVs), bicycles, or any other off road vehicles are authorized in the Camp Lejeune training complex or on any live fire range or training area.

6. **Other Notes/General comments(s)**

   a. **Police Call.** Upon completion of all training, Range OICs and RSOs will ensure a thorough, detailed police call is conducted of the entire live fire ranges, training facility and training areas in order to ensure that no trash, ammunition boxes, or any other debris/dunnage has been left in the area and that all fighting positions and holes have been filled in by the using unit. All areas occupied during the conduct of training will be thoroughly policed; if a training area has not been policed upon the occupation of the using unit, the unit should notify BLACKBURN of the situation so it will not be held responsible for the training facility, training area and live fire range. When an area is found by Range Control personnel to be in a poor state of police, the last known using unit will be required to return to the training facility, training areas or live fire ranges and police it up thoroughly and be inspected to be properly cleared.

   b. **The use of all pyrotechnics/smoke is prohibited 500 meters from the center of the old and new Base Landfill.** Pyrotechnics/Smoke are not authorized in the entire GSRA complex. Pyrotechnics/Smoke/other training devices are not authorized within 1000 meters of the fuel farms aboard MC Base, Camp Lejeune.

   c. **Observation posts must be requested in the same manner as all other training facilities.** (See Appendix I)

   d. **At no time will metal stakes/engineer stakes be used to support any target material or used to support wooden pallets being used as targets due to the potential high hazard of ricochets.** Units are not authorized to fire at steel targets using 5.56mm green tipped (DODIC A059/A064) ammunition closer than 100 meters.
7. Ranges

NOTE: The table below is a quick reference to all ranges aboard Camp Lejeune. For a complete description of each range, see the referenced page number.

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RANGE NAME: A-1

DESCRIPTION: Baffled Pistol Range

PRIMARY RANGE USE: Pistol Qualification/Requalification Range

ALTERNATE RANGE USES: Pistol Familiarization Range

LOCATION: Camp Johnson, Grid 79034450

PRIMARY DIRECTION OF FIRE: 162 degrees magnetic

WEAPONS ACCOMMODATED: All military issue pistols (.45 Cal/40 Cal/9mm)

AMMUNITION AUTHORIZED: All pistol ammunition
No armor piercing type ammunition

TARGETS/SIMULATORS/DEVICES: 14 firing points

FACILITIES(Number of each): Head Facilities: 1 Port-a-John
POV Parking Area: 1
Range Tables: 2

UTILITIES AVAILABLE: Electricity: No
Lights: No
Water System: No

INSTALLED COMMUNICATIONS: Telephone (450-0857)

AREA SUITABILITY: Squad/Platoon

Range Use Restrictions/Comments/Conflicts

1. Firing Lines are located at 7, 15, and 25 meters.

2. Recreational shooting is not authorized on this range.

3. Maneuvers are not authorized on this range.

4. Night use is authorized if properly scheduled in RFMSS.

5. Class 3B and 4 LASER devices are not authorized on this range.
6. The Civilian Military Police Academy is authorized to fire the 12 Gauge Shotgun/12 Gauge Ammunition on this range if the proper barriers are in place to protect the wooden wall and a detailed police call is conducted and all shotgun debris is removed.

Other Considerations

1. A range contractor will set up the range and provide a qualified range operator for the scheduled/signed time period. The operator will provide one E-type silhouette and two bull’s eye paper replacements per firing point, along with target pasties and a stapler. If the using unit requires additional targets/bull’s eyes, the unit must furnish/provide them. Contact the contracting officer representative at 451-4480/2411 with any contract support issues. The range contractor must be on the contracted range the entire time scheduled.

2. Using units that require a time extension on the range must request it at least four (4) hours in advance of their scheduled completion (COLD) time in order to allow for an alteration to the scheduled contractor support. This request for time extension will be made through Range Scheduling/Blackburn.

3. Units must occupy a contractor-supported range with a responsible unit training representative (Not necessarily the Range OIC/RSO) within 1 hour of the “HOT” time or the range will be cancelled.

4. This range can be scheduled in RFMSS for a maximum of 12 hours per day.

5. This range is not authorized for civilian owned weapons.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on this range.

3. POVs are not authorized on this range. All vehicles must use the range designated parking area.

4. Red range flag will be flown at entrance of range.
5. Government Safety vehicle and corpsman must be present on the range prior to commencing training.

6. Range guard will be posted near the firing line.

7. No personnel are authorized behind the bullet trap at any time.

8. Using unit is responsible for a detailed police call of the range, bullet trap area, all facilities, dumpster area, and the parking/staging areas when training is completed daily.

9. Range must be inspected and cleared by Range Control Range Inspector prior to departing the range/training area.

10. Range OIC/RSO will complete and submit a range report/ICE comment upon completion of training and turn-in of range. Report all maintenance problems/issues to a Range Inspector.

11. Military Police/Civilian Military Police are authorized the 12 Gauge Shotgun with authorized ammunition if the using unit provides plywood to protect the wooden wall/berm.
RANGE NAME: B-12

DESCRIPTION: Baffled Pistol Range

PRIMARY RANGE USE: Pistol Qualification/Requalification Range

ALTERNATE RANGE USES: Pistol Familiarization Firing Range

LOCATION: New River Air Station
Grid Coordinate: 74304510

PRIMARY DIRECTION OF FIRE: 180 degrees magnetic

WEAPONS ACCOMMODATED: All Military Issue Pistols (.45 Cal/40 Cal/9mm)

AMMUNITION AUTHORIZED: All pistol ammunition
No armor piercing type ammunition

TARGETS/SIMULATORS/DEVICES: 10 firing points

FACILITIES(Number of each): Head Facilities: 1 Port-a-John
POV Parking Area: 1
Range Tables: 2

UTILITIES AVAILABLE: Electricity: No
Lights: No
Water System: No

INSTALLED COMMUNICATIONS: Telephone (449-0180)

AREA SUITABILITY Platoon/Squad

Range Use Restrictions/Comments/Conflicts

1. Firing Lines are located at 7, 15, and 25 meters.

2. Recreational shooting of pistols, rifles, and shotguns not authorized on this range.

3. Maneuvers are not authorized.

4. Night use is authorized if scheduled in RFMSS.
5. Class 3B and 4 LASER devices are not authorized on this range.

Other Considerations

1. A range contractor will set up the range and provide a qualified range operator for the scheduled time period. The operator will provide one E-type silhouette and two bull’s eye paper replacements per firing point, along with target pasties and a stapler. If the using unit requires additional targets/bull’s eyes, the unit must furnish/provide them. Contact the contracting officer representative at 451-4480/2411 with any contract support issues. The range contractor must be on the contracted range the entire time scheduled.

2. Using units that require a time extension on the range must request it at least four (4) hours in advance of their scheduled completion (“COLD”) time in order to allow for an alteration to the scheduled contractor support. This request for time extension will be made through Range Scheduling/Blackburn.

3. Units must occupy a contractor-supported range with a responsible unit training representative (Not necessarily the Range OIC/RSO) within 1 hour of the “HOT” time or the range will be cancelled.

4. This range can be scheduled for a maximum of 12 hours per day.

5. This range is not authorized for civilian owned weapons.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on range.

3. POVs are not authorized on the range. All vehicles must use the range designated parking area.

4. Report all maintenance problems to a range inspector.

5. Red range flag will be flown at the entrance of the range.

6. Government Safety vehicle and corpsman must be present on the range prior to commencing training.
7. One (1) range guard will be posted near the firing line and the entrance to the range to ensure unauthorized personnel do not enter the range area.

8. No personnel are authorized behind the bullet trap at any time.

9. Using unit is responsible for a detailed police call of the range, bullet trap area, all facilities, and parking/staging areas when training is completed daily.

10. Range must be inspected and cleared by a range inspector prior to departing range/training area.

11. Range OIC/RSO will complete and submit a range report/ICE Comment upon completion of training and the turn-in of range. Report all maintenance problems/issues to a Range Inspector.
RANGE NAME: D-9/R-100

DESCRIPTION: Skeet Range

PRIMARY RANGE USE: Skeet/Trap Firing Range

ALTERNATE RANGE USES: Shotgun familiarization firing range

LOCATION: Grid Coordinate: 85553989

PRIMARY DIRECTION OF FIRE: 040 degrees magnetic

WEAPONS ACCOMMODATED: Shotgun Only

AMMUNITION AUTHORIZED: 12 Gauge
16 Gauge
20 Gauge
28 Gauge
410 Gauge
Ammunition limited to number 7-1/2 shot or smaller.

12 Gauge SLUG Ammunition is NOT authorized on this Range


FACILITIES (Number of each): Head Facilities: 6 (Male/Female)
POV Parking Area: 1
Range House: 1 (MCCS)
Range Tables: 6
Skeet Houses: 8
Port-a-Johns: 6

UTILITIES AVAILABLE: Electricity: Yes
Lights: Yes
Water System: Yes

INSTALLED COMMUNICATIONS: Telephone (451-3889)

AREA SUITABILITY: Platoon

Range Use Restrictions/Comments/Conflicts:

NOTE: This range (MCCS R-100 Skeet Range) is scheduled to be moved to a new location up by the front gate at Grid 86534372
and renamed R-100 in the future and the Range Control SOP will be updated/changed at that time.

1. Maneuvers are not authorized on this range.

2. Night use is authorized for MCCS scheduled events.

3. Class 3B and 4 LASER devices are not authorized on this range.

4. Conflicts with TLZ Sparrow and the DF and DB training areas which are under construction and will not exist in the near future.

5. MCCS operates this range and it must be scheduled in RFMSS.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Base AC/S MCCS may conduct firing on Range D-9 from 0800 to 2200 on Thursday through Sunday and on Federal Holidays.

3. A red range flag will be flown at the entrance to the range when it is HOT.

4. Notify BLACKBURN at 451-3064 prior to going HOT or COLD.

5. Range will cease-fire when there are helicopter operations either scheduled or unscheduled in TLZ Sparrow or Marines are in immediate vicinity.

6. Using unit is responsible for a detailed police call of range, all facilities, dumpster area, and parking/staging areas when training is completed.

7. Actual days of operation are operationally flexible to accommodate using units that request shotgun live fire if scheduled in RFMSS.

8. Military Units requesting to use D-9/R-100 must contact MCCS first prior to scheduling this range in RFMSS.
RANGE NAME: D-29A

DESCRIPTION: Baffled Pistol Range

PRIMARY RANGE USE: Pistol Qualification/Requalification Range

ALTERNATE RANGE USES: 1. Pistol Familiarization Firing Range.
2. Combat Pistol Course

LOCATION: Mainside
Grid Coordinate: 83903820

PRIMARY DIRECTION OF FIRE: 265 degrees magnetic

WEAPONS ACCOMMODATED: All military issue pistols (.45 cal/40 cal/9mm)

AMMUNITION AUTHORIZED: All pistol ammunition
No armor piercing type ammunition

TARGETS/SIMULATORS/DEVICES: 14 Pistol targets (Pits targets).

FACILITIES(Number of each): Head Facilities: 1 Port-a-John
POV Parking Area: 1
Range House: 1
Range Tables: 2
Range Tower: 1

UTILITIES AVAILABLE: Electricity: No
Lights: No
Water System: No

INSTALLED COMMUNICATIONS: Telephone (451-2001)

AREA SUITABILITY Platoon

Range Use Restrictions/Comments/Conflicts

1. Firing Lines for are located at 7, 15, and 25 meters.

2. Recreational shooting of civilian pistols, rifles, and shotguns are not authorized on this range.

3. Maneuvers are not authorized on this range.
4. Night use is authorized if properly scheduled in RFMSS.

5. Class 3B and Class 4 LASER devices are not authorized on this range.

Other Considerations

1. A range contractor will set up the range and provide a qualified range operator. The operator will provide one E-type silhouette and two bull’s eye paper replacements per firing point, along with target pasties and a stapler. If the using unit requires additional targets/bull’s eyes, the unit must furnish them. Contact the contracting officer representative at 451-4480/2411 with any contract support issues. The range contractor must be on the contracted range the entire time scheduled.

2. Using units that require a time extension on the range must request it at least four (4) hours in advance of their scheduled completion ("COLD") time in order to allow for an alteration to the scheduled contractor support. This request for time extension will be made through Range Scheduling/Blackburn.

3. Using unit must notify Range Control/BLACKBURN at least (4) four hours in advance if a time extension is required. The pistol range can only be scheduled 12 hours per day.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on this range.

3. POVs are not authorized on this range or between the tower and the wooden wall. All vehicles must use the range designated parking area next to the range. Do not park on the grass/berm.

4. Range OIC/RSO will complete and submit a range report upon completion of training and turn-in of range. Report all maintenance problems/issues to a range inspector or document on the range report/ICE Comment.

5. Red range flag will be flown at the range entrance.

6. Safety vehicle and corpsman must be present on range prior to commencing any live fire training.
7. A range guard will be placed near the firing line.

8. Using unit is responsible for detailed police call of range, bullet trap area, all facilities, the and parking/staging areas on each day.

9. Range must be inspected and cleared by a range inspector prior to departing the range.

10. The using unit will need to provide its own telephone if wanted/needed.

11. Personnel are not authorized behind the bullet trap device or on the dirt berm behind the range.
RANGE NAME: D-29B

DESCRIPTION: Baffled Pistol Range

PRIMARY RANGE USE: Pistol Qualification/Requalification Range

ALTERNATE RANGE USES: 1. Pistol Familiarization Firing Range. 2. Combat Pistol Course

LOCATION: Mainside
Grid Coordinate: 83903820

PRIMARY DIRECTION OF FIRE: 263 degrees magnetic

WEAPONS ACCOMMODATED: All military issue pistols (.45 cal/40 cal/9mm)

AMMUNITION AUTHORIZED: All pistol ammunition
No armor piercing type ammunition

TARGETS/SIMULATORS/DEVICES: 14 Pistol targets (Pits targets).

FACILITIES(Number of each): Head Facilities: 1 Port-a-John
POV Parking Area: 1
Range House: 1
Range Tables: 2
Range Tower: 0

UTILITIES AVAILABLE: Electricity: No
Lights: No
Water System: No

INSTALLED COMMUNICATIONS: Telephone (451-2001)

AREA SUITABILITY Platoon/Squad

Range Use Restrictions/Comments/Conflicts

1. Firing Lines for are located at 7, 15, and 25 meters.

2. Recreational shooting of civilian pistols, rifles, and shotguns not authorized on this range.
3. Maneuvers are not authorized on this range.

4. Night use is authorized if properly scheduled in RFMSS.

5. Class 3B and Class 4 LASER devices are not authorized on this range.

Other Considerations

1. A range contractor will set up the range and provide a qualified range operator. The operator will provide one E-type silhouette and two bull’s eye paper replacements per firing point, along with target pasties and a stapler. If the using unit requires additional targets/bull’s eyes, the unit must furnish them. Contact the contracting officer representative at 451-4480/2411 with any contract support issues. The range contractor must be on the contracted range the entire time scheduled.

2. Using units that require a time extension on the range must request it at least four (4) hours in advance of their scheduled completion (“COLD”) time in order to allow for an alteration to the scheduled contractor support. This request for time extension will be made through Range Scheduling/Blackburn.

3. Using Unit must notify Range Control/BLACKBURN at least (4) fours hours in advance if a time extension is required. The pistol range can on be scheduled 12 hour per day.

4. Units must occupy a contractor-supported range with a responsible unit training representative (Not necessarily the Range OIC/RSO) within 1 hour of the “HOT” time or the range will be cancelled.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on this range.

3. POVs are not authorized on this range or between the tower and the wooden wall. All vehicles must use the range designated parking area. Do not park on the grass or the dirt berm.

4. Range OIC/RSO will complete and submit a range report upon completion of training and turn-in of range. Report all
maintenance problems/issues to a range inspector and document on the range report.

5. Red range flag will be flown at the range entrance.

6. Safety vehicle and corpsman must be present on the range prior to commencing training.

7. Range guard will be posted near the firing line.

8. Using unit is responsible for detailed police call of range, bullet trap area, all facilities, dumpster area, and the parking/staging areas when training is completed on a daily basis.

9. The range must be inspected and cleared by a range inspector prior to departing the range.

10. The using unit must provide its own telephone if needed.

11. No one is authorized behind the bullet trap device.

12. Nonlethal ammunition is not authorized on this range.
RANGE NAME: D-30

DESCRIPTION: Baffled Pistol Range
(Without a Bullet Trap)

PRIMARY RANGE USE: Pistol
Qualification/Requalification Range

ALTERNATE RANGE USES:
1. Pistol Familiarization Range
2. Combat Pistol Course

LOCATION: Mainside
Grid Coordinate: 85143692

PRIMARY DIRECTION OF FIRE: 215 degrees magnetic

WEAPONS ACCOMMODATED: All military issue pistols
(.45 caliber/40 cal/9mm)

AMMUNITION AUTHORIZED: All pistol ammunition
No armor piercing type ammunition

TARGETS/SIMULATORS/DEVICES: 32 firing points

FACILITIES (Number of each):
Head Facilities: 1 Port-a-John
POV Parking Area: 1
Range House: 1
Range Tables: 2
Range Tower: 0
Range Shed: 1

UTILITIES AVAILABLE:
Electricity: Yes
Lights: No
Water System: no

INSTALLED COMMUNICATIONS: Telephone

AREA SUITABILITY: Platoon
Range Use Restrictions/Comments/Conflicts

1. Firing Lines for are located at 7, 15, and 25 meters.

2. Recreational shooting of civilian pistols, rifles, and shotguns not authorized on this range.

3. Maneuvers are not authorized on this range.

4. Night use is authorized if properly scheduled in RFMSs.

5. Class 3B and Class 4 LASER devices are not authorized on this range.

Other Considerations

1. A range contractor will set up the range and provide a qualified range operator. The operator will provide one E-type silhouette and two bull’s eye paper replacements per firing point, along with target pasties and a stapler. If the using unit requires additional targets/bull’s eyes, the unit must furnish them. Contact the contracting officer representative at 451-4480/2411 with any contract support issues. The range contractor must be on the contracted range the entire time scheduled.

2. Units must occupy a contractor-supported range with a responsible unit training representative (Not necessarily the Range OIC/RSO) within 1 hour of the “HOT” time or the range will be cancelled.

3. Using Unit must notify Range Control/BLACKBURN at least (4) four hours in advance if a time extension is required. The pistol range can only be scheduled 12 hours per day.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on this range.

3. POVs are not authorized this range. All vehicles must use the range designated parking area. Do not park any vehicle on the grass or the MCCS PT/Bike Trail. Do not block the MCCS PT/Bike Trail. Units must be aware of the fuel farm and heavy traffic areas around this range.
4. Range OIC/RSO will complete and submit a range report/ICE Comment upon completion of training and turn-in of range. Report all maintenance problems to a range inspector and via ICE.

5. Red range flag will be flown at the range entrance.

6. Safety vehicle and corpsman must be present on the range prior to commencing any live fire training.

7. A range guard will be posted near the firing line.

8. Using unit is responsible for a detailed police call of the entire range, berm area, all facilities, and parking/staging areas on a daily basic when training is completed.

9. Range must be inspected and cleared by a range inspector prior to departing the range/training area.

10. It is the using unit’s responsibility to bring a telephone if needed.

11. No one is authorized behind the dirt bermed area. There is no bullet trap on this range.

12. Nonlethal ammunition is not authorized on this range.

13. Using unit must be aware of the fuel farm that is right across the road and safety procedures in place and enforced such as ammunition handling, smoking, and all other safety precautions.
RANGE NAME: E-1

DESCRIPTION: Air Defense Firing Range

PRIMARY RANGE USE: Anti-Aircraft Range

ALTERNATE RANGE USES: .50 cal Machinegun Range

LOCATION: Grid Coordinate: 93702920

PRIMARY DIRECTION OF FIRE: 150 degrees magnetic

RIGHT LATERAL LIMIT: 170 degrees magnetic

LEFT LATERAL LIMIT: 130 degrees magnetic

WEAPONS ACCOMMODATED: Anti-Aircraft Guided Missile Systems
All other weapons (.50 caliber or less)

AMMUNITION AUTHORIZED: Stinger Missile/Avenger System
All other weapon system ammunition (.50 caliber or less)

TARGETS/SIMULATORS/DEVICES: Targets i.e. BATS, RCMAT Drones and others provided by using unit.

FACILITIES(Number of each): Range Towers: 2
POV Parking Area: 1 (Officer’s Beach gravel parking area)

UTILITIES AVAILABLE: Electricity: Yes (Tower only)
Lights: Yes (Tower only)
Water System: No.
Port-a-Johns: None (Must be contracted at unit expense).

INSTALLED COMMUNICATIONS: Telephone in the tower

AREA SUITABILITY Company/Platoon/Section

Range Use Restrictions/Comments/Conflicts
1. Requires a range sweep by an aircraft of the N-1/BT-3 impact area prior to going HOT. Range Control will provide safety boats for Brown’s Inlet and request air sweeps if scheduled properly in RFMSM using the required timeline. Procedures for conducting a range sweep are listed in Chapter 10 of this SOP.

2. The range is restricted for migrating whales (November 21 through March 31) and during sea turtle season (May 15 through October 31).

3. Impact area must be monitored at all times during firing. Firing will cease if a boat, aircraft, or sea mammal like whales enters the surface danger zone and missile hazard area.

4. The using unit must obtain FACSFAC VACAPES clearance and exclusive use of the W-122H airspace and Cherry Point R5306C Airspace when conducting a live fire stinger missile event.

5. Night use is authorized after a pre-night air-sweep. The using unit must use radar and night vision goggles to ensure the surface danger zone is clear before conducting any live fire during hours of darkness.

6. Class 3B and 4 LASER devices are authorized on this range if scheduled and the unit provides a LASER range safety officer.

7. Maneuvers are authorized for Avenger/Stinger vehicles on the beach. Maneuver area on the beach is between Grids 936292 and 937293.

Other Considerations

1. Using unit must schedule Range E-1 at a minimum of one calendar month in advance and ensure all requirements are completed.

2. Using unit must arrange for small boat support when using any target devices that float. Unit will be responsible for retrieving their targets from the impact area before they float away and onto the public beaches or the State Park along the coast.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is authorized on this range by request only.
Unit are not authorized to bivouac on the beach itself.

3. POVs are not authorized on this range. All POV type vehicles must use the range designated parking area (Officer’s Beach Pavilion).

4. Report all maintenance problems/issues to a range inspector and document it on the range report or submit an ICE comment.

5. Safety vehicle and corpsman must be present on the range prior to commencing any live fire training.

6. The using unit Range OIC and RSO must maintain communications with the senior missile director, assistant missile director, visual observers, range guards, and tower guards.

7. Red range flags are flown from flag poles at the gate leading to E-1 by parking lot at the Officer’s Beach, Onslow North Tower, and Bear Creek Tower.

8. Observers posted at Onslow North Tower and Bear Creek Tower must be manned prior to firing and conducting the air sweep. Tower guards must have binoculars, radio communications with Range OIC and be in place at least one half hour prior to any live firing. Sectors of observation are as follows: Bear Creek Tower 058 to 223 degrees and Onslow North Tower 035 to 235 degrees. Tower Guard can only use the tower platform area. Do not disturb the equipment inside the towers. Do not leave any lights on in the tower after the training event.

9. Navy Boat Crew will position boats at the ocean side of Bear Inlet vicinity of grid 035335 and the ocean side of North Onslow Tower vicinity of grid 930284.

10. Positive communication with road guards/tower guards, Navy Boat Crew, and BLACKBURN must be maintained at all times.

11. The range will be put into a check fire or secured if the sea state goes above Sea State 3.

12. Ensure no Stinger missiles are fired at an elevation greater than 40 degrees and the gyro is in the stabilized mode of operation.
13. The conservation measures below are in place to reduce the possibility of sea turtle and sea mammal entanglement, collisions, or disorientation. These are in addition to the Onslow Beach SOPs as outlined in this SOP and the Environmental Handbook for Trainers/Quicklook. The measures apply to special use requests of the area from Onslow North Tower northeast 500m.

   a. No night time lighting on the beach is authorized.

   b. Firing restricted to the hours from sunrise to 2000 only.

   c. Remove transport vehicles or tents from the beach by 2000/darkness.

   d. Driving on the beach after sunset is discouraged due to nesting turtles. If driving is required during these hours, any vehicle traveling on the beach will navigate using night vision equipment/blackout lights and a ground guide will walk ahead of the vehicle to ensure no damage to sea turtles or their nests. Unit must be prepared to fill in and rake out ruts if required.

   e. A sandbag wall at least 18 inches high will surround all other vehicles, targets, or drones that need to remain on beach. Equipment left on the beach parallel to surf will not exceed 8 feet in length.

   f. Turtle nests are protected and marked with a metal wire cage and signs. No digging or placement of equipment is allowed within 50 feet of the turtle nests/cages. Digging on the beach is not authorized unless specifically authorized by Base EMD and Range Control.

   g. All tactical vehicular traffic will be confined to the wet sand area below the mean high tide line. Vehicles and personnel must stay off the sand dunes at all times. Any deep ruts, depressions, or holes in the beach will be filled and smoothed out/leveled out before leaving the area.

   h. Nightly sea turtle patrols (ECON, Base EMD) will be monitoring the using unit/live fire exercise for consistency with these rules/policies and all control measures.

14. Range must be inspected and cleared by a range inspector prior to departing range/beach.

15. Immediately report all dud Stinger missiles to BLACKBURN.
RANGE NAME: ETA-1

DESCRIPTION: Engineering Training Area (MCES, Courthouse Bay)

PRIMARY RANGE USE: Engineer Demolition Training

ALTERNATE RANGE USES: Urban Mobility Breachers Course

LOCATION: Grid Coordinate: 84292840

PRIMARY DIRECTION OF FIRE: N/A

WEAPONS ACCOMMODATED: Demolitions/Pyrotechnics
12 Gauge Shotgun

AMMUNITION AUTHORIZED: Dynamite
C-4 Demolition Charges
TNT Demolition Charges
Shaped Charges (Limited)
Detonation Cord
Claymore Mine
Bangalore Torpedo
Antitank Mines
Cratering Charge (Limited)
Flex Linear
Deta Sheets
RDX Boosters
Blasting Caps
Shock Tube MN52
Pyrotechnics
12 Gauge Lock Buster Round
(DODIC A014, A023, and A024)
Field Expedition Charges not to exceed 5 lbs TNT equivalency
-Claymore
-Bangalore Torpedo
-Shaped Charge
-Cratering Charge
-Urban Charge
-Soap Dish/Omni Charge
-Water Charge
-Breaching Charges (as required)

NOTE: Field expedient charges require a special range request.
TARGETS/SIMULATORS/DEVICES: Multi-Training area: 2 Demo Pits, 1 Urban Mobility Breachers Course

FACILITIES (Number of each): Head Facilities: 2
POV Parking Area: 1
Range Sheds: 8
Range Tables: 3
Range Tower: 1
Indoor Classroom: 2
Outdoor Classroom: 1
Safety Bunkers: 3
Magazines: 5
Infiltration Course: 1

UTILITIES AVAILABLE: Electricity: Yes
Lights: Yes
Water System: Yes

INSTALLED COMMUNICATIONS: Telephone: Yes 450-7328/7213

AREA SUITABILITY Company/Platoon

Range Use Restrictions/Comments/Conflicts

1. Charges not to exceed 27 lbs net explosive weight (NEW) per shot. Units may be required to reduce charges and/or bury charges due to weather-related noise propagation issues. Units using charges above 27 lbs NEW must first confer with BLACKBURN regarding this issue before going HOT. Regardless of weather, all charges greater than 27 lbs NEW will be buried in the ground.

2. Live land mines are only authorized at ETA-7 and for demonstration purposes.

3. Bangalore Torpedoes require a 300 Meter safety fan for personnel in the open.

4. Maneuvers are not authorized on this range.

5. Class 3B and 4 LASERs are not authorized on this range.

6. Limited night use authorized for charges that do not exceed one (1) pound net explosive weight per shot. All other
demolition training will cease one hour prior to sunset. ETA-1 MCES has a special range request to conduct night time training with demolition and explosive have the total weight of day time training requirements.

Other Considerations

1. ETA 1 is assigned to Commanding Officer, Marine Corps Engineer School (MCES) on a priority use basis. All other units requesting use of this range must coordinate through CO, MCES and the MCES S-3 must schedule it for the other unit in RFMSS.

2. Planning and usage must be in accordance with FM 3-34.214, Explosives/Demolitions, and all other applicable references.

3. Using unit must fill in all holes and ditches created by demolitions training prior to departing.

4. This range is affected by the activation of New River Air Station’s Runway 1. Any training with effects above the 1500 foot ceiling limit will be put into check fire. Range Control will notify the Range OIC/RSO of the necessary procedures and when normal training can resume.

5. Unit must ensure Traps Bay is cleared of all small crafts/boats prior to going HOT.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking only authorized on this range by request.

3. POVs are not authorized on range. All vehicles must use the range designated parking areas only.

4. A map overlay indicating the range fan and current road guard placements will be provided when range is checked out. It is the responsibility of the Range OIC/RSO to ensure that all road guards are placed properly. All road guards will have and maintain internal communication with the Range OIC/RSO while training is being conducted.

5. Report all maintenance problems to a range inspector and the CO MCES (Attn S-4).
6. The Range OIC must visually verify that Traps Bay is clear prior to firing.

7. Red range flag must be flown at the entrance to the range and Traps Bay while range is in use.

8. Safety vehicle and corpsman must be present on the range prior to commencing training.

9. All non-participating or observing personnel will either be in a missile proof bunker or outside of the assigned range fan.

10. Cratering charges will not be exploded on roads leading into or adjacent to the range.

11. Helmets, flak jackets, hearing protection, and eye protection must be worn when conducting demolition training.

12. Using unit is responsible for a detailed police call of the range, all facilities, dumpster area, and parking/staging areas when training is completed. The unit will ensure the removal of all dunnage from the range to include inert line charges, tactical wire, wood, and scrap metal.

13. A final range sweep will be conducted to ensure the area is free of unexploded explosives. It is the using unit’s responsibility to dispose of explosive material as required by local directives. “Trash shots” are not authorized to be conducted.

14. Range must be inspected and cleared by a MCES SNCO/Instructor before departing range/training area.

15. Range OIC/RSO will complete and submit a range report upon completion of training and turn-in of range.

16. The old ETA-1 Steel Pit is no longer authorized for live fire and non-live fire training.
RANGE NAME: ETA-2  
DESCRIPTION: Engineering Training Area  
PRIMARY RANGE USE: Engineer Demolition Training  
ALTERNATE RANGE USES:  
1. Mechanized Assault Course  
2. Breaching Operations  
3. Constructing Tank Traps  
4. ABV Operations and Operator Training  
LOCATION: Grid Coordinate: 86542719  
PRIMARY DIRECTION OF FIRE: 010 deg mag (Inert Line Charge)  
WEAPONS ACCOMMODATED: Demolitions/Pyrotechnics  
AMMUNITION AUTHORIZED:  
C-4 Demolition Charges  
TNT Demolition Charges  
Detonation cord, Blasting caps  
Shaped Charges, Claymore Mines, Anti-tank Mines  
Bangalore Torpedo  
Inert Line Charge (Only) (M68/M69)  
Cratering Charge  
Pyrotechnics/Smokepot  
TARGETS/SIMULATORS/DEVICES: Trench system  
FACILITIES (Number of each):  
Head Facilities: None  
Range Sheds: 0  
Range Bleachers: 0  
Range Towers: 2  
Range Bunker (Sandbag): 2  
POV Parking Area: 1 (Mile Hammock Boat Launching Area)  
UTILITIES AVAILABLE:  
Electricity: No  
Lights: No  
Water System: No  
INSTALLED COMMUNICATIONS: No  
AREA SUITABILITY: Company/Platoon/Section
Range Use Restrictions/Comments/Conflicts

1. Charges not to exceed 27 lbs net explosive weight per shot.

2. Only inert line charges are authorized on this range. Firing personnel shall be in an armored vehicle in a button up mode with single hearing protection during firing. Spectators shall not be allowed within the surface danger zone or noise hazard contour during firing.

3. Live land mines authorized only for demonstration purposes. Must be remote control fired only.

4. Requests for use of field expedient demolitions and/or devices must be submitted in writing through the unit’s chain of command to Range Control. The Special Range Request must be submitted ten (10) working days in advance from the first day of training. Planning and usage must be in accordance with FM 3-34.214 Explosive and Demolitions.

5. Bangalore Torpedoes require a 300M-safety fan for personnel in the open.

6. Maneuvers are authorized. Night use with explosives and demolitions is authorized by special range request only.

7. Class 3B and 4 LASERs devices are not authorized on this range.

8. Demolition training will cease one hour prior to sunset.

Other Considerations

1. This range is assigned to Commanding Officer, 2d Combat Engineer Battalion on a priority use basis. Other units requesting use of the range must coordinate through CO, 2d CEB S-3 prior to scheduling at Range Control.

2. Using unit must fill in all holes and ditches created by demolitions training and remove all material added to this range prior to departing.

3. Earth may be excavated/disturbed during ABV operations and for construction of tank traps. Tank traps will not exceed 15 feet in width or a depth of 9 feet. Excavations must be filled in and leveled upon completion of training.
4. Red-cockaded woodpecker habitat nearby; see Chapter 6.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking only authorized on range by request.

3. POVs are not authorized on this range. All vehicles must use the range designated parking area at Mile Hammock Bay.

4. A map overlay indicating the range fans and current road guard placements will be provided when range is checked out. It is the responsibility of the Range OIC/RSO to ensure that all road guards are placed properly. All road guards will have and maintain internal communication with the Range OIC/RSO while training is being conducted.

5. Report all maintenance problems to a range inspector.

6. Red range flag must be flown at entrance to the range.

7. Safety vehicle and corpsman must be present on the range prior to commencing training.

8. All non-participating or observing personnel will either be in a missile proof bunker or outside of the assigned range fan.

9. Cratering charges will not be exploded in roads leading into or adjacent to the ranges and all craters must be filled in.

10. Helmets, flak jackets, hearing, and eye protection must be worn when conducting demolition training.

11. Using unit is responsible for a detailed police call of the range, all facilities, dumpster area, and parking/staging areas when training is completed. The unit will ensure the removal of all dunnage from the range to include inert line charges, tactical wire, wood, and scrap metal.

12. A final range sweep will be conducted to ensure the area is free of unexploded ordnance. It is the unit responsibility to remove and disposed of unused explosive material as required by local directives. “Trash shots” not authorized.

13. Range OIC/RSO will complete and submit a range report upon completion of training and turn-in of range.
14. A range inspector must inspect the entire range complex upon completion of training involving all demolitions or the construction of tank traps training prior to the unit departing.
RANGE NAME: ETA-3

DESCRIPTION: Engineering Training Area

PRIMARY RANGE USE: Engineer Demolition Training

ALTERNATE RANGE USES:
1. Infiltration Course
2. Obstacle Course
3. Breaching Course
4. IED Course

LOCATION: Grid Coordinate: 87804080

PRIMARY DIRECTION OF FIRE: N/A

WEAPONS ACCOMMDOATED: Demolitions/Pyrotechnics

AMMUNITION AUTHORIZED:
Dynamite
C-4 Demolition Charges
TNT Demolition Charges
15 lb Shaped Charge
Claymore Mine
Bangalore Torpedo (Limited)
FLSC/LHFLSC
Deta Sheet
Pyrotechnics/Smoke pots
12 gauge Lock Buster Round
Field Expedient Charges not to exceed 15 lbs TNT equivalency
-Claymore
-Bangalore Torpedo
-Shaped Charge
-Cratering Charge (Limited)
-Urban Charge/breaching
NOTE: Field expedient charges and night training require a special range request.

TARGETS/SIMULATORS/DEVICES:
Night Infiltration Course
Land Navigation Course
Ropes Course
Combat Obstacle Course
Field Fortification/Trench Complex

FACILITIES(Number of each):
Head Facilities: 2
Outdoor classrooms: 1
Shower Facilities: 2  
Range Sheds: 1 (CEBn)  
Range Offices: 1 (CEBn)  
Indoor classrooms: 2  
POV Parking Area: 1  
Range Tables: 3  
Field ASP: 1

**UTILITIES AVAILABLE:**  
Electricity: Yes  
Lights: Yes  
Water System: Yes (Non-Potable)

**INSTALLED COMMUNICATIONS:**  
Telephone: No

**AREA SUITABILITY**  
Company/Platoon

**Range Use Restrictions/Comments/Conflicts**

1. Charges not to exceed 15 lbs net explosive weight per shot for this ETA. ETA-3 is not authorized for steel and concrete cutting type training due to the larger SDZ.

2. Live land mines authorized only for demonstration purposes; must be remote controlled fired.

3. Bangalore Torpedoes require a 300 meter safety fan for personnel in the open.

4. Red-cockaded woodpecker habitat nearby: no vehicular traffic or training in specifically designated areas.

5. Maneuvers are not authorized.

6. Night use is not authorized without special range request.

7. Class 3B and 4 LASER devices are not authorized on this range.

8. Demolition training will cease one hour prior to sunset.

9. At no time will steel and concrete cutting training events take place on this range due to the SDZ limitations.

**Other Considerations**
1. Assigned to Commanding Officer, 2d Combat Engineer Battalion (CEBn) on a priority use basis. Other units requesting use of this range must coordinate and scheduled in RFMSS through CO, 2d CEBn S-3. Planning and usage must be in accordance with FM 3-34.214 Explosive and Demolitions.

2. Using unit must fill in all holes and ditches created by training prior to departing.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking only authorized on range by request to 2d CEB.

3. POVs are not authorized on this range unless approved by 2d CEB S-3. All vehicles must use the range designated parking area.

4. A map overlay indicating the range fans and current road guard placements will be provided when range is checked out. It is the responsibility of the Range OIC/RSO to ensure all road guards are placed properly. All road guards will have and maintain internal communication with the Range OIC/RSO while training is being conducted.

5. Range must be inspected and cleared by 2d CEB Range Staff prior to departing range/training area. Range OIC/RSO will complete and submit a range report upon completion of training and turn-in of range. Report all maintenance problems/issues to 2d CEB S-3 and ICE.

6. Red range flag will be flown at the entrance to the range.

7. Safety vehicle and corpsman must be present on the range prior to commencing training.

8. All non-participating or observing personnel will either be in a bunker or outside of the surface danger zone for this range.

9. Cratering charges will not be exploded in roads leading into or adjacent to the ranges.

10. Helmets, flak jackets, hearing, and eye protection must be worn when conducting demolition training.
11. Using unit is responsible for a detailed police call of the range, all facilities, dumpster area, and parking/staging areas when training is completed. The unit will ensure the removal of all dunnage/trash from the range to include inert line charges, tactical wire, wood, and scrap metal.

12. A final range sweep will be conducted to ensure the area is free of unexpended explosives. It is the unit responsibility to disposed of explosive material as required by local directives. "Trash Shots" are not authorized.
RANGE NAME: ETA-4

DESCRIPTION: Engineering Training Area

PRIMARY RANGE USE: Engineer Demolition Training

ALTERNATE RANGE USES:
1. Live Fire Breaching Exercises
2. APOBE Operations
3. Inert Line Charge (Only)

LOCATION: Grid Coordinate: 91003280

PRIMARY DIRECTION OF FIRE: 365 degrees magnetic

WEAPONS ACCOMMODATED: Demolition/Pyrotechnics

AMMUNITION AUTHORIZED:
Dynamite
C-4 Demolition Charges
TNT Demolition Charges
Shaped Charges
Claymore Mine
Bangalore Torpedo
Antitank Mines
Cratering Charge
M68 MICLIC (Inert Line Charge)
APOBE (Live) DODIC MN79
Field Expedient Charges not to exceed 50 lbs TNT equivalency:
-Claymore
-Bangalore Torpedo
-Shaped Charge
-Cratering Charge
-Urban Charge

NOTE: All field expedient charges and all night training require a special range request.

TARGETS/SIMULATORS/DEVICES: Open demolition area

FACILITIES (Number of each):
Head Facilities: None
Bunker: 1
Range Tables: 0
Instructor Tower: 1
UTILITIES AVAILABLE:  
Electricity: No  
Lights: No  
Water System: No  

INSTALLED COMMUNICATIONS:  
Telephone: No  

AREA SUITABILITY  
Company/Platoon  

Range Use Restrictions/Comments/Conflicts

1. Only APOBE (Live) operations will exceed the 51 lbs net explosive weight rule. All other demolition and explosive charges limited to 50 lbs or below net explosive weight per shot.

2. Live land mines are authorized only for demonstration purposes; must be remote controlled fired.

3. Bangalore Torpedoes require a 300 meter safety fan for personnel in the open.

4. Maneuvers are authorized down range.

5. Demolition training will cease one hour prior to sunset. Night use is not authorized without a special range request.

6. Class 3B and 4 LASER devices are not authorized on this range.

Other Considerations

1. Requests to use field expedient demolitions, live fire breaching with coordinated live fire and demolitions and/or night operations must be submitted in writing through the unit’s chain of command to Range Control. The Special Range Request must be submitted at least ten (10) working days in advance from the first day of training. Planning and usage must be in accordance with FM 3-34.214 Explosive and Demolitions.

2. Using unit must fill in all holes and ditches created by training prior to departing this range. Unit must remove all debris from this range to include the down range area.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.
2. Bivouacking is only authorized on this range by request.

3. POVs are not authorized on range. All vehicles must use the range designated parking area located up by the Base ASP.

4. A map overlay indicating the range fans and current road guards placement will be provided when range is checked out. It is the responsibility of the Range OIC/RSO to ensure that all road guards are placed properly. All road guards will have and must maintain internal communication with the Range OIC/RSO while training is being conducted.

5. This range must be inspected and cleared by a range inspector prior to departing range/training area. Range OIC/RSO will complete and submit a range report upon completion of training and turn-in of range. Report all maintenance problems/issues to a range inspector or via ICE.

6. Red range flag will be flown at the entrance to the range.

7. Verify range fan when employing the M68 Inert Line Charge. Ensure any and all additional safety precautions and requirements are in place, enforced, and supervised.

8. All non-participating or observing personnel will either be in the range missile proof bunker or outside of the surface danger zone.

9. Cratering charges will not be exploded in roads leading into or adjacent to the ranges. All holes must be filled in.

10. Safety vehicle and corpsman must be present on the range prior to commencing training. Helmets, flak jackets, hearing, and eye protection must be worn when conducting demolition training.

11. Using unit is responsible for a detailed police call of the range, all facilities, dumpster area, and the parking/staging areas when training is completed. The unit will ensure the removal of all dunnage from the range to include inert line charges, tactical wire, wood, and scrap metal. “Trash Shots” are not authorized. All Road Guard positions must be policed up and inspected by a range inspector.

12. A final range sweep will be conducted to ensure the area is free of all unexpended explosives. It is the unit
responsibility to dispose of explosive material as required by local directives.
 RANGE NAME: ETA-5  
DESCRIPTION: Engineering Training Area  
PRIMARY RANGE USE: Engineer Demolition Training  
ALTERNATE RANGE USES: Field Expedient Demo Range  
LOCATION: Grid Coordinate: 82423606  
PRIMARY DIRECTION OF FIRE: N/A  
WEAPONS ACCOMMODATED: Demolition/Pyrotechnics  
AMMUNITION AUTHORIZED: Dynamite  
C4 Demolition Charge  
TNT Demolition Charge  
Shaped Charge  
Claymore Mine  
Bangalore Torpedo  
Cratering Charge (Limited)  
Pyrotechnics  
Field Expedition Charges not to exceed 20 lbs TNT equivalency.  
- Claymore  
- Bangalore Torpedo  
- Shaped Charge  
- Cratering Charge  
- Urban Charge  
NOTE: All field expedient charges and night training require a special range request.  
TARGETS/SIMULATORS/DEVICES: None  
FACILITIES(Number of each): Head Facilities: None  
Range Sheds: 2-SOI  
Range Tables: 4  
Overhead Cover: 1  
Range Observation Bunker: 1  
POV Parking Area: ALZ-20  
UTILITIES AVAILABLE: Electricity: No  
Lights: No  
Water System: No  
INSTALLED COMMUNICATIONS: Telephone (Outlet)
AREA SUITABILITY

Platoon/Squad

Range Use Restrictions/Comments/Conflicts

1. Conflicts with ETA-5A (Breaching House) which is not included if ETA-5 is scheduled and signed for.

2. Charges are not to exceed 20 lbs net explosive weight (NEW) per shot and all other charges must be separated by a least one (1) minute.

3. Bangalore Torpedoes (Only 1 Section is authorized) require a 300 meter safety fan for personnel in the open.

4. Maneuvers are not authorized on ETA-5.

5. Demolition training will cease one hour prior to sunset. Night use is not authorized without special range request. If approved, night shots are limited to 10 lbs NEW if approved by Special range request for night time training.

6. LASER devices are not authorized on this range.

Other Considerations

1. Requests for field expedient demolitions and/or night operations must be submitted in writing through the unit’s chain of command to Range Control. The Special Range Request must be submitted at least ten (10) working days in advance from the first day of training. Planning and usage must be in accordance with FM 3-34.214 Explosive and Demolitions.

2. This range is affected by the activation of New River Air Station’s Runway 1. Any weapon systems firing above the 1500 foot ceiling will be affected. Range Control will notify the Range OIC/RSO of the necessary and required procedures to be taken. Range Control will contact the Range OIC/RSO when normal training can resume.

3. Using unit must fill in all holes and ditches created by training and remove debris in the pit prior to departing.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is only authorized on this range by request.
3. POVs are not authorized on this range, tank trail, or adjacent training areas. All POVs must use the range designated parking area across from old Range K-305/ALZ-20 just off K-Range Road.

4. A map overlay indicating the range fans and current road guard placement will be provided when range is checked out. It is the responsibility of the Range OIC/RSO to ensure that the road guard is placed properly. The road guard will have and must maintain internal communication with the Range OIC/RSO while live fire training is being conducted.

5. Verify range fan when Bangalore Torpedoes (Only one Section) are deployed. Ensure any and all additional safety precaution and requirements are emplaced. The road guard should be at the secondary placement and all open personnel are outside the 300-meter safety fan or inside the bunker.

6. The Range must be inspected and cleared by a range inspector prior to departing range/training area. Range OIC/RSO will complete and submit a range report/ICE Comment upon completion of training and turn-in of range. Report all maintenance problems/issues to a range inspector and via ICE.

7. Red range flag will be flown at the entrance to the range on K-Range/Rhodes Point Road.

8. Safety vehicle and corpsman must be present on the range prior to commencing training.

9. All non-participating or observing personnel will either be in a bunker or outside of the surface danger zone.

10. Cratering charges will not be exploded on roads leading into or adjacent to the range. All demolition training must be conducted in the designated demolition area/pit and holes filled in.

11. Claymore Mine training must be conducted in designated pit Area only and no further than 50 ft from the target berm. Claymore Mines must be oriented so that the blast effect is absorbed by target dirt berm. The using unit must ensure that the back blast area is cleared and all Claymore Mine debris is removed.
12. When conducting demolition training: helmets, flak jackets, and hearing/eye protection must be worn.

13. All demolition pits and claymore firing points will be restored to their original state upon completion of training. A mound of sand/dirt is provided on site for maintenance of demolition pits and replacements of all sandbags.

14. Using unit is responsible for a detailed police call of the entire range, all facilities, and the parking/staging areas when training is completed. The unit will ensure the removal of all dunnage from the range to include tactical wire, wood, concrete blocks, scrap metal and any other material added to the range.

15. A final range sweep will be conducted to ensure the area is free of all unexpended explosives/demolitions. It is a unit responsibility to dispose of explosive material as required by local directives. “Trash Shots” are not authorized on this range. Using unit must be aware of other units using K-325, K-323, K-321/K321A, and K-319 that may be in the hazard zone of ETA-5 when demolition training is being conducted.
RANGE NAME: ETA-5A

DESCRIPTION: Urban Breaching House

PRIMARY RANGE USE: Breaching Operations

ALTERNATE RANGE USES: 1. Close Quarters Battle (CQB) 2. Room Clearing Operations

LOCATION: Grid Coordinate: 82423606

PRIMARY DIRECTION OF FIRE: N/A (Inside the Structure Only)

WEAPONS ACCOMMODATED: All military issue pistols (.45/40 Caliber or less) 12 Gauge Shotgun M16/M-4 Rifle

AMMUNITION AUTHORIZED: 9mm/40 Cal/45 Cal Frang/Ball 12 Gauge Lock Busting Round 5.56mm – (Short Range Training Ammunition and 5.56mm Frangible) Flex Linear/Deta Sheets Expedient Breaching Devices (With prior approval/SRR) Simunitions (SESAMS) Practice Hand Grenades Only

TARGETS/SIMULATORS/DEVICES: None. Live Fire Bullet Traps need to be installed when conducting live fire with frangible or SRTA ammunition inside the building.

FACILITIES(Number of each): Head Facilities: None Range Sheds: 2 (Both SOI) Breaching House (Multi-Rooms) Range Tables: 4 Overhead Cover: 1 POV Parking Area: K-305 Area

UTILITIES AVAILABLE: Electricity: No Lights: No Water System: No

INSTALLED COMMUNICATIONS: Telephone outlet: ETA-5 bunker

AREA SUITABILITY: Platoon/Squad
Range Use Restrictions/Comments/Conflicts

NOTE: Requires a Special Range Request to use this range when conducting breaching/room clearing.

1. Conflicts with ETA-5. ETA-5 and ETA-5A cannot be scheduled at the same time unless prearranged with Range Control and a Special Range Request (SRR) is submitted.

2. Demolition charges will not to exceed 0.25 lbs Net Explosive Weight (NEW) per shot. Demolitions are not authorized inside the building and can only be used at the entrances to ETA-5A.

3. Personnel are not authorized on the roof of the breaching house. Demolition charges will be deployed in a manner not to damage the roof or supporting structures like walls, door, and door frames. The using unit must be prepared to make required repairs.

4. Maneuvers are authorized inside the structure.

5. Demolitions are not authorized after sunset. Night use can be authorized with a special range request. Night vision devices are authorized if scheduled in RFMSS.

6. Class 3B and Class 4 LASER devices are not authorized on this range.

Other Considerations

1. Requests to conduct live fire breaching using ETA-5A with coordinated live fire (bullet traps) and demolitions must be submitted in writing through the unit’s chain of command to Range Control. The Special Range Request, to include a signed and reviewed ORM worksheet, must be submitted at least ten (10) working days in advance from the first day of training. Units must request Engineering Training Area (ETA-5) and the breaching house (ETA-5A) to support this training.

2. Range OIC/RSO must have completed the Urban Breachers Course and have a certification card on hand while conducting training. Using unit may have additional certified and qualified breaching personnel on hand to assist in training requirements.

3. Using units must also repair/replace all doors, door jams, windows, and frames, door knobs, and hinges, and any walls that
may have been damaged during training. Units must have all repair material on hand prior to conducting any training. Repair work must be completed and inspected by a range inspector within 48 hours of use. The unit must remove all used doors and any and all other material used from the range.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is only authorized on this range by request.

3. POVs are not authorized on this range, tank trail, or the adjacent training areas. All POVs must use the range designated parking area across from the old Range K-305/ALZ-20 just off K-Range and Rhodes Point Road.

4. A map overlay indicating the range fans and current road guard placement will be provided when range is checked out. It is the responsibility of the Range OIC/RSO to ensure that the road guard is placed properly. The road guard will have and maintain internal communication with the Range OIC/RSO while training is being conducted.

5. Range must be inspected and cleared by a range inspector prior to departing range/training area. Range OIC/RSO will complete and submit a range report/ICE Comment upon completion of training and turn-in of range. Report all maintenance problems to a range inspector and via ICE.

6. Red range flag will be flown at the entrance to the range on K-Range Road.

7. Safety vehicle and corpsman must be present on the range prior to commencing training.

8. All non-participating or observing personnel will either be in a bunker or outside of the range surface danger zone.

9. Helmets, flak jackets, hearing and eye protection must be worn when conducting breaching training.

10. Using unit is responsible for a detailed police call of the range, all facilities, and parking/staging areas when training is completed. The unit will ensure the removal of all dunnage from the range to include damage doors, window frames, tactical wire, scrap metal, and others items.
11. A final range sweep will be conducted to ensure the area is free of unexpended explosives. It is the unit responsibility to disposed of explosive material as required by local directives. “Trash shots” are not authorized on this range.

12. Short Range Training Ammunition (SRTA) use in the house is restricted to areas already prepared with bullet absorbing material. Coordinate target placement for SRTA use with Base Range Safety Specialist during face-to-face brief and special range request.
**RANGE NAME:** ETA-6 CVOT

**DESCRIPTION:** Combat Vehicle Operators Training (CVOT) Confidence Course

**PRIMARY RANGE USE:** Tactical Wheeled Vehicle Confidence Course

**ALTERNATE RANGE USES:** None

**LOCATION:** Grid Coordinate: 84702930

**PRIMARY DIRECTION OF FIRE:** N/A

**WEAPONS ACCOMMODATED:** N/A

**AMMUNITION AUTHORIZED:** N/A

**TARGETS/SIMULATORS/DEVICES:** None

**FACILITIES (Number of each):**
- Port-a-Johns: 2
- Overhead Cover: 1 (Sea-Hut)
- POV Parking Area: Yes
- Range Table: 1

**UTILITIES AVAILABLE:**
- Electricity: Yes
- Lights: Yes
- Water System: No

**INSTALLED COMMUNICATIONS:** None

**AREA SUITABILITY**
Platoon/Section

**Range Use Restrictions/Comments/Conflicts**

1. Must use the designated routes and trails only.

2. Maneuvers off the designated routes and trails is not authorized.

3. Use of recreational vehicles, to include POVs, dirt bikes, ATVs, and others types of civilian vehicles is not authorized.
4. Units may use tactical vehicles up to 7 Ton Trucks/MRAPs on this course. Larger tactical vehicles may require a special range request.

5. Night use is authorized but must be scheduled in RFMSS.

6. Must adhere to the posted speed limits throughout the entire course.

7. Range OIC/RSO must maintain communication with each vehicle on the course and BLACKBURN at all times.

8. Only the operator and instructor are authorized to be in the vehicle while on the course.

9. All personnel in the vehicle must wear flak jackets and kevlar helmets.

10. All personnel in vehicle must use seat belts.

11. Thorough walk-through and range inspection will be conducted by Range OIC/RSO with a Range Inspector.

12. All personnel not training will stay in student/vehicle staging area only.

13. Adhere to all posted speed signs on this course.

   a. Rough Roads max speed 15 Mph Day/10 Mph Night
   b. Urban Terrain max speed 15 Mph Day/10 Mph Night
   c. Serpentine Barriers max speed 12 Mph Day/07 Mph Night
   d. Canal Roads max speed 20 Mph Day/10 Mph Night
   e. Ditches max speed 20 Mph Day/10 Mph Night
   f. Bridges max speed 20 Mph Day/10 Mph Night
   g. Berms max speed 15 Mph Day/10 Mph Night
   h. Canal Crossing max speed 15 Mph Day/10 Mph Night
   i. Side Slopes max speed 20 Mph Day/10 Mph Night
   j. Curves max speed 15 Mph Day/10 Mph Night
NOTE: There will be (2) speed limit signs.
Day Driving = White sign with black numbers.
Night Driving = Black sign with white numbers.

Other Considerations

1. The Confidence Course is designed to allow operators to gain confidence and experience in negotiating certain types of obstacles. This range is not a convoy course and there should be no more than 5 vehicles on the course at any one time. ROIC/RSO are responsible for the proper vehicle dispersion throughout the course.

2. The course can be driven both forwards and reverse. Range OIC/RSO/CVOT Instructor are responsible to ensure all vehicles are traveling in the same direction.

3. There are escape ramps throughout the entire course in case of a vehicle malfunction or driver inability to negotiate an obstacle.

4. Using units are responsible for providing night vision goggles and chemical lights when conducting night operations.

5. Using units are responsible for performing proper operations checks on all vehicles prior to any training.

6. This training facility is subject to closure due to inclement weather.

Special Instructions

1. Training must be supervised by certified CVOT Instructor.

2. Be familiar with Chapter 4 of this SOP for Medical Evacuation Procedures for MCB Range Control (MEDEVAC Procedures).

3. Range must be scheduled in RFMSS and signed for at Bldg 54, Range Control by qualified Camp Lejeune Range OIC/RSO and a certified CVOT Instructor with instructor card. Two People are required to sign out this training site.

4. Bivouacking is not authorized on this range.
5. POVs are not authorized on this range. All (POV) vehicles must use the range designated parking area.

6. Safety vehicle and corpsman must be present on the range prior to commencing any training.

7. Red range flag will be flown at the entrance of the range by Highway 172.

8. Road guards will be placed at the entrance of the range, beginning of serpentine, as well as intersection of range road and tank trail and must also maintain communication the Range OIC/RSO/CVOT Instructor.

9. The using unit is responsible for a detailed police call of the entire range, all facilities, and the parking/staging areas when training is complete.

10. Range must be inspected and cleared by Range Control, Range Inspector, prior to departing range/training area. If a CVOT Course (Conduct by 2d MLG, G-3 Training) is being conducted then the CVOT Instructor Staff will inspect and clear the unit itself.

11. Range OIC/RSO will complete and submit a range report upon completion of training and turn-in of range or use ICE. Report all range maintenance problems/issue to Range Control or a range inspector.
RANGE NAME: ETA-7
DESCRIPTION: Engineering Training Area
PRIMARY RANGE USE: Engineer Demolition Training
ALTERNATE RANGE USES: 1. Steel Cutting Range
                      2. Field Expedient Charge Range
STATUS: Active
LOCATION: Grid Coordinate: 84803296
PRIMARY DIRECTION OF FIRE: N/A
WEAPONS ACCOMMODATED: Demolitions/Explosives
AMMUNITION AUTHORIZED:
- Dynamite
- C-4 Demolition Charges
- TNT Demolition Charges
- Shaped Charges
- Detonation Cord
- Claymore Mine
- Bangalore Torpedo
- APOBE (Live) DODIC MN79
- Antitank Mines
- Cratering Charge
- Flex Linear
- Deta sheets
- RDX Boosters
- Blasting Caps
- Pyrotechnics
- Field Expedient Charges not to exceed 50lbs TNT equivalency
  - Claymore
  - Bangalore Torpedo
  - Shaped Charge
  - Cratering Charge
  - Urban Charge
  - Soap Dish/Omni Charge
  - Breaching Charges (as required)
NOTE: Other Charges (DODIC) may be added once approved by Range Control.

NOTE: Field expedient charges
require a special range request.

**TARGETS/SIMULATORS/DEVICES:**

- Armor type targets: 1

**FACILITIES (Number of each):**

- Large Open Demo Pit: 1
- Demo Bunker: 1
- Head Facilities: None
- Range Tables: 2
- Port-a-Johns: 1

**UTILITIES AVAILABLE:**

- Electricity: No
- Lights: No
- Water System: No

**INSTALLED COMMUNICATIONS:**

- Telephone: No

**AREA SUITABILITY**

Company/Platoon

**Range Use Restrictions/Comments/Conflicts**

1. Charges are not to exceed 50 lbs (NEW) TNT equivalency per shot and all shots must have at least a thirty (30) second delay between the shots.

2. Live land mines are authorized only for demonstration purposes.

3. Bangalore Torpedoes require a 300 meter-safety fan for all personnel in the open.

4. Maneuvers are not authorized on this range.

5. Class 3B and 4 LASER devices are not authorized on this range.

6. Night use is authorized if properly scheduled in RFMSS. Charges will not exceed 10 pounds (NEW) TNT equivalency per shot at night unless approved by a special range request.

7. All other demolition training will cease one hour prior to sunset unless a special range request is submitted to Range Control at least ten (10) working days in advance.

8. All charges 45 to 50 lbs (NEW) TNT equivalency will be buried in the ground depending on the weather.
9. Three (3) Road Guards/Gates are required for this range at road intersection at grid 853323, road intersection grid 845332, and road intersection grid 849335.


11. For additional target material, contact Range Maintenance at least 30 days in advance of your scheduled training.

12. Units conducting training by place charges on steel and concrete must remove all vehicles and equipment 1000 meters away from ETA-7.

Other Considerations

1. The Commanding Officer Engineer School (MCES) has priority of use for ETA-7. All other units requesting use of ETA-7 will schedule in RFMSS as required, no further then 59 days out from the 1st day of training.

2. Planning and usage must be in accordance with FM 3-34.214 Explosive and Demolitions.

3. Using unit must have a plan and means to fill in all holes and ditches created by training prior to departing. Any material that falls outside the dirt berm must be policed up and returned inside the bermed area.

4. This range is affected by the activation of New River Air Station’s Runway 1. Any weapon systems firing above the 2500 foot ceiling will be affected. Range Control will notify the Range OIC/RSO of the necessary and required procedures to be taken. Range Control will contact the Range OIC/RSO when normal training can resume.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on this range. HA Training area must be scheduled for bivouacking.

3. POVs are not authorized on ETA-7 or the surrounding training areas. Authorized POVs (SOI/MCES) must park in the designated parking area only as per the approved/signed POV parking letter.
4. A map overlay indicating the range fan and current road guard/gates locations that must be locked will be provided when the range is checked out. It is the responsibility of the Range OIC/RSO to ensure that all road guards are placed properly with the proper equipment and all gates are locked. If posted, all road guards will have and maintain internal communication with the Range OIC/RSO while training is being conducted.

5. Report all range maintenance problems/issues to a Range Inspector/Range Control.

6. The Range OIC/RSO must visually verify that the training areas HA, HH, and HG is clear prior and that all gates are locked before going in a “HOT” status.

7. Red range flag must be flown at the entrance to the range and along Marines Road while the range is in use. Two (2) range flags must be issued for this range.

8. Government safety vehicle and corpsman must be present on the range prior to commencing any training.

9. All non-participating or observing personnel will either be in the range bunker or outside of the entire range fan.

10. Cratering charges will not be exploded in roads leading into or adjacent to the range/pit.

11. When conducting demolition training, helmets, flak jackets hearing, and eye protection must be worn.

12. Using unit is responsible for a detailed police call of the entire range, all facilities, dumpster area, and parking/staging areas when training is completed. The unit will ensure the removal of all dunnage/trash from the range to include, tactical wire, all wood, scrap metal, and all other debris from the demo pit area. Using unit will be required to fill in and level out the impact area. Unit are not authorized to place additional target material down range unless approved in written by Range Control.

13. A final range sweep will be conducted to ensure the area is free of unexploded explosives and demolitions and all gates are opened. It is the using unit’s responsibility to dispose of all explosive material as required by local directives.
14. ETA-7 and Training Area HA and all road guards/gates must be inspected and cleared by a Range Inspector before departing range/training area.

15. Range OIC/RSO will complete and submit an ICE/range report upon completion of training and the turn-in of range.

16. Using unit will police up all items/debris like metal objects that may have been thrown out pit must be policed up and piled up next to the pit.
RANGE NAME: F-2

DESCRIPTION: Machinegun Field Firing and Multipurpose BZO Range

PRIMARY RANGE USE: Squad Automatic Rifle Transition Range


LOCATION: Grid Coordinate: 90704296

PRIMARY DIRECTION OF FIRE: 210 degrees magnetic

WEAPONS ACCOMMODATED: All military issue pistols (.45/40 Caliber/9mm) 12 Gauge Shotgun M16/M4 Rifle M249 Squad Automatic Weapon M27 Infantry Automatic Rifle M240B/G Medium Machinegun M203/M32 Grenade Launcher

AMMUNITION AUTHORIZED: All Pistol Ammunition All 12 Gauge Ammunition 5.56mm (Ball, Tracer, Linked) 7.62mm (Linked) 40MM TP (DODIC B519 Only)

TARGETS/SIMULATORS/DEVICES: None. Unit can emplace manufactured silhouette targets with wooden stakes only or arrange for PITS targets that are protected if the units requested them and picked them up.

FACILITIES (Number of each): Head Facilities: 1 Port-a-John Range House: 1 Range Tables: 2 POV Parking Area: 1

UTILITIES AVAILABLE: Electricity: Yes (Inside the shed only) Lights: No
**Water System:** No

**INSTALLED COMMUNICATIONS:** None

**AREA SUITABILITY:** Squad/Fire Team

**Range Use Restrictions/Comments/Conflicts**

1. Conflicts with F-4, F-5, F-18, F-18 .50 cal, FA, FE, FF, and FG training areas.

2. Maneuvers are authorized. F-2 and F-5 can be scheduled together as F-25T in RFMSS for a supported attack with M240B/G machinegun base of fire, day and night live fire and movement training event is authorized. Squad supported attacks with 7.62mm machineguns can be accomplished by scheduling F-25T.

3. Authorized for night use. Night vision devices are authorized. Class 3B and 4 LASER devices are not authorized on this range.

4. This range requires 4 road guards. A map overlay indicating the range fan, road guard positions, and gate closures will be provided when range is checked out. It is the responsibility of the Range OIC/RSO to ensure that all road guards are placed properly. All road guards will have and maintain internal communication with the Range OIC/RSO while training is being conducted. Due to size of the areas where encroachment could occur during live firing; road guards must be particularly vigilant for intruders circumventing their checkpoints/road guard positions.

5. Vehicular movement downrange is restricted to existing gravel roads only. Vehicles are not authorized on the firing berm.

6. Firing is authorized from berm; no designated firing Points on the dirt berm.

7. Cross range firing is not authorized unless the unit also schedules F-25T and firing from the support by fire position with machineguns is only authorized to engage the last set of targets on F-5.

**Other Considerations**
1. Use of PITS (targets) on this range is encouraged; contact the contracting officer representative at 451-5749 with any contract support issues/questions, with the date, hours needed, and number of targets/protection requested. Request must be submitted ten (10) days in advance from the first day of training. Units can pick up targets at Bldg 1404; warehouse hours for pickup are 0700-1200. The unit is required to provide a qualified PITS operator for the remote control unit.

2. PITS targets require protection from weapon effects. Sandbag/steel plate them in as directed by contract personnel. Grenade Launchers are not authorized to fire on PITS targets. Units are responsible for PITS damage due to poor protection.

3. Downrange movement restricted to 800 meters. If F-18 .50 cal range is firing .50 cal machineguns, movement is restricted to the 42 north/south grid line.

4. Any target material added to the range by the using unit must be removed after the training event.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is only authorized on this range by request.

3. Digging on live fire ranges are not authorized except for that required for proper deployment and safety of designated weapon systems. Sandbags must be provided and filled by the unit prior to occupying the range. Prior to departing the range, the unit will ensure all sandbags are removed and holes are filled in and leveled.

4. POVs are not authorized on this range, tank trails, adjacent training areas or along Highway 24. POVs must use the designated parking area and must be issued Range Control POV Pass.

5. Range must be inspected and cleared by a range inspector prior to departing the range/training area. Range OIC/RSO will complete and submit a range report upon completion of training and turn-in of range. Report all maintenance problems/issues to a range inspector or Range Control.

6. Range OIC/RSO will ensure F-5 and FA training area are secured with road guards in place and gates are secured and all
personnel and equipment are out of the assigned surface danger zone.

7. Range OIC/RSO will deconflict road guard placements and relief with F-4, F-5, F-18/F-18 7.62mm Match /F-18 .50 cal and all MAC Ranges.

8. Range OIC/RSO must verify all weapons range safety cards and direction of fire before conducting live fire.

9. Red range flag will be flown at the entrance to range by Highway 24.

10. Government safety vehicle and corpsman must be present on the range prior to commencing any training.

11. All non-participating or observing personnel will remain outside of the range fan/firing line at all times.

12. All personnel must wear helmets, flak jackets, eye and hearing protection while training is being conducted on this range.

13. Range OIC/RSO will ensure adequate number of safety personnel are assigned to control the maneuver exercises/elements. Range OIC or the RSO will accompany each fire team/squad down range during the live fire and movement. Range OIC/RSO will be equipped with appropriate communication and signaling devices while down range.

14. Dry runs/rehearsal will be conducted before going HOT with live ammunition. Range OIC/RSO will ensure all personnel are familiar with the designated firing lanes, firing points, sectors of fires, limits of fires, and limit of advance.

15. Using unit is responsible for a detailed police call of the entire range, all facilities on the range, the parking, and staging areas when training is completed. The unit will ensure the removal of all dunnage/trash from the range to include tactical wire, wood, brass, links, and scrap metal.

16. It is the responsibility of the Range OIC/RSO to ensure that the lights are turned off from the overhead covered area before securing from the range.

17. Unit should use caution when entering and exiting this range due to the heavy traffic on Highway 24.
RANGE NAME: F-4

DESCRIPTION: Fire Team/Squad Attack Range

PRIMARY RANGE USE: Rifle Familiarization Range

ALTERNATE RANGE USES: 1. Pistol Familiarization Range  
2. Rifle Marksmanship Range  
3. Shotgun Range

LOCATION: Grid Coordinate: 91804210

PRIMARY DIRECTION OF FIRE: 1. Station 1: 220 degrees magnetic (Nearest to Range House)  
2. Station 2: 236 degrees magnetic (Middle of Range)  
3. Station 3: 213 degrees magnetic (Furthest from Range House)

WEAPONS ACCOMMODATED: All military issue pistols (.45 Caliber/9mm)  
12 Gauge Shotgun  
M16 Rifle, M4 Rifle  
M249 Squad Automatic Weapon  
M203/M32 Grenade Launcher

AMMUNITION AUTHORIZED: All Pistol Ammunition  
All 12 Gauge Ammunition  
5.56mm (Ball, Tracer, Linked)  
40mm TP (DODIC B519 Only)

TARGETS/SIMULATORS/DEVICES: Using unit provides PITS or other suitable target material.  
PITS locations/stations: 11  
Head Facilities: None  
Range House: 1  
POV Parking Area: None

FACILITIES (Number of each): Electricity: Yes, Range House  
Lights: Yes, Range House  
Water System: No

UTILITIES AVAILABLE: None

INSTALLED COMMUNICATIONS: Telephone: 451-2129
**AREA SUITABILITY:** Up to a squad size unit

Range Use Restrictions/Comments/Conflicts


2. Red-cockaded woodpecker habitat are near this range. Training is restricted. No vehicle traffic or training will be conducted in specifically designated RCW habitat areas.

3. Maneuvers are restricted down range and must stay within the assigned lanes/range footprint.

4. Authorized for night use. Night vision devices are authorized. Class 3B and 4 LASER devices are not authorized on this range.

5. This range requires 4 road guards. A map overlay indicating the range fan, road guard stations and gate closures will be provided when range is checked out. It is the responsibility of the Range OIC/RSO to ensure that all road guards are placed properly and gates are secure. All road guards will have and maintain internal communication with the Range OIC/RSO while training is being conducted. Road guards must be particularly vigilant for intruders circumventing their checkpoints. Road Guards are required at grids 878413, 912423, 929399, and 923374.

6. Vehicular movement downrange restricted to existing gravel roads only.

7. No designated firing points. Cross range firing is not authorized on this range. Caution must be taken down range on target engagement zones and target placement to ensure no cross range firing take place outside the approved surface danger zone that may be directed toward other training areas and live fire ranges.

**Other Considerations**

1. Use of PITS (targets) on this range is encouraged; contact the contracting officer representative at 451-5749 with any contract support issues, with the date, hours needed and number of targets requested. Request must be submitted ten (10) days in advance from the first day of training. Units can pick up targets at Bldg 1404; warehouse hours for pickup are 0700-1200.
The unit is required to provide a qualified PITS operator for the remote control unit.

2. PITS targets require protection from weapon effects. Sandbag them in as directed by contract personnel. Grenade Launchers not authorized to fire on PITS targets. Units are responsible for PITS damage due to poor protection.

3. Downrange movement restricted to 900 meters. Maneuvers are not authorized if ranges F-2, F-5, and F-25T are active. If Range F-18/F-18 7.62mm Match/F-18 .50 cal is firing machineguns, movement is restricted to the 42 north/south grid line.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking only authorized on this range by request. POVs not authorized on this range, tank trail, along Highway 24 or the adjacent training areas.

3. Digging on live fire ranges are not authorized except for that required for proper deployment and safety of designated weapon systems. Sandbags must be provided and filled by the unit prior to occupying the range. Prior to departing the range, the unit will ensure all sandbags are removed and holes are filled in and leveled.

4. Range must be inspected and cleared by a range inspector prior to departing range/training area. Range OIC/RSO will complete and submit a range report upon completion of training and turn-in of range. Report all maintenance problems to range inspector or Range Control and via ICE Comment.

5. Range OIC/RSO will ensure all conflict ranges, gun positions, and training areas are secured of all personnel and equipment.

6. Range OIC/RSO will deconflict road guard placements and relief with F-2, F-5, F-18, F-18 7.62 Match, F-18 .50 cal, and all MAC Ranges.

7. Range OIC/RSO must verify all weapons range safety cards.

8. Red range flag will be flown at the entrance to the range.
9. Government safety vehicle and corpsman must be present on the range prior to commencing training.

10. All non-participating or observing personnel will remain outside of the range fan.

11. All personnel must wear helmets, flak jackets, hearing, and eye protection while training is being conducted.

12. Range OIC/RSO will ensure adequate number of safety personnel are assigned to control maneuver exercises. Range OIC/RSO will accompany each fire team down range during fire and movement. Range OIC/RSO will be equipped with appropriate communication and signaling devices while down range.

13. Dry runs will be conducted before going HOT with live ammunition. Range OIC/RSO will ensure all personnel are familiar with the designated firing lanes, firing points, sectors of fires, limits of fires, and limit of advance. Do not mix blank ammunition or live ammunition together.

14. The using unit is responsible for a detailed police call of the entire range, all facilities, and the parking/staging areas when training is completed. The unit will ensure the removal of all dunnage/trash from the range to include the down range area.

15. Units will ensure they secure and lock the gate when departing the range at the end of training event.
**RANGE NAME:** F-5

**DESCRIPTION:** Squad/Fire Team Live Fire Maneuver Course

**PRIMARY RANGE USE:** Squad/Fire Team Live Fire Maneuver Course

**ALTERNATE RANGE USES:**
1. Rifle Familiarization Range
2. Squad Battle Drill Range
3. Unknown Distance Range
4. Night Firing Range
5. CMP Range
6. Moving Target Range

**LOCATION:** Grid Coordinate: 91004280

**PRIMARY DIRECTION OF FIRE:** 210 degrees magnetic

**WEAPONS ACCOMMODATED:**
- All military issue pistols (.45 Caliber/9mm)
- 12 Gauge Shotgun
- M16/M4 Rifle
- M249 Squad Automatic Weapon
- M240B/G Medium Machinegun
- M203/M32 Grenade Launcher
- AT-4 9mm Trainer

**AMMUNITION AUTHORIZED:**
- All Pistol Ammunition
- All 12 Gauge Ammunition
- 5.56mm (Ball, Tracer, Linked)
- 7.62mm (Linked)
- 40mm TP (DODIC B519) Only
- 9mm for AT-4 Trainer
- Smoke/Illumination Grenades
- Artillery Simulators

**TARGETS/SIMULATORS/DEVICES:**
- 43 RETS E-silhouette pop up targets, 2 moving infantry targets

**FACILITIES (Number of each):**
- Head Facilities: 2
- Range Tower: 1
- Overhead Cover: 1
- Range Tables: 2
- POV Parking Area: Yes
UTILITIES AVAILABLE: Electricity: Yes
Lights: Yes
Water System: No

INSTALLED COMMUNICATIONS: Telephone Number: 451-2007

AREA SUITABILITY Squad/Fire Team

Range Use Restrictions/Comments/Conflicts


2. Maneuvers are authorized on this range but are restricted to the range footprint/target area.

3. Authorized for night use. Night vision devices are authorized. Class 3B and 4 LASER devices are not authorized on this range.

4. This range requires road guards. A map overlay indicating the range fan, current road guard placements and gate closures will be provided when range is checked out. It is the responsibility of the Range OIC/RSO to ensure all road guards are placed properly in the correct locations. All road guards will have and maintain internal communication with the Range OIC/RSO while training/live fire is being conducted. Road guards must be particularly vigilant for intruders circumventing their checkpoints/gates.

5. Vehicular movement downrange is restricted/limited to existing roads only.

6. RETs are operated by approved scenarios that are preset electronically and operated by the range contractor.

7. No designated firing points on this range. Cross range firing is not authorized on this range.

8. Grenade Launchers (M203/M32 with TP Ammunition only) are not authorized to fire on the target systems (RETs) that are in place.

Other Considerations
1. Request to modify computerized target scenarios must be submitted through the unit’s chain of command to Range Control. The request must be submitted ten (10) working days in advance from the first day of training. Contact the contracting officer representative at 451-4480/2411 with any contract support issues. The range contractor must be on the contracted range the entire time scheduled.

2. The using units that require a time extension on the range must request it at least four (4) hours in advance of their scheduled completion (“COLD”) time in order to allow for an alteration to the scheduled contractor support. This request for time extension will be made through Range Scheduling during normal working hours. After hours contact BLACKBURN.

3. Units must occupy a contractor-supported range with a responsible unit or contracted training representative (Not necessarily the Range OIC/RSO) within 1 hour of the “HOT” time or the range will be cancelled.

4. This range can be scheduled for a maximum of 12 hours per day.

5. The unit is responsible for becoming acquainted with training scenarios the contractor has prior to training session.

6. Downrange movement restricted to 900 meters. If Range F-18/F-18 7.62mm Match/F-18 .50 cal is firing machineguns (7.62mm/.50 cal), downrange movement must remain north of the 42 east/west grid line.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is only authorized on this range by request only.

3. Digging on live fire ranges are not authorized except for what is required for the safe employment of designated weapon systems. Sandbags must be provided and filled by the unit prior to occupying the range. Prior to departing the range, the unit will ensure all sandbags are removed and holes are filled in and leveled.
4. POVs are not authorized on this range, on the tank trails, adjacent training areas or along Highway 24. POVs must use the designated parking area and must have Range Control POV pass.

5. Range must be inspected and cleared by a range inspector prior to departing the range/training area. Range OIC/RSO will complete and submit a range report upon completion of training and turn-in of the range. Report all maintenance problems/issuues to a range inspector or via ICE Comment.

6. Range OIC/RSO will ensure all conflicting ranges, gun positions, and training areas are secured of all personnel and equipment prior to going “HOT”.

7. Range OIC/RSO will deconflict road guard placements and relief with F-2, F-4, F-18/F-18 7.62mm Match/F-18 .50 cal and all MAC Ranges.

8. Range OIC/RSO must verify all weapons range safety cards.

9. Red range flag will be flown at the entrance to the range.

10. Government safety vehicle and corpsman must be present on the range prior to commencing training.

11. All non-participating or observing personnel will remain outside of the range fan/firing line.

12. All personnel must wear helmets, flak jackets, and hearing eye protection while training is being conducted.

13. Range OIC/RSO will ensure adequate number of safety personnel are assigned to control maneuver exercises/elements. Range OIC or the RSO will accompany each fire team/squad down range during the live fire and movement event. Range OIC/RSO will be equipped with appropriate communication and signaling devices while down range.

14. Dry runs/rehearsals will be conducted before going HOT under the same conditions (Day/Night) with live ammunition. Range OIC/RSO will ensure all personnel are familiar with the designated firing lanes, firing points, sectors of fires, limits of fires, and limit of advance. Never mix live ammunition and blanks on this range. The unit must check, enforce, and supervise all safety procedures.
15. Using unit is responsible for a detailed police call of the entire range complex, all facilities, and the parking/staging areas when training is completed. The unit will ensure the removal of all dunnage/trash from the range to include brass, links, SAW ammunition plastic containers, tactical wire, wood, scrap metal, or any other material on this range.

16. It is the responsibility of the Range OIC/RSO to ensure the lights are turned off from the overhead covered area and the gate secured/locked before securing from the range.

17. F-2 and F-5 can be scheduled together in RFMSS as F-25T to support a supported live fire attack, day and night live fire, and movement training event.

18. Using units must use caution when using pop-ups/M203 Illum on this range due to Highway 24 and close proximity of civilian property.

19. Unit using F-18 will need to be aware of any training being conducted by 2d MLG BST and 2d CEB Bn at ETA-3.
RANGE NAME: F-6
DESCRIPTION: Hand Grenade Range
PRIMARY RANGE USE: Hand Grenade Range
ALTERNATE RANGE USES:
1. Hand Grenade Distance and Accuracy Course (Non-Live Fire)
2. Hand Grenade Assault Course (Non-Live Fire)
LOCATION: Grid Coordinate: 87643836
PRIMARY DIRECTION OF FIRE: 095 degrees magnetic
WEAPONS ACCOMMODATED: Hand Grenades
AMMUNITION AUTHORIZED:
Hand Grenade, Practice DODIC G811
Practice Grenade Fuse DODIC G878
M67 Hand Grenade, HE, Fragmentation DODIC G881
TARGETS/SIMULATORS/DEVICES:
1. Two open grenade fragmentation impact areas, separated by a dirt berm, each with two aiming stakes in each lane/pit area.
2. One practice throwing area with four practice pits structures and aiming stakes.
3. Hand Grenade Distance and Accuracy Course with all targets.
4. Hand Grenade Assault Course with all targets.
FACILITIES (Number of each):
Head Facilities: None
Range Tables: 3
Range Observation Tower: 1
Practice Throwing Range: 1
Practice Throwing Bunkers: 4
Fragmentation Throwing Bunkers: 4
POV Parking Area: None
Outdoor Classroom with lights: 1
Bleachers: 1
UTILITIES AVAILABLE:
Electricity: Yes (Tower/Outdoor Classroom)
Lights: Yes (Tower/Outdoor Classroom)
Water System: No
Sound/PA System: Yes (In the tower)

INSTALLED COMMUNICATIONS: Telephone Number, Tower 451-8576 and Box 451-6840

AREA SUITABILITY: Company/Platoon

Note: Hand Grenade Distance and Accuracy Course (Non-Live Fire) and the Hand Grenade Assault Course (Non-Live Fire) are included with F-6 when scheduled properly in RFMSS and signed for. Unit is responsible for the entire complex/area.

Range Use Restrictions/Comments/Conflicts

1. Maneuvers are not authorized down range on the live fire hand grenade range. Small arms ammunition is not authorized on this range.

2. Night use is not authorized. Handling and throwing of live hand grenades will cease-fire one (1) hour prior to sunset.

3. Placement of targets down range is not authorized on this range.

4. Range will be returned to original condition upon completion of training. Using unit will provide yard rakes, shovels, and fill in/level out all holes downrange in the impact area. Unit will police up all spoons, pins, clips, and dunnage down range.

5. Throwing pits will be supervised/manned by a qualified NCO/SNCO/Officer at all times.

6. Left and right lateral limit markers define the boundaries of hand grenade impact area. A center marker defines maximum throwing distance. Range OIC/RSO will ensure no grenades explode outside designated impact area.

7. No more than one (1) live hand grenade will be thrown at a time. Detonation must occur before the next grenade is thrown from the next pit. The Range OIC/RSO must control the sequence of throwing. On command from the Range OIC/RSO, personnel will enter from the left hand side of the wall to the throwing pits; they will depart the throwing pits to the right after throwing their live grenade and on the command of the Range OIC/RSO only. The Range OIC/RSO must account for each and every detonation before moving anyone in or out of the live grenade pit area.
8. High explosive type fragmentation grenades are not authorized on the Practice Hand Grenade Range, Distance and Accuracy Range or the Grenade Assault Course at any time. Practice Hand Grenades with fuse are not authorized on the live grenade range, live grenade pits/impact area at any time.

9. Marines must throw a minimum of 2 practice grenades on the non-live fire practice grenade range prior to throwing any live grenade(s). Prior to going HOT, all procedures must be briefed and rehearsed, including immediate action drills for a dropped grenade in the pit or any other emergency type procedures before going into “HOT” status.

10. If a dud or misfire grenade occurs on this range, the Range OIC/RSO will place the entire range in an immediate “CHECK FIRE” and notify Range Control/BLACKBURN for a request for Base EOD support. The using unit must request permission from BLACKBURN to continue throwing of live grenades on the other side of the separating berm from the dud grenade. The practice non-live fire throwing of practice grenades on the practice grenade range or the other non-live fire ranges may continue to train. Upon arrival of EOD and after the mandatory wait time, the rest of the range will be placed into a “CHECK FIRE” so Base EOD can go down range and clear the dud hand grenade. The unit will remain in a complete check fire until lifted by Range Control/BLACKBURN personnel.

11. When using F-6 Hand Grenade Range, the “COOK OFF or MILKING” methods of releasing the spoon and counting down to throw the grenade is not authorized for training.

12. At no time will the using unit place any objects, targets, or material down range in the impact area of the live hand grenade range.

13. At no time will live hand grenades be thrown into standing water/mud/snow. Base EOD may be contacted to conduct an on site inspection to verify that the impact area is clear of standing water if required.

14. F-6 Range conflicts with FD Training Area.

15. The using unit must place sandbags (two to three sandbags) on the outside of the live fire grenade pits to cover up the drain holes. This is a mandatory requirement that must be in
place, enforced, and checked by the Range OIC/RSO and the Range Inspector before requesting to go on a “HOT” status.

Other Considerations

1. This Range requires a Gunnery Sergeant or above as Range OIC. Only the Range OIC can sign for this range and this type of training event.

2. Prior to scheduling of the range, the unit must coordinate Base EOD support at 449-0558 and ensure that Base EOD support will be available during their requested scheduled dates and times. The unit is required to notify Base EOD in the case the required training support dates have changed or the range has been cancelled. Once the using unit confirms with BLACKBURN that all hand grenades have detonation properly down range and the Range OIC verifies that to BLACKBURN, the using unit would be granted permission to go down range to police up down range and conduct required range repairs and fill in and level out the impact area.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is only authorized on this range by request.

3. Digging is not authorized on this range. Fill dirt will only come from the dirt piles provided at end of the range. At no time will dirt be removed from the center/main dividing berms.

4. POVs are not authorized on this range, the tank trail, or adjacent training areas. POVs cannot park along Sneads Ferry Road, Range F-17, Gas Chamber, and the surrounding areas.

5. Entire range complex must be inspected and cleared by a range inspector prior to departing the range/training area. Range OIC/RSO will complete and submit a range report upon completion of training and the turn-in of the range. Report all range maintenance problems/issues to a range inspector and/or use ICE.

6. Range OIC/RSO will ensure all personnel and equipment are clear of impact area and the surrounding SDZ for live hand grenades.
7. A Road Guard wearing a road guard/reflective vest will be placed at the entrance of the range with the proper communication gear to the Range OIC/RSO. A red range flag will be flown at the entrance to the range next to Sneads Ferry Road.

8. A government safety vehicle and a corpsman must be present on the range prior to commencing any training.

9. All training personnel must wear helmets, flak jackets, hearing and eye protection while training is being conducted with live hand grenades. All non-participating personnel will be protected by the concrete wall and on the inside of the yellow safety line and they must be in helmets, flak jackets, sleeves down, and wearing proper hearing and eye protection. Observing personnel must be inside the range tower. Movement in and out of the tower must be controlled. All other personnel must be in the outdoor classroom.

10. Range OIC/RSO will ensure all safety personnel (SNCO/NCOs) are assigned to supervise the training in the throwing pits.

11. Range OIC/RSO will notify Range Control that training has been completed and that all grenades are accounted for and all functioned/detonated. The Range OIC/RSO will place the unit into a “CHECK-FIRE” and will conduct a sweep down range before allowing the entire working party down range.

12. A detailed police call and restoration of the impact areas will be conducted upon receiving a “COLD TIME” and a range inspector must inspect the entire range complex.

13. The range, all facilities (to include the inside of the tower), the parking/staging, outdoor classroom, other practice grenade areas will be policed and inspected regardless if used or not. The unit will ensure the removal of all trash and dunnage from the range. The last person from the using unit leaving the range will ensure the gate and tower are closed and locked. Using unit must ensure all lights, sound systems, are tuned off like the PA system and lights in the classroom.

14. Either the Range OIC or the RSO will be in the tower at all times during the live fire event. No more than 10 personnel will be allowed in the tower at any one time. Personnel are not authorized to enter/exit the tower while live grenades are being thrown/used.
RANGE NAME: F-11A

DESCRIPTION: Baffled Rifle BZO/Pistol Range

PRIMARY RANGE USE: Basic 30 Meter Firing Range (ZERO)

ALTERNATE RANGE USES: 1. Shotgun Familiarization
2. Modified Table 3 and 4 CMP (Limited)

LOCATION: Grid Coordinate: 87023959

PRIMARY DIRECTION OF FIRE: 086 degrees magnetic

WEAPONS ACCOMMODATED: Military Shotgun
M16/M4 Rifle
Military Pistol
(.45 cal/40 cal and below)

AMMUNITION AUTHORIZED: 12 Gauge
5.56mm (ball only)
Pistol ammunition, .45 cal/40 cal/9mm

TARGETS/SIMULATORS/DEVICES: 16 firing points

FACILITIES(Number of each): Head Facilities: 2 Port-a-Johns
Range Tables: 3
POV Parking Area: 1
Range House: 1 (Unserviceable)
Bleachers: 4

UTILITIES AVAILABLE: Electricity: No
Lights: No
Water System: No

INSTALLED COMMUNICATIONS: Telephone Outside the Range House,
Yellow direct line to Range Control

AREA SUITABILITY: Platoon/Squad

Range Use Restrictions/Comments/Conflicts

1. Maneuvers are authorized on this when conducting CMP type training only. All live fire must take place in the baffled area only.
2. Night use is authorized if scheduled properly in RFMSS.

3. Class 3B and Class 4 LASER devices are not authorized on this range.

4. Helmets, flak jackets, hearing, and eye protection are required on this range at all times.

5. Non-Lethal ammunition is not authorized on this range.

6. Units are not authorized to fire burst or full automatic live fire on this range. The M249 SAW/M27 IAR is only authorized to fire single shot but must be approved by Range Control by special range request.

Other Considerations

1. F-11A is not a contractor supported range and the using unit must provide its own targets and remove them after the event.

2. At no time will targets be placed on the wooden uprights/support poles to the wooden baffling system.

3. At no time will the using unit use steel targets or steel support poles like engineer stakes on this range.

4. Any target material added to this range must be removed by the using unit.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on this range without approval from Range Control.

3. Limited POV parking is authorized on this range in the range parking area. Units are not authorized to park along Sneads Ferry Road or block the main entrance to F-11A/B.

4. Report all maintenance problems/issues to a range inspector and or submit via ICE comments.

5. Red range flag will be flown at the entrance of the Range along Piney Green Road.
6. A safety vehicle and a corpsman must be present on the range prior to commencing any training.

7. A range guard will be posted near the firing line.

8. The using unit is responsible for a detailed police call of the entire range, bullet trap area, all facilities, and the parking/staging areas when training is completed.

9. Range must be inspected and cleared by a range inspector prior to departing range/training area.

10. Range OIC/RSO will complete and submit a range report upon completion of training and the turn-in of the range.

11. POVs and tactical vehicles are not authorized on the grassy areas behind the firing line and must stay on the gravel path at all times. All vehicles must be 10 meters away from the gate/entrance to F-11A/B as not to block safety vehicle access.

12. The vacuum system for F-11B must be on for F-11A or it will not work properly.

13. Units are not authorized to go behind the bullet trap area because of the lead hazards.
RANGE NAME: F-11B

DESCRIPTION: Baffled Pistol Range

PRIMARY RANGE USE: Pistol Qualification/Requalification Range

ALTERNATE RANGE USES: 1. Pistol Familiarization Range.
                        2. Combat Pistol Course

LOCATION: Grid Coordinate: 87003960

PRIMARY DIRECTION OF FIRE: 086 degrees magnetic

WEAPONS ACCOMMODATED: Military Pistols only (.45 Cal/40 cal/9mm)

AMMUNITION AUTHORIZED: All military pistol ammunition
                         No armor piercing type ammunition

TARGETS/SIMULATORS/DEVICES: 14 firing points

FACILITIES(Number of each): Head Facilities: 2 Port-a-Johns
                            Range Tables: 4
                            POV Parking Area: 1
                            Range House: 1
                            Bleachers: 4

UTILITIES AVAILABLE: Electricity: No
                     Lights: No
                     Water System: No

INSTALLED COMMUNICATIONS: Telephone on the outside of the
                           Range House: 451-2005

AREA SUITABILITY: Platoon/Squad

Range Use Restrictions/Comments/Conflicts:

1. Firing lines for pistols are located at 7, 15, and 25 meters.

2. Maneuvers are authorized when conducting the Combat Pistol Course in the wooden baffled area only.

3. Night use is authorized if scheduled properly in RFMSS.
4. Class 3B and Class 4 LASER devices are not authorized on this range.

5. Hearing protection is always required. Eyewear protection is highly recommended.

6. Non-Lethal ammunition is not authorized on this range.

Other Considerations

1. A range contractor will set up the range and provide a qualified range operator for the scheduled time period. The operator will provide one E-type silhouette and two bull’s eye paper replacements per firing point, along with target pasties and a stapler. If the using unit requires additional targets material/bull’s eyes, the unit must furnish them. Contact the contracting officer representative at 451-5749 with any contract support issues. The range contractor must be on the contracted range the entire time scheduled.

2. Using units that require a time extension on the range must request it at least four (4) hours in advance of their scheduled completion (“COLD”) time in order to allow for an alteration to the scheduled contractor support. This request for time extension will be made through Range Scheduling/Blackburn.

3. Units must occupy a contractor-supported range with a responsible unit training representative (Not necessarily the Range OIC/RSO) within 1 hour of the “HOT” time or the range will be cancelled.

4. This range can be scheduled for a maximum of 12 hours per day.

5. This range is not authorized for civilian owned weapons.

6. The using units must clean-up the entire bullet trap/target area.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on range without approval from Range Control.
3. Limited POV parking is authorized in the range parking area only. Units are not authorized to park on the grass, along Sneads Ferry Road or block the main entrance to F-11A/B.

4. Range OIC/RSO will complete and submit a range report upon completion of training and the turn-in of the range. Range must be inspected and cleared by a range inspector prior to departing the range/training area. Report all maintenance problems/issues to a range inspector, Range Control and or via ICE comment.

5. Red range flag will be flown at the entrance of the Range by Piney Green Road.

6. A government safety vehicle and a corpsman must be present on the range prior to commencing any live fire training.

7. A range guard wearing a road guard reflective vest will be posted near the firing line.

8. Using unit is responsible for a detailed police call of the entire range, bullet trap area, all facilities, Port-a-Johns and the parking/staging areas when training is completed.

9. POVs and tactical vehicles are not authorized on the grassy areas behind the firing line and must stay on the gravel path. All vehicles must be 10 meters away from the gate to F-11A/B as not to block any safety vehicle/range inspector access.

10. Units are not authorized to go behind the bullet trap area due to the lead hazard.
RANGE NAME: F-17

DESCRIPTION: Training Tower

PRIMARY RANGE USE: 1. Fast Roping
2. Rappelling
3. Climbing Wall

ALTERNATE RANGE USES: None

LOCATION: Grid Coordinate: 87603840

PRIMARY DIRECTION OF FIRE: N/A

WEAPONS ACCOMMODATED: N/A

AMMUNITION AUTHORIZED: N/A

TARGETS/SIMULATORS/DEVICES: N/A

FACILITIES (Number of each): Head Facilities: None
POV Parking Area: None (Over by the Industrial Area and Base Brig).
Range Tower: 1
Range Tables: 0

UTILITIES AVAILABLE: Electricity: Yes
Lights: Yes
Water System: No

INSTALLED COMMUNICATIONS: On telephone pole near tower.

AREA SUITABILITY: Platoon/Company

Range Use Restrictions/Comments/Conflicts

1. Live fire is not authorized on this training facility.
2. Night use is authorized if scheduled properly in RFMSS.
3. Class 3B and Class 4 LASER devices are not authorized.
4. The requesting unit must provide all training support materials (ropes, snap links, etc) and all required safety equipment and required personnel.
Special Instructions

1. Range OIC/RSO must be a E-6 or above with a Camp Lejeune Range OIC/RSO Card to sign for this training facility along with a E-4/Cpl or above that is a certified/qualified HRST/TRST Master at the time of signing for this training facility.

2. Bivouacking is not authorized on this training facility.

3. POVs are not authorized on this training facility. All POV type vehicles must use the range designated parking area over by the Base Brig. POVs are not authorized to park at the entrance to the training facility, on Sneads Ferry Road, F-6 Range, or the Base Gas Chamber.

4. Range OIC/RSO will complete and submit a range report upon completion of training and turn-in of range. The training facility must be inspected and cleared by a range inspector prior to departing training facility/training area. Report all maintenance problems/issues to a range inspector or by using ICE Comment.

5. Red range flag will be flown at the entrance of the range along Sneads Ferry Road.

6. A government safety vehicle and a corpsman must be present on this training facility prior to commencing any training.

7. The using unit is responsible for a detailed police call of the entire training facility, tower area, all facilities, and the parking/staging areas when training is completed.

8. Unit must sweep all steps and remove all trash from the range. Ensure all lights are turned off, doors are locked, and the gate is secured/locked prior to departure.

9. All training conducted on this training tower must be conducted in accordance with all required Marine Corps Orders, other required references, and policies.

10. When climbing up the vertical platform ladders, no gloves should be worn to ensure good hand rail contact.

11. While training is being conducted on the tower head protection and eye protection must be worn within a 5 meter
radius of the tower to eliminate possibility of injury due to falling debris and or equipment.
**RANGE NAME:** F-18/F-18 7.62 MATCH & SNIPER/
F-18 .50 Cal/F-18 NON-LETHAL

**DESCRIPTION:** Machinegun Field Firing Range

**PRIMARY RANGE USE:** Machinegun Field Firing Range

**ALTERNATE RANGE USES:**
1. Infantry BZO/Zero Range
2. Night Vision Firing Range
3. Sniper Range (7.62mm Only)
4. Pistol Familiarization Range
5. Shotgun Familiarization Range
6. Non-Lethal Ammunition Range
7. CMP Range

**LOCATION:** Grid Coordinate: 87073942

**PRIMARY DIRECTION OF FIRE:** 085 degrees magnetic

**WEAPONS ACCOMMODATED:** All military issue pistols (.45 Caliber or less)
12 Gauge Shotgun
M16/M4 Rifle
M249 Squad Automatic Weapon
M240B/G Medium Machinegun
M2 .50 Caliber Machinegun
M40/MK-11 7.62mm Sniper Rifle

**AMMUNITION AUTHORIZED:**
All Pistol Ammunition
All 12 Gauge Shotgun Ammunition
5.56mm (Ball, Tracer, Linked)
7.62mm (Ball, Linked, Match)
All .50 cal Ammunition (DODIC A606 is not authorized)
Non-Lethal Ammunition
M203/M32 (Non-Lethal Only)

**TARGETS/SIMULATORS/DEVICES:**
1. Hard Targets: 6

   Left side: 646 meters
             720 meters
             912 meters

   Right side: 656 meters
             720 meters
             912 meters
2. Using unit must provide any and all additional target material and a removal plan.

**FACILITIES (Number of each):**
- Head Facilities: None
- Bleachers: 1
- Range Tables: 2
- POV Parking Area: Behind the firing line near the tree line is for limited POV Parking.

**UTILITIES AVAILABLE:**
- Electricity: No
- Lights: No
- Water System: No

**INSTALLED COMMUNICATIONS:**
- Telephone (On the telephone pole behind the berm) 451-6047

**AREA SUITABILITY**
- Squad/Platoon/Company

**Range Use Restrictions/Comments/Conflicts**


2. This range consists of two (2) dirt berms. Forward berm is approximately 1 meter high; rear berm is approximately 2 meters high. Designated firing line is on the berm or directly in front of the forward berm. Cross range firing is not authorized on this range. Firing into the forward dirt berm is not authorized. All units must use caution due to Lyman Road being close by.

3. Additional targets may be placed down range by the unit but must be removed after the scheduled training event by the using unit.

4. Live fire movement/maneuvers are authorized on this range once approved by Range Control by special range request as long as all live fire and the effects of live fire are within the approved surface danger zone of F-18 at all times.

5. Authorized for night use if properly scheduled in RFMSS. Night vision devices are authorized.
6. Class 3B and 4 LASER devices are not authorized on this range.

7. This range requires road guards. A map overlay indicating the range fan, current road guard placements and gate closures will be provided when this range is checked out. Placement and, or requirements for additional road guards for .50 cal machinegun and 7.62mm match ammunition for sniper training will differ from small arms weapon training 7.62mm machinegun and below. It is the responsibility of the Range OIC/RSO to ensure that all road guards are placed properly in the correct locations and out of danger from the other live fire ranges that may be scheduled. All road guards will have and maintain internal communication with the Range OIC/RSO while live fire training is being conducted. Road guards must be particularly vigilant for intruders/vehicles circumventing their checkpoints at all times.

8. Reference minimum safe distances between each weapon system. The maximum range of all weapons will not exceed the limits of observation. Cross range firing is not authorized on this range. This range is very close to Lyman Road and the unit should avoid firing on the right flank of this range to prevent ricochets on that side of the range and possible crossing over of Lyman Road.

9. When maneuvers are authorized, do not engage existing hard targets closer than 150 meters due to ricochet hazard with all weapons.

10. Vehicles are authorized to fire from on top of the berms or in front of the berms. No more than two (2) vehicles are authorized on the firing line at a time. Vehicles will be chocked, with hand brake set and weapon mounted with T&E. A minimum of 6 meters safe separation will be maintained between firing positions. The driver and A-driver must be out of the vehicle. Units should use caution in placing vehicles on and off the dirt berm.

11. Vehicle movement/live fire downrange is not authorized.

12. Steel Targets are authorized with approval from Range Control on this range if placed in the proper location to prevent ricochets.

13. F-18 supports the M240B/G machinegun training. F-18 7.62mm support the 7.62mm sniper rifles firing match ammunition only.
F-18 .50 cal support both the M2 .50 cal machinegun and .50 cal sniper rifle. The DODIC A606 round for the 50 cal Sniper Rifle is not authorized on F-18 .50 cal.

Other Considerations: This range conflicts with many other activities/ranges/training areas. Range OIC/RSO will deconflict all road guard placements and reliefs with F-2, F-4, F-5, F-25T, and all MAC Ranges. Notify F-2, F-4, F-5, F-25T, and MAC Ranges if machinegun training is being conducted on this range. Ensure Range OIC/RSO of F-2, F-4, F-5, F-25T, and the MAC Ranges understand their limit of advancement based on the range being used. Notify same upon completion of training so all road guards can be repositioned if required or needed. Ensure all conflicting ranges, gun positions, and training areas are secured of personnel and equipment.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is authorized on this range once approved by Range Control.

3. Digging on this range is not authorized except for the requirements for the proper deployment and safety of designated weapon systems. Sandbags must be provided and filled by the unit prior to occupying the range. Prior to departing the range, the unit will remove all sandbags and fill in/level out all holes. At no time will sandbags be filled from the dirt in the berms.

4. POVs are not authorized down range, trails, or adjacent training areas. All vehicles must use the designated parking area across from industrial area.

5. Range must be inspected and cleared by a range inspector prior to departing range/training area. Range OIC/RSO will complete and submit a range report upon completion of training and turn-in of range. Report all maintenance problems/issues to a range inspector and or use ICE Comment.

6. Range OIC/RSO must verify all weapons range safety cards and direction of fire.

7. Red range flag will be flown at entrance to the range along Piney Green Road.
8. A government safety vehicle and a corpsman must be present on this range prior to commencing any training.

9. All non-participating or observing personnel will remain outside of the range fan/firing line.

10. All personnel must wear helmets, flak jackets, hearing, and eye protection while live fire training is being conducted.

11. Range OIC/RSO will ensure adequate number of safety personnel are assigned to control exercise/crew served weapon systems.

12. Range OIC/RSO will ensure all personnel are familiar with firing points, sectors of fire, limits of fire, any other safety rules/policies.

13. The using unit is responsible for a detailed police call of the entire range, all facilities, and the parking/staging areas when training is complete. The unit will ensure the removal of all dunnage from the range to include links, brass, tactical wire, wood, sandbags, wooden pallets, and all scrap metal.

14. Police of the road guard position is the responsibility of the using units. Units are required to issue plastic bags for trash to the road guard. Road Guard positions will be inspected by the Range Inspectors.

15. Units are not authorized to pre-stage equipment, ammunition, or target material prior to the approved training unless approved by Range Control.
**RANGE NAME:** G-3/G-3 .50 Cal/G-3 TOW

**DESCRIPTION:** Infantry Weapons Range

**PRIMARY RANGE USE:** Infantry Weapons Range

**ALTERNATE RANGE USES:**
1. Mortar Range
   60/81/120mm Mortars (MP 7)
2. Guided Missile Range
3. Rocket Launcher Range
4. Grenade Launcher Range
5. Field Firing Machinegun Range
6. Sniper Range (Limited)
7. LAR (25mm) Weapons Range
8. AAV Weapon System Range
9. Tank (MG Firing Range Only)

**LOCATION:** Grid Coordinate: 89423451

**PRIMARY DIRECTION OF FIRE:** 085 degrees magnetic

**WEAPONS ACCOMMODATED:**
All Military Pistols
M203/M32 40mm GL
M16/M4 Rifle
M249 SAW/M27 IAR
M240B/G, M219/M240 Coax MG
MK19 40mm GL
AT-4, M72A7 LAW, TOW II, Javelin, MK 153 SMAW
60mm/81mm/120mm Mortars
25mm Chain Gun (LAV)
M2 .50cal Machinegun
M40/MK-11 Sniper Rifle
M82 SASR .50 Cal Sniper Rifle

**AMMUNITION AUTHORIZED:**
9mm/45 cal
5.56mm (All DODICs)
7.62mm (All DODICs)
.50 cal (All DODICs)
(DODIC A606 not authorized).
25mm TP-T Only
40mm (all DODICs)
60mm Mortar (All DODICs)
66mm M72A7 LAW (All DODICS)
81mm Mortar (All DODICs)
83mm MK-153 SMAW (All DODICs)
84mm AT-4 (All DODICs)
120mm Mortar (All DODICs)
TOW II (All DODICs)
Javelin M98A1
M257 Smoke Grenade Launchers on the Tank/AAV/LAR

TARGETS/SIMULATORS/DEVICES: 28 Hard Targets

FACILITIES (Number of each):
- Head Facilities: None
- Range Tables: 0
- POV Parking Area: None (POV Parking is across the street next to the pump house but is limited to only a few vehicles)

UTILITIES AVAILABLE:
- Electricity: No
- Lights: No
- Water System: No

INSTALLED COMMUNICATIONS: Phone at bottom of berm.

AREA SUITABILITY

Range Use Restrictions/Comments/Conflicts

1. There are no designated firing points on this range/berm. Firing is only authorized from on top of the berm. No movement past the berm is authorized without EOD support.

2. The following areas will be closed for all traffic/training and or occupation when **firing the TOW II Missile**: Lyman Road, SIM Center, ALZ-7, ALZ-28, G-3A, G-10A, MOUT Complex, MP-1, MP-2, MP-3, MP-4, MP-5, TLZ Penguin, TLZ Tern, TLZ Raven, OP-2/OP-2 LASER, OP-3/OP-3 LASER, all MAC Ranges, and training areas: FG, GA, GB, GC, GD, GF, and FC. The using unit must conduct a detail sweep of the entire area listed above to ensure that no one, no unit, no vehicles are in the surface danger zone of the TOW II live fire training event. Firing the TOW Missile is authorized at night if properly scheduled in RFMSS and the required Quiet Hours is not violated.
3. The following areas will be closed for all traffic and occupation when firing the .50 Cal/25mm: Highway 172 from Sneads Ferry Road (vic Duck Creek 907306) to Triangle Outpost Gate, G-5, G-6 CBC, G-7, EOD-1, MP-6, GP-7, GP-8, GP-9, GP-10, GP-11, TLZ Crane, TLZ Gull, Freeman’s Creek Landing/Gate, Training Areas: GA, GC, GD, GE, GF, GH, and GI. A metal gate located by LZ Goose must be secured and locked for G-3 .50 cal. ETA-4 must be deconflicted with both units before being approved.

4. G-3, G-3 .50 cal, and G-3 TOW II will go into “CHECK FIRE” while fixed wing or rotary wing aircraft are operating in and around the G-10 Impact Area/UCAS Facility unless fires have been deconflicted by time and altitude with Range Control/BLACKBURN during the Face-to-Face Brief. Suggest placing a radio and operator on using unit’s frequency with FAC to coordinate G-10 use when aircraft are not in/over the G-10. Once the co-use is coordinated with FAC/JTAC, contact BLACKBURN/Range Control Scheduling for clearance for G-3 to go into a “HOT” status.

5. Live fire and maneuvers/movement down range is not authorized on G-3/G-3 TOW/G-3. Downrange movement is prohibited unless accompanied by Base EOD personnel and properly scheduled in RFMSS.

6. All units must have a certified LASER Range Safety Officer (LRSO) for all Class 3B and Class 4 LASER devices being used on this range. This range is approved for all Classes of LASERs (Class 1, 2, 3A, 3B, and Class 4 LASERs).

7. Night use with dud producing ammunition is authorized if properly scheduled in RFMSS. Small Arms can be fired past 2359 if properly scheduled in RFMSS.

8. Digging on this range is not authorized except what is required for the proper deployment and safety of designated weapon systems. Sandbags must be provided and filled by the unit prior to occupying the range. Prior to departing the range, the unit will ensure all sandbags are removed and all holes are filled in and leveled. Ruts and track marks from tracked vehicles must be filled in/leveled out the using unit.

Other Considerations

1. This range has a firing berm about 550 feet long by 45 feet wide and 20 feet high.
2. The left lateral and right lateral limit signs for the .50 Cal are the black and white signs.

3. At no time will ground units fire ground weapons into the G-10 Impact Area, fire into the Urban CAS Facility (UCAS). This area is assigned as a No Fire Area (NFA) for all ground weapons.

4. Units using MP-7 are authorized to use the berm (Left hand side of the berm) for 60mm/81mm/120mm mortars, direct alignment/lay, or 60mm mortar hand-held if properly scheduled in RFMSS or deconflicted with the unit that has G-3 (Firing Berm) scheduled and signed for. Range Control Scheduling must be informed on all piggy-backing/co-use via e-mail or phone call.

5. The using unit will be issued a Road Guard Map, Detour Sign Map, and a Railroad Gate Instruction Form. All detour signs that are used must be put back up after the training event.

**Special Instructions**

1. A red range flag will be flown at the entrance to the range.

2. Helmets, flak jackets, hearing, and eye protection are required for all personnel on this range during live fire. When firing the TOW Missile, eye and throat protection and kevlar TOW blankets are also required depending on the type of TOW missile being fired. When firing MK-19 40mm (All DODICs), ballistic goggles, gloves, and sleeves down are also required.

3. Be familiar with Chapter 5 of this SOP and all references on the weapon and ammunition FM/TMs as required.

4. A map overlay indicating the range fan, target arrays, current road guard placements, detour signs, and all gate closures will be provided when the range is checked out by the Range OIC. It is the responsibility of the Range OIC/RSO to ensure that all road guards are emplaced, gates are closed, detour signs are posted, orange traffic cones are placed out at the correct locations. Firing TOW missiles requires additional road guards and road/training area sweeps. Sim Center, Lyman Road, Old Dump Road, intersection of Wallace Creek Road and Old Bear Creek Road and the MOUT Facility will be swept and secured prior to going “HOT” with TOW missiles. Ensure MOUT Staff and BLACKBURN are notified before closing the road. All road guards must have and maintain internal communication with the Range OIC/RSO while live fire training is being conducted. Road guards must be particularly vigilant for intruders/vehicles.
circumventing their assigned checkpoints. Range OIC/RSO is responsible for ensuring all gates and detour signs are secured to the upright storage position upon completion of training.

5. When firing, regardless of position on the firing berm, weapons must be absolutely limited to traversing from 087.5 degrees magnetic left to 099.5 degrees magnetic right.

6. When firing the M2 .50 cal Machinegun, 50 cal Sniper Rifle and LAV 25mm, the Range OIC of the firing unit will provide sentries/road guards at the Triangle Outpost and Sneads Ferry/Highway 172 range gates. Both gates will remain closed, orange cones placed out during all live firings. Road guards must also be positioned at Freemans Creek Gate (with gate secured) and the RSO must sweep Highway 172 and the surrounding training areas to include LZ Crane, LZ Gull, and Freeman Creek Boat landing. All sentries will have direct communications with the ROIC of the firing unit on a frequency other then Range Control frequency. Another gate has been placed by LZ Goose and must be secured/locked.

7. The using unit will inform BLACKBURN before closing and securing Highway 172, BLACKBURN must inform PMO/ISS of all road closures.

8. The using unit must provide it own Port-a-Johns, if required or needed.

9. The gate leading into the impact area along perimeter road must be secured.

10. Vehicle-mounted weapon systems are authorized on the berm. Only six (6) vehicles (Wheeled/Tracked) at one time are permitted on the berm conducting live fire at the same time as long as live fire and the effects of live fire are within the approved SDZ for that weapon system/ammunition. Units should use ground guides and caution should be used when entering and exiting the berm. Units must repair all damage to the berm. The weapon must be fired using a Traversing and Elevation Mechanism (T&E). Units requesting training with “free gun” must submit a special range request.

11. When firing ground/vehicle mounted TOW Missile (Required DODICs), the protective ballistic blanket must be used.

12. Range must be inspected and cleared by a range inspector prior to departing range/training area. Range OIC/RSO will
complete and submit a range report upon completion of training and turn-in of range. Report all maintenance problems/issues to a range inspector, Range Control and or ICE Comment.

13. This range can be scheduled for the M257 Smoke Grenade Launcher that are attached/equipped on the Tank/AAV/LAR.

14. Units are not authorized to use OP-5/OP-5 LASER unless scheduled in RFMSS and signed for. Units are not authorized to use the top deck of the tower due to the hazards with the radar system on top of the OP-5. Units are not authorized to attach antennas or any other devices to the top of the tower. Units are not authorized to walk on top of the containers located on the bottom deck.
RANGE NAME: G-3A

DESCRIPTION: M257 Smoke Grenade Launcher System Range

PRIMARY RANGE USE: Vehicle Mounted Smoke Grenade Launcher Range

ALTERNATE RANGE USES: None

LOCATION: Grid Coordinate: 89503558

PRIMARY DIRECTION OF FIRE: 085 degrees magnetic

WEAPONS ACCOMMODATED: M257 Smoke Grenade Launchers on the Tank/AAV/LAR

AMMUNITION AUTHORIZED: Vehicle Smoke Grenade

TARGETS/SIMULATORS/DEVICES: G-10 Impact Area

FACILITIES (Number of each):
- Head Facilities: None
- Range Tower: OP-5
- Range Tables: 0
- POV Parking Area: None

UTILITIES AVAILABLE:
- Electricity: No
- Lights: No
- Water System: No

INSTALLED COMMUNICATIONS: None

AREA SUITABILITY: Company/Platoon/Section

Range Use Restrictions/Comments/Conflicts

1. Safety Restrictions: Personnel in vehicles equipped with the M257 SGLS will be inside of the vehicle with all hatches secured when firing as per the vehicle TMs. Down range movement is prohibited unless accompanied by Base EOD personnel. Maneuver is not authorized on this range. Only stationary firing from vehicles is authorized.

2. OP-5 serves this range for control and to observe.
3. Night use is not authorized. LASER systems are not authorized on this range.

Special Instructions

1. A red range flag will be flown at grid coordinate 895355 with a road guard with a orange reflective vest posted. Ensure the gate at grid coordinate 890360 is closed prior to going “HOT” status. Positive communication is required between Range OIC/RSO, road guard, and the firing vehicles at all times. Be familiar with Chapters 5 and 7 of this SOP and this appendix.

2. Using unit is responsible for providing Port-a-Johns if required or needed.

3. When using smoke grenades, ensure firefighting equipment is available.

4. This range is heavily vegetated and may not meet your training requirements in all cases. Recommend G-3 be scheduled for firing the M257 Smoke Grenade Launchers on the Tanks, AAVs and LAVs.
RANGE NAME:                     G-5

DESCRIPTION:                   Vehicle Convoy Range
                                Infantry Weapons Range (Static)
                                AAV/LAV Gunnery Range (Static)

PRIMARY RANGE USE:             Vehicle Convoy Range
                                Infantry Weapons Range
                                AAV/LAV Gunnery Range

ALTERNATE RANGE USES:          Inert Line Charge (MICLIC) Range

LOCATION:                      Grid Coordinate: 94103241

PRIMARY DIRECTION OF FIRE:     150 degrees magnetic

WEAPONS ACCOMMODATED:          All AAV Weapons (Static Fire)
                                M240B/G Machinegun
                                M219/M240 COAX Machinegun
                                M203/M32 (TP Ammunition only)
                                M16/M4 Rifle
                                M249 SAW/M27 AR
                                MK19 (TP Ammunition only)
                                M2 .50 cal Machinegun
                                M242 25mm Chain Gun
                                M40/MK-11/MK-12 Sniper Rifle
                                M82 SASR .50 cal Sniper Rifle
                                M-68 Inert MICLIC (Only)

AMMUNITION AUTHORIZED:         5.56mm
                                7.62mm
                                .50 cal (all DODICs except A606)
                                25mm TP-T
                                40mm (TP only)
                                M68 Line Charge (inert)

TARGETS/SIMULATORS/DEVICES:    Hard Targets: None
                                Moving Infantry: None
                                Stationary Infantry: None

FACILITIES (Number of each):   None

UTILITIES AVAILABLE:           Electricity: Yes
                                Water System: No
                                Sewer: No

AREA SUITABILITY              Company/Platoon/Section
Range Use Restrictions/Comments/Conflicts

1. Firing will impact in the N1/BT-3/Browns Island Impact Area. An aerial sweep of the entire area is required, including the AIWW and the surrounding wetlands/marshes prior to firing. Range Control will schedule a helicopter for the using unit as long as the range is scheduled in accordance with Chapter 3 time limits. The using unit will ensure that a aerial search is made of the impact area, AIWW, wetlands/marshes, dunes, and ocean side areas within the surface danger area one-half hour prior to firing to ensure the areas are safe for firing. If night live fire is being conducted another aerial sweep must be conducted before darkness.

2. The AIWW must be closed during live fire. Range Control will post the Navy Boat Crew to accomplish this requirement. Projectiles will not be fired to impact within 200 yards of the AIWW. North Tower and Bear Tower must be manned prior to firing and the aerial sweep.

3. Maneuver down range is not authorized on this range.

4. Night use is authorized if scheduled properly in RFMSS and a aerial sweep is conducted prior to darkness.

5. Class 3B and Class 4 LASER devices are not authorized on this range.

6. Digging on this range is not authorized except as required for the proper deployment and safety of designated weapon systems. Sandbags must be provided and filled by the unit prior to occupying the range. Prior to departing the range, the unit will ensure all sandbags are removed and holes are filled in and leveled.

Special Instructions

1. In addition to the RSO, the Range OIC will appoint position safety officers as required and will post four range/tower guards equipped with radios.

2. Using units will post tower guards one-half hour before the aerial search/sweep. Range/towers guards posted on towers will be equipped with binoculars, radios, and night vision devices if night live fire is scheduled.

3. Observation Sectors Are
a. Bear Creek Tower Guards: 064 degrees magnetic to 190 degrees magnetic.

b. North Tower Guards: 055 degrees magnetic to 270 degrees magnetic.

4. From one hour prior to commencing live fire until termination, unit will fly a red range flag during daylight hours, and display red flashing lights from sunset until sunrise at flagpoles and on top of range towers at:

a. Bear Creek Tower

b. Onslow Beach North Tower

c. Main entrance to Range G-5

5. Range guards must have at least three miles visibility to seaward or the range will not be allowed to go “HOT” status.

6. Range/tower guards will be instructed to call the Range OIC/RSO if a vessel (water craft) or aircraft penetrates the danger area as shown on the range fan overlay. Sentries/tower guards will also raise and lower the red range flag/flashing lights at the required times.

7. Range/tower guards must maintain communication throughout the entire training event with the Range OIC/RSO and the Navy Safety/Guard Boats prior to the aerial search.

8. Range Control will provide Navy Safety/Guard Boats to be positioned in the AIWW near Bear Creek and Freeman Creek to control boat traffic during entire period of firing.

9. Navy Guard Boats, equipped with radios and operators will stop all civilian waterborne traffic and hold them in place at their guard boat positions for a period of one hour. At the end of the hour, the range will be put in check fire and boats will be allowed to proceed north/south. When all traffic has cleared the guard boats, firing may resume. The following types of vessels will not be stopped; the range will be placed in an immediate check fire and the unit must confirm a check fire until they have completed their passage of the SDZ:

a. Vessels belonging to the U.S. Coast Guard.
b. Vessels belonging to the U.S. Army Corps of Engineers.

c. Commercial Barges under tow.

d. Civilian law enforcement vessels.

10. If at any time the Navy Boat Crew's coxswain determines weather conditions such as sea state/high winds in the AIWW are hazardous to the safety of his/her watercraft, the coxswain will contact the Range OIC/RSO and Range Control (BLACKBURN) and the range will go COLD. Navy Guard Boats are present to assist the scheduled range user, but work directly for the Range Control Officer (BLACKBURN).

11. Firing will cease if red range flag or red flashing lights are lowered or extinguished for any reason.

12. After the first range sweep for the day has been completed and tower guards have been posted, other units authorized to use Range G-5 during later periods of the same day are urged to affect contact relief of tower guards. Otherwise, another range sweep is required prior to resumption of live fire.

13. Telephones are available at the Bear Creek Tower, and North Tower. Units are not authorized to place people in the towers itself due to electronic gear that is inside the towers unless pre-arranged with Range Control. The using unit will place personnel on the catwalk/platform only.

14. Internal radio communication will be established between the Range OIC/RSO, safety towers, firing line, and Navy Safety/Guard Boats on frequency 38.45 FM and BLACKBURN on frequency 34.70 FM. A total of six radios, five for internal communication requirements and one for BLACKBURN, are required. If the range phone is not operational, an additional radio is required as back-up from the ROIC/RSO to BLACKBURN.

15. Be familiar with the contents of aerial sweep procedures, Chapters 5, 7 of this SOP and this Appendix on G-5/H-1.

16. This range must be scheduled at least (1) one calendar month in advance prior to the first day of training.

17. If this range is scheduled for night live fire an additional aerial and surface sweep must be conducted prior to darkness.
18. This range can only conduct live fire during even hours (0800, 1000, 1200, and 1400) as an example and must be in a COLD status during odd hours (0900, 1100, 1300, and 1500) as an example.

19. Unit must be on the look out for sea turtles, whales, or any other type of sea mammals at all times. Firing must stop until the sea mammal(s) has departed the surface danger zone.

Special Instructions When Firing Inert M68 Series Line Charge

1. A map overlay providing the direction of fire, range fan and danger areas will be provided by Range Control at the time the range is checked-out. Firing personnel shall be in an armored vehicle in a buttoned up mode with single hearing protection during firing. Spectators shall not be allowed within the surface danger zone or noise hazard contour during firing.

2. If the inert M68 line charge is the only weapon system to be fired, it is not necessary to close Hwy 172. Bear and North Towers must still be manned and an aerial search/sweep must still be conducted due to the SDZ of the rocket. Unit must police up the expended line charge(s) and remove it from the range.
RANGE NAME: G-6/CBC

DESCRIPTION: Infantry Company Battle Course

PRIMARY RANGE USE: Infantry Company Battle Course
(Company Live Fire and Maneuver)

ALTERNATE RANGE USES:
1. Basic Techniques of Fire Range
2. Squad/Platoon, Live Fire and Maneuver Range.
4. Machinegun Field Firing Range

LOCATION:
Grid Coordinate: 94513280
1st Objective: 94193380
2nd Objective: 93753421
3rd Objective: 93423442

PRIMARY DIRECTION OF FIRE:
354 degrees magnetic for 1st Objective
330 degrees magnetic for 2d Objective
335 degrees magnetic for 3d Objective

WEAPONS ACCOMMODATED:
All military pistols
M16/M4 Rifle
M249 Squad Automatic Weapon/M27 IAR
M203/M32 Grenade Launcher
M40/MK-11/MK12 Sniper Rifle
M240B/G Machinegun
M2 .50 cal Machinegun (Limited)
M82 SASR .50 cal Sniper Rifle (Limited)
MK-19 40mm Grenade Launcher
AT-4 M136 (9mm only)
M72A7 LAW and Sub-Cal Trainer
SMAW MK-153 (9mm/Live Missiles)
M242 25mm Chain Gun/LAR (Limited)
AAV .50 cal/40mm Machinegun (Limited)

AMMUNITION AUTHORIZED:
All Pistol Ammunition
5.56 mm (ball/linked/tracers)
7.62 mm (ball/linked/tracers)
.50 cal (ball/linked/tracers)
.50 cal (all DODICs, except A606)
40mm (TP, TP Linked Only)
AT4 Rocket (9mm Only)
M72A7 LAW and Sub-Cal Trainer
SMAW Rockets (9mm/TP Only)

A-112
TARGETS/SIMULATORS/DEVICES

Target Description/Quantity:

Bunkers: 9
Trench Lines: 4
Armor Targets: 10
Infantry Targets: 24 (PITS, Unit must provide them)
Moving Infantry Targets (TBD)
Stationary Infantry Targets (TBD)

FACILITIES (Number of each):

Head Facilities: None
POV Parking Area: None
Range Tower: None
Range Tables: None
Building Fronts: 7

UTILITIES AVAILABLE:

Electricity: No
Lights: No
Water System: No

INSTALLED COMMUNICATIONS:

None

AREA SUITABILITY:

Company (-) or (+)

Range Use Restrictions/Comments/Conflicts

SDZ (A) 7.62mm and Below Conflicts With


NOTE: 7.62mm is limited to the 2d Objective only.

SDZ (B) .50 Cal and Above Conflicts With


NOTE: .50 cal is limited to the 1st objective only from the .50 cal firing pad. The DODIC A606 round is not authorized on G-6/CBC.
1. This range requires a written Special Range Request (SRR) as per this SOP. The using units will submit a SRR with signed ORM to Range Control at least 10 working days before the RFMSS scheduled event. This range requires the unit to deconflict any conflicts.

2. G-6/CBC Live Fire Addendum is published under separate cover with additional issues, concerns, and measures that unit must complete/accomplish before going in a “HOT” status. All using units will coordinate with Range Control to obtain a copy of the Live Fire Addendum for G-6 CBC.

3. All live fire and the effects of live fire, must impact within the G-6/CBC approved surface danger zone/G-10 impact area only. This range requires very close, detailed coordination, and deconfliction with other training events that could be scheduled.

4. Live fire and maneuver/movement is authorized for both day and night on this range. A walk through and dry fire rehearsal must be conducted prior to all live fire and maneuver/movement both day and night under the same conditions.

5. All units conducting live fire and maneuver/movement will conduct a terrain walk with the Range Safety Specialist; contact him at 451-1240 at least 5 working days in advance.

6. Only Practice Hand Grenades with fuzes are authorized in the trenches.

7. When conducting live fire in the trenches, the using units must ensure that the direction of fire is maintained within the approved SDZ only. At no time will live fire be directed toward Highway 172.

8. Firing of the AT-4, M72A7 LAW Sub-Cal, or SMAW 9mm spotting rounds or the SMAW Training Practice (TP) Rocket at the bunkers is authorized. Units may fire at temporary targets approved by the Range Control Officer or the approved hard targets that are in place.

9. Night operations/training is authorized, night vision devices are authorized.

10. It is recommended that the Range OIC/RSO have red smoke and red pyrotechnic on this range for all live fire to cease all operations/training in case of emergency.
11. Bivouacking is authorized south of Highway 172 near the front of Range G-5 or the GH training area if properly scheduled in RFMSS. This area can also be used for a vehicle (POV) parking area if properly scheduled/coordinated with Range Control and the vehicle(s) have a Range Control POV pass. Bivouacking north of Highway 172 on the CBC G-6 range complex is not authorized.

12. All wheeled and tracked vehicles will stay on the gravel roads provided at all times. No off road movement beyond the 1st objective.

13. All machineguns and/or mortars at the scheduled and signed for mortar positions must be registered before the scheduled live fire and movement event.

14. No overhead live fire with mortars or machineguns is authorized on this range.

15. No movement past Objective 3 into the G-10 impact area. Dud producing ammunition is authorized and can be used on the targets beyond the 3d Objective.

16. Digging on this range is not authorized except for the required purpose for the proper deployment and safety of designated weapon systems. Sandbags must be provided and filled by the unit prior to occupying the range. Prior to departing the range, the unit will ensure all sandbags are removed; holes are filled in and leveled. Units are not authorized to remove sandbags from the bunkers.

17. Using units will schedule one additional day for detailed police call/maintenance inspection/EOD sweep of the entire range complex.

Special Instructions

1. A red range flag will be flown at the entrance of the G-6/CBC Range along Highway 172.

2. Be familiar with the contents of Chapter 5, Appendix A of this SOP, and the Live Fire Addendum for G-6/CBC.

3. It is the responsibility of the Range OIC/RSO to ensure all designated gates/barricades are secured and that all road guards are posted properly. Road guards must be equipped with a radio.
operating on a unit frequency (not BLACKBURN’s 34.70 FM). Road Guard positions are listed in G-6/CBC Map/Overlay.

4. The using unit will ensure that a search is made of the entire G-6/CBC area prior to commencing any live fire. Gates that are found to be unsecured must have verification that all persons are cleared prior to any live fire being conducted.

5. Communication between the Range OIC/RSO and designated PSOs with the maneuver elements must be maintained at all times.

6. All live fire must remain within the left and right lateral limit signs. Dud producing ordnance must impact beyond the (last) 3d objective only.

7. Vehicle mounted weapons systems are authorized. The .50 Cal machinegun will fire from one location on this range only (See CBC G-6 Live Fire Addendum). Such authorization will be for static fire only. No targets will be engaged by moving vehicles. Free guns are not authorized on this range; all machineguns must be attached to the T&E mechanisms and can only engage the two armor targets (Army M113s) on the 1st objective only.

8. If the using unit will be crossing Highway 172 in tactical formations or bivouacking on that side of the highway caution must be taken to ensure crossing is done safely. If requested, Base PMO/DPS will install caution signs to slow traffic or the unit should provide road guards with orange reflective vests.

9. The using units are responsible for ordering/scheduling Port-a-Johns if required.

10. Range Control will provide a map with all road guard and gate positions to the using unit at the time the range is checked out.

11. POVs are not authorized on Range G-6/CBC. POVs can park at G-5 only if issued a Range Control POV Pass if the using unit schedules the range for that purpose.
RANGE NAME: G-7

DESCRIPTION: Infantry Weapons Range
Field Artillery Direct Fire Range

PRIMARY RANGE USE: Infantry Weapons Range/
Artillery Direct Fire Range

ALTERNATE RANGE USES: 1. AAV Gunnery Range
2. MK-19 40mm Range
3. .50 cal Machinegun Range

LOCATION: Grid Coordinate: 95873450

PRIMARY DIRECTION OF FIRE: 154 degrees magnetic

WEAPONS ACCOMMODATED: All Military Pistols
12 Gauge Shotgun
M16/M4
M249 SAW/M27 IAR
MK19 40mm
M2 .50cal Machinegun
M240B/G and M240E Machinegun
M40/MK-11/MK-12 Sniper Rifles
.50 cal Sniper Rifle (SASR)
M777A1/A2 155mm
(Direct Fire Only)

AMMUNITION AUTHORIZED: Pistol Ammunition (All DODICs)
12 Gauge (All DODICs)
5.56mm (All DODICs)
7.62mm (All DODICs)
.50 cal (All DODICs except A606)
40mm (All DODICs)
155mm (HE DODICs, D544 and D595)

TARGETS/SIMULATORS/DEVICES: Hard Targets: 9 armor hulks

FACILITIES (Number of each): Head Facilities: None
Range Tower: 1 (Wooden
POV Parking Area: None
Range Tables: None
Dirt Berm: 1
Concrete Ammo Pad: 1

A-117
UTILITIES AVAILABLE:

Electricity: No
Lights: No
Water System: No

INSTALLED COMMUNICATIONS:
None

AREA SUITABILITY

Company/Platoon/Section

Range Use Restrictions/Comments/Conflicts

1. All live fire will impact in the N1/BT3, Brown’s Island impact area. An aerial sweep of the entire area is required, including the AIWW prior to firing. The AIWW must be closed during live fire. Onslow Beach North Tower and Bear Tower must be manned prior to and during live fire firing.

2. Artillery direct fire only. No high velocity rounds authorized exceeding 25,000 yards fixed seaward. Projectiles will not be fired to impact within 200 meters of the AIWW. Only (1) one M77A2 155mm howitzer can fire (Direct Fire) at a time.

3. Maneuvers are not authorized down range past 50 meters unless escorted by Base EOD.

4. Night use is authorized up to 2300 if properly scheduled in RFMSS.

5. Class 3b and Class 4 LASER devices are not authorized on this range.

6. Digging on this range is not authorized except that required for proper deployment and safety of designated weapon systems. Sandbags must be provided and filled by the unit prior to occupying the range if needed or required. Prior to departing the range, the unit will ensure all sandbags are removed; holes are filled in and leveled out. Do not bury any trash/ammunition dunnage on this range.

7. Firing from stationary vehicles is authorized. Firing from a moving vehicle is not authorized.

Other Considerations. The firing berm is about 225 feet long by 24 feet wide and vehicle can move within 100 meters down range of the firing berm.

Special Instructions
1. In addition to the RSO, the Range OIC will appoint position safety officers as required and four range tower guards equipped with radios. Range tower guards posted on the towers will be equipped with binoculars, night vision devices (if firing at night), and radios. The using units will post range tower guards at least one-half hour before an aerial/surface search. Sectors of observation are:

a. Bear Creek Tower Guard:
   064 degrees magnetic to 190 degrees magnetic.

b. Onslow Beach North Guard:
   055 degrees magnetic to 270 degrees magnetic.

2. One hour prior to commencing live fire until termination, fly a red range flag during daylight hours, and display red flashing lights from sunset until sunrise at flag poles and on top of the range towers at:

a. Bear Creek Tower.

b. Onslow Beach North Tower.

c. Main entrance to Range G-7.

3. Tower guards must have at least three miles visibility seaward or the range will not be allowed to go into a “HOT” status.

4. Range tower guards will be instructed to call via radio the Range OIC/RSO immediately before any water vessel(s), aircraft (s) and sea mammal(s) penetrates the surface danger area as shown on the range fan overlay for G-7. Range tower guards will also be directed to raise and lower range flag and turn on flashing lights at the required times. Range Tower guards are not authorized to be inside the tower itself and are only authorized to use the catwalk/platform only.

5. The using unit will ensure that a detailed search (Surface and Aerial) is made of the entire impact area, N1/BT-3, Browns Island, AIWW, all marshes/wetlands, dunes, and ocean areas within the surface danger zone area at least one-half hour prior to live fire to ensure that all areas are safe for live fire. Range Control will schedule a helicopter for the using unit provided the range has been scheduled one calendar month in advance of intended use. If not scheduled on calendar month out
the using unit will be responsible for scheduling a sweep aircraft.

6. Range tower guards will be in communication with the ROIC/RSO and the Navy Safety/Guard Boats prior to the aerial/surface search.

7. Range Control will provide Navy Guard Boats to be positioned in the AIWW near Bear Creek and Freeman Creek to control all boat traffic during periods of live fire.

8. Navy Guard Boats, equipped with radios and operators will stop all civilian waterborne traffic and hold them in place at their guard boat positions for a period of one hour. At the end of the hour, the range will be put in check fire and boats will be allowed to proceed. For general planning purposes live fire will be conducted during even hours (0800, 1000, 1200, and 1400 as an example) and the the unit will be placed in a check fire during odd hours (0900, 1100, 1300, and 1500 as an example). When all boat traffic has cleared the Navy Guard Boats, firing may resume. The following types of vessel(s) will not be stopped and the range will be placed in an immediate check fire until they have completed their passage of the SDZ:
   a. Vessels belonging to the U.S. Coast Guard.
   b. Vessels belonging to the U.S. Army Corps of Engineers.
   c. Commercial Barges under tow.
   d. Civilian law enforcement vessels.

9. If at any time the Navy Boat Crew's coxswain determines weather conditions, seas state, high winds in the AIWW are hazardous to the safety of his/her craft, the coxswain will contact the Range OIC/RSO and Range Control, BLACKBURN and the range will go “COLD”. Navy Safety Boats are present to assist the range user, but work directly for the Range Control Officer and BLACKBURN.

10. Firing will cease if range flag or flashing lights are lowered or extinguished for any reason.

11. Contact relief of the tower guards is a unit responsibility. After the first range sweep for the day has been completed and tower guards have been posted, other units authorized to use Range G-7 during later periods of the same day
are urged to affect contact in relief of tower guards. Otherwise, subsequent range sweeps will be required prior to resumption of live fire. If night fire is scheduled another sweep (Aerial/Surface) must be scheduled and conducted prior to darkness.

12. Explosive rounds will be fired at G-7/Browns Island only by direct fire artillery. All other HE type ammunition being fired by the MK-19 must be on this side (north side) of the very large dirt berm down range on G-7.

13. Telephone capabilities are available at the Bear Creek Tower and Onslow North Tower.

14. Internal radio communication will be established between the unit conducting live fire Range OIC/RSO, range tower guards, firing line, and Navy Safety/Guard Boats on frequency 38.45 FM and Range Control, BLACKBURN on frequency 34.70 FM. A total of six radios: five for internal communication requirements and one for Range Control, BLACKBURN are required. If the range phone is not operational, an additional radio is required as back-up to Range Control, BLACKBURN.

15. Be familiar with the contents of this entire Range Control SOP and Appendix A.

16. A road guard will be posted at the entrance to G-7.

17. Very strict compliance of this SOP when firing direct fire artillery and .50 cal machinegun due to noise and the assigned surface danger zone (SDZ) to ensure that all live fire and the effects of live fire stay on federal/government property at all times.

18. Unit must remove all ammunition dunnage, conduct a detailed police call of the entire range to include the range towers and the surrounding training area.

19. Range must be inspected and cleared by a range inspector prior to departing range/training area. Range OIC/RSO will complete and submit a range report upon completion of training and turn-in of range. Report all maintenance problems/issues to a range inspector and or ICE Comment.

20. Additional direct fire artillery live fire requirements:
a. The minimum target engagement distance for HE 155mm direct fire, when unprotected troops are located in the firing position, is 750 meters.

b. When constructing the direct fire surface danger diagram, Distance X, per Chapter 11 of MCO P3570.1B/DA PAM 385-63, will not be less than the range corresponding to an elevation of 267 mils for the charge fired.

c. Area D will not be occupied during direct fire.

d. Howitzers may be rough laid using the grid azimuth method, a safety circle is not required. Howitzers may also be laid digitally on the azimuth of fire (AOF).

e. Prime movers and ground guides will not move more than 80 meters forward of the firing berm when moving howitzers in and out of position.

f. The initial azimuth to orient the howitzer is 2520 mils. The left azimuth boundary of the left-most gun is 2422 mils and the right azimuth boundary of the right-most gun is 2618 mils.

g. No Safety “T” is required for artillery direct fire.

h. Direct fire artillery can only engage targets center range and to the right side of the range. Units should avoid all targets on the left hand side of the range.
RANGE NAME: G-19A

DESCRIPTION: Light Anti-Armor Weapons and Shoulder-Launched Multipurpose Assault Range

PRIMARY RANGE USE: Light Anti-Armor/Anti-Tank Weapons Range
Shoulder-Launched Multipurpose Assault Weapon Range

ALTERNATE RANGE USES: 1. Light Anti-armor (9mm and 21mm sub-caliber) Weapons FAM Range
2. SMAW Field Firing Range

LOCATION: Grid Coordinate: 89763423

PRIMARY DIRECTION OF FIRE: 075 degrees magnetic

WEAPONS ACCOMMODATED: 83mm MK-153 SMAW
84mm M136 AT-4 (HEAT)
M72A7 LAAW 66mm

AMMUNITION AUTHORIZED: 9mm Spotter Rounds (AT-4/SMAW)
83mm SMAW (All DODICs)
84mm M136 AT-4 (HEAT)
AT-4 9mm Training Device
M72A7 LAAW 66MM (DODIC HA29)
M72A7 21mm Trainer (DODIC HA21)

TARGETS/SIMULATORS/DEVICES: 8 Armor (EODT) Hulks

FACILITIES (Number of each): Head Facilities: 2 Port-a-John
Range Tower: None
Dirt Firing Berm: 1
Range Tables: 2
POV Parking Area: Very Limited, must have a RCD POV pass
Ammunition Bunker: 1
Outdoor Classroom/Bleachers: 1
Wooden Firing Points/Wall: 4

UTILITIES AVAILABLE: Electricity: No
Lights: No
Water System: No
PA System: No
**INSTALLED COMMUNICATIONS:** Phone: 450-5671

**AREA SUITABILITY**

Company/Platoon/Section

**Range Use Restrictions/Comments/Conflicts**

1. Firing on this range will impact in the G-10 Impact Area.

2. No down range movement past the firing berm/signs is authorized on this range without EOD support.

3. Class 3B and 4 LASERs are not authorized on this range.

4. Night use is authorized if properly scheduled in RFMSS.

5. Units are not authorized to emplace additional targets in the impact area (dud hazard) down range.

6. Ensure all safety procedures and precautions listed in appropriate references for the weapon system are in place, supervised, and enforced for all preparations and firing operations.

7. These weapons systems contain high explosive warheads and rocket motors with very loud noise levels and can be hazardous to all operators and bystanders if appropriate safety precautions and proper PPE are not followed.

8. The extreme over pressure and noise created when firing rockets require special precautions during live fire and unit must observe the daily firing limitation for that weapon system.

9. This range will cause a conflict with G-10 Helo/Fixed Wing.

10. This range must be inspected and cleared by a range inspector prior to departing the range/training area. ROIC/RSO will complete and submit a range report upon completion of training and turn-in of range. Report all maintenance problems to a range inspector, Range Control and or ICE Comment.

11. Vehicles are not authorized on the firing berm, off road on the grass, or in the woods at any time on this range.

12. Digging on this range is not authorized except that required for proper deployment and safety of designated weapon systems. Sandbags must be provided and filled by the unit prior
to occupying the range if needed or required. Prior to departing the range, the unit will ensure all sandbags are removed; holes are filled in and leveled out. Do not bury any trash/ammunition dunnage on this range.

13. Units must police up the back blast area for any dunnage or debris from the live fire event and remove it from the entire range complex.

Other Considerations

1. This range has a firing berm 70 feet by 25 feet.

2. Be familiar with Chapter 5 of this SOP.

3. All live fire and the effects of live fire must be within the approved surface danger zone of G-19A and that weapon system at all times.

4. POV parking on G-19A/B will be authorized on this range but will be limited to four (4) to six (6) POV vehicles if assigned a Range Control POV Pass and the POV vehicles are parking in the authorized area only. Tactical vehicles will always have the priority for the parking spaces. Units must control the number of POVs on this range as per this SOP because of limited assigned parking area. POVs and tactical vehicles are not authorized to park on the tank trails, grass, in the woods, along the Sneads Ferry Road, by OP-5, or on Range G-3. Additional POVs can park over by the pump house across the road from Range G-3 but can not block the gate to the structure itself. If POVs are found on this range without a RCD POV Pass, not in the assigned parking area, or parking in the surrounding training areas the range will be placed in a check fire status until the problem is resolved/corrected by the Unit Range OIC/RSO.

5. Bivouacking on this range is authorized if requested and properly scheduled in RFMSS. At no time will anyone enter the G-10 Impact Area without EOD support.

Special Instructions

1. A red range flag will be flown at the entrance to the range.

2. A range guard will be posted at the entrance of this range and must maintain internal communication with the Range OIC/RSO at all times.
3. Ensure the back blast area for each rocket system is cleared of all vehicles and personnel at all times. Units must ensure the entire Area F is clear.

4. Flak jacket, helmet, hearing and eye protection are required and will be worn on this range during all firing.

5. A road guard will be posted on the vehicle trail to prevent vehicles/personnel from passing behind the back blast.

6. Firing anti-armor rockets in pairs (two) is authorized on this range. Firing more than one rocket is authorized as long as all safety procedures are in place.

7. Using units must ensure all mis-fire procedures for that rocket system are followed and supervised.

8. Using units will ensure minimum target engagement ranges are in place, and enforced depending on the rocket system being fired.

9. Using units will report all ammunition fired down range that did not function properly as (UXO) to BLACKBURN.

10. Small arm ammunition (Live 5.56mm/7.62mm) are not authorized on this range.

11. Unit must ensure a minimum range to impact (minimum target distance/minimum safety distance) for the rocket system being fired are in place and enforced.
RANGE NAME: G-19B

DESCRIPTION: Grenade Launcher Range

PRIMARY RANGE USE: Grenade Launcher Range

ALTERNATE RANGE USES:
1. M203/M32 FAM Fire Range
2. M203/M32 Zeroing Range
3. M203/M32 Qualification Range

LOCATION: Grid Coordinate: 89833409

PRIMARY DIRECTION OF FIRE: 063 degrees magnetic

WEAPONS ACCOMMODATED:
M203 Grenade Launchers
M32 Multi-Shot Grenade Launcher

AMMUNITION AUTHORIZED:
40mm (All DODICs), (Except 40mm CS)

TARGETS/SIMULATORS/DEVICES:
Zero Panels, Windows, Bunkers, Troops in the Open, Emplaced Troops, Automatic Weapons Positions

FACILITIES(Number of each):
Head Facilities: 2 Port-a-John
Range Tower: None
Dirt Firing Berm: 1
Range Tables: 2
POV Parking Area: Very Limited, must have a RCD POV pass
Ammunition Bunker: 1
Outdoor Classroom/Bleachers: 1
Wooden Firing Points/Wall: 4
Firing Roof: 2

UTILITIES AVAILABLE:
Electricity: No
Lights: No
Water System: No

INSTALLED COMMUNICATIONS:
Telephone: 450-5670

AREA SUITABILITY
Company/Platoon/Section

Range Use Restrictions/Comments/Conflicts

1. Firing on this range will impact in the G-10 Impact Area.
2. No down range movement past the firing berm/signs is authorized on this range without EOD support.

3. Class 3B and 4 LASER devices are not authorized on this range.

4. Night use is authorized if properly scheduled in RFMSS.

5. Units are not authorized to emplace additional targets in the impact area (dud hazard).

6. Ensure all safety procedures and precautions listed in appropriate references on the weapon and ammunition are in place, supervised, and enforced for all preparations and firing operations.

7. Most 40mm ammunition contain high explosive warheads and can be hazardous to all operators and bystanders if appropriate safety precautions are not followed.

8. This range will cause a conflict with G-10 Helo/Fixed Wing.

9. This range must be inspected and cleared by a range inspector prior to departing the range/training area. Range OIC/RSO will complete and submit a range report upon completion of training and turn-in of range. Report all maintenance problems to a range inspector and or ICE.

10. Vehicles are not authorized on the firing berm or off road at any time on this range.

11. Digging on this range is not authorized except that required for proper deployment and safety of designated weapon systems. Sandbags must be provided and filled by the unit prior to occupying the range if needed or required. Prior to departing the range, the unit will ensure all sandbags are removed; holes are filled in and leveled out. Do not bury any trash/ammunition dunnage on this range.

12. Maintain a minimum of 6 meter separation between firing positions with the M203/M32.

13. All DODICs for 40mm M203/M32 are authorized except 40mm CS as long as all minimum safe distances (165 meters for HEDP, 130 meters for HE) are in place, enforced, and supervised.
14. Using unit will report all ammunition fired down range that did not function properly (UXO) to BLACKBURN.

Other Considerations

1. This range has a firing berm 70 feet by 25 feet.

2. Be familiar with Chapter 5 of this SOP.

3. All live fire and the effects of live fire must be within the approved surface danger zone of G-19B at all times.

4. POV parking on G-19A/B will be authorized on this range but will be limited to four (4) to six (6) POV vehicles if assigned a Range Control POV Pass and the vehicles are parking in the authorized area only. Tactical vehicles will always have the priority for the parking spaces. Units must control the number of POVs on this range as per this RC SOP because of limited assigned parking area. POVs and tactical vehicles are not authorized to park on the tank trails, grass, in the woods, along the Sneads Ferry Road, by OP-5, or on Range G-3. Additional POVs can park over by the pump house across the road from Range G-3 but can not block the gate to the structure itself. If POVs are found on this range without a RCD POV Pass, not in the assigned parking area, or parking in the surrounding training areas the range will be placed in a check fire status until the problem is resolved/corrected by the Unit Range OIC/RSO.

5. Bivouacking on this range is authorized if requested and properly scheduled in RFMSS.

Special Instructions

1. A red range flag will be flown at the entrance to the range.

2. Range guard will be posted at the entrance of this range and must maintain internal communication with the Range OIC/RSO at all times.

3. Flak jacket, helmet, hearing and eye protection are required and will be worn on this range during all live fire.

4. Firing M203/M32 40mm in pairs (two) is authorized on this range. Firing more then one (1) M203/M32 at a time is authorized as long as all safety procedures are in place and enforced.
5. Using unit must ensure all mis-fire procedures are followed.

6. The using unit will replace any damaged sandbags and clean out, clean up the firing positions on the firing berm.

7. MK-19 40mm machinegun is not authorized for this range.

8. All personnel will be instructed in the proper use of all safety precautions/immediate action procedures before conducting live firing. Unit must build a dud pit on the side of the berm if needed and the dud must be removed by the unit or EOD.

9. Firing small arm ammunition is not authorized on this range.

10. Using unit must ensure a minimum range to impact (minimum target distance/minimum safety distance) for M203/M32. HEDP must not engage target closer then 165 meters and HE is 130 meters.
RANGE NAME: H Range

DESCRIPTION: Waterborne Live Fire Range

PRIMARY RANGE USE: Riverine Assault Range
Waterborne Gunnery Range
Oceanside Gunnery Range (N1/BT-3)

ALTERNATE RANGE USES: Rotary Wing Aerial Gunnery Range

LOCATION: Grid Coordinate: 95303070

PRIMARY DIRECTION OF FIRE: 155 degrees magnetic

WEAPONS ACCOMMODATED: M16/M4
M249 SAW
M240B/G Machinegun
MK-44 Mini-Gun 7.62mm
M2 .50cal Machinegun
MK-19, 40mm Machinegun
All Rotary Wing Weapons
M203 Grenade Launcher

AMMUNITION AUTHORIZED: 5.56mm
7.62mm
.50 caliber
20mm (TP only)
30mm (TP only)
40mm (TP only) linked
2.75 inch rockets (TP only)
40MM Ilumination Round B535
Handheld Illumination L312

NOTE: Dud Producing Ammunition is NOT authorized on this range.

TARGETS/SIMULATORS/DEVICES: 5 Armor type targets

FACILITIES(Number of each): Head Facilities: None
Range Towers: 2
POV Parking Area: None

UTILITIES AVAILABLE: Electricity: No
Lights: No
Water System: No
INSTALLED COMMUNICATIONS: None

AREA SUITABILITY: Section/Platoon

Range Use Restrictions/Comments/Conflicts

1. This live fire range is restricted for migrating whales (November 21 through March 31 each year) and during sea turtle season (May 15 through October 31 each year) and live fire could be delayed until the situation with the whale or other sea mammal sighting or turtle sighting has been resolved.

2. Live fire will cease if a civilian/military boat(s) or aircraft enters the assigned surface danger zone of N1/BT-3, Browns Island impact area. Very strict compliance of this SOP when conducting live fire due to noise issues and the assigned surface danger zone to ensure all live fire and the effects of live fire stay on federal/government property/controlled water at all times. All tower guards must be alert and observing seaside at all time to ensure that a watercraft does not enter the surface danger zone and to give early warning to the Range OIC/RSO to cease fire.

3. Maneuvers with boats/watercraft are authorized in the waterways only. Movement inland on foot is limited and restricted. Base EOD support will be required for this type of training event. Boats should use caution during low tide, for possible sandbars and other water obstacles that may or could be present.

4. Night use is authorized after an additional before darkness surface sweep is conducted. Using units must use radar if equipped and night vision goggles to ensure the surface danger zone, and surrounding islands/inlets are clear at all times.

5. Class 3B and Class 4 LASER devices are not authorized on H Range.

6. Firing from stationary or moving watercraft is authorized.

7. Conflicts with Range G-5, G-7, and training area GH.

8. G-10 Helo/Fixed, G-10 Naval Gunfire could be a potential conflict if not properly deconflicted by the using units.
Other Considerations

1. Range Control will provide Navy Safety Boats and request an air sweep if the range request is submitted within the required time limits. However, if a unit requests the range without the proper lead time. The using unit has the responsibility to schedule a sweep aircraft via their unit’s Air Officer.

2. Using units must schedule H Range at a minimum of one calendar month in advance to ensure publication of a Notice to Mariners. This is also the required lead time for Range Control to schedule a sweep aircraft.

3. Be familiar with Chapter 5 of this SOP.

Special Instructions

1. Red range flag are flown from flagpoles at Onslow North Tower, and Bear Creek Tower while this range is in a “HOT” status.

2. Observers posted at Onslow North Tower and Bear Creek Tower must be manned prior to the air and surface sweep, the sweeps must be conducted before the unit can be placed into a live fire status. Tower guards (Two) must have binoculars, radio communications with Range OIC/RSO and be in place at least one half hour prior to air and surface sweep. Sectors of observation are as follows: Bear Creek Tower 058 to 223 degrees and Onslow North Tower 035 to 235 degrees. If live fire is done at night, tower guards are required to have night vision goggles. Tower Guards can not be inside the towers unless pre-arranged with Range Control, they can only be on the cat walk/platforms only. Tower Guard must alert and observing at all times out to sea, up and down the AIWW for all small water craft so all live fire can be halted as quickly as possible.

3. Navy Boat Crew will position (3) boats when this range is scheduled and live fire is being conducted. Navy Guard Boat 1 will be located in the vicinity of grid 932295. Navy Guard Boat 2 will be located in the vicinity of Bear Tower Grid 976341. Navy Boat 3 (Speedy) will be located in the AIWW. The ocean side boat is weather dependent and a call will be made by the senior Navy Boat Crew member on whether this position can be maintained due to the sea state.
4. Positive communication with the road/tower guards, Navy Boat Crew, sweep aircraft and BLACKBURN must be maintained at all times.

5. The range will be put into a check fire or secured if the sea state goes above Sea State Three (3).

6. Ensure that there is a dedicated government safety vehicle and a corpsman present during all live fires and located at Freeman Creek Landing or Onslow Beach Bridge during low tide. Freeman Creek landing must be scheduled in RFMSS as a separate event.

7. No dud producing rounds will be fired into the N1/BT3 Impact Area/Brown’s Island. The only authorized DODIC for the MK-19 40mm is BA12.

8. All small arms and MK-19 40mm (TP Only) fire will be directed toward the armor type targets (old Army M113’s) in the impact area and must be directed out to sea. Do not shoot at the Connex Boxes marked with white and yellow stripes; they are the left and right lateral limit signs for the H-Ranges. There are a total of 4 connex boxes (LLL/RLL Signs) on the range.

9. Unit will conduct dry runs prior to each live fire exercise to ensure all personnel are familiar with the physical boundaries (left and right lateral limits) of the range and direction of fire.

10. There are three assigned runs authorized at H-Range (H-1 intracoastal waterway, H-2 South side of Browns Island towards Browns Inlet, and H-3 North side of Browns Island towards Browns Inlet).

11. Using unit will contact Base Explosive Ordnance Disposal (EOD) after the live fire training event and report any/all duds that may be located or seen while training is being conducted.

12. Only the even hours (0800, 1000, 1200, and so on) are authorized for live fire. During odd hours 0900, 1100, 1300, and so on) the range will be in “Check Fire” status to allow civilian traffic on the Atlantic Intracoastal Waterway (AIWW).

13. Weapons will be kept in a Condition 4 until the watercraft are in the N1/BT3/Brown’s Island impact area/buffer area. All loaded and armed weapons will be pointed seaward only in the
approved SDZ. At no time will unit dump brass, links, ammunition cans, trash into the waterways.

14. Communication will be maintained with each and every watercraft and tower guards on a separate frequency. Range OIC/RSO will maintain normal communication with BLACKBURN at all times.

15. Any man size targets (Wet Sand Area Only) added to the H Range must be removed after the training event and must have Base EOD support to add and remove. At no time will steel engineer stakes be used on this range.

16. Using unit must have foul weather, man overboard, and sinking watercraft safety plans, as well as a HazMat Plan for fuel spills from watercraft.

17. Using unit will be required to submit a special range request using the standard format 10 working days before the scheduled event.

18. The using unit will contact Range Control, Range Safety for the approved SDZs and standard direction of fires.

19. Ensure all other regulations dealing with water operations and watercraft safety procedures are strictly adhered to and supervised. All military boats/using units must use common courtesy and follow standard waterway rules and policies while operating watercraft on the public waterways like the AIWW, New River, and Atlantic Ocean at all times.

20. If AIWW is scheduled to be closed, Navy Boat Crew must secure the waterway, and a Notice to Mariners must be published at least fourteen (14) days in advance. The AIWW must be opened every other hour.

21. Using unit must deconflict with G-3 .50 cal to open up Highway 172 when placing or changing out unit tower guards and placing the safety vehicle and corpsman at Freeman’s Creek Landing.

22. **Sweep Aircraft Procedures**

   a. When the sweep aircraft checks in with BLACKBURN on 233.8 UHF (primary), 119.5 (alternate), or 34.70 VHF, BLACKBURN will contact the Navy Guard Boats and the unit, providing the sweep bird’s call sign.
b. Navy Guard Boat 1 will be located in the vicinity of grid 932295. It will have a Blue flashing light and flying the Bravo Flag (red flag).

c. Navy Guard Boat 2 will be located in the vicinity of Bear Tower Grid 976341. It will have a blue flashing light and flying the Bravo flag.

d. Navy Speedboat (Speedy) will be located in the AIWW during the sweep.

e. BLACKBURN will read the following safety brief to the sweep aircraft:

"Sweep the N1/BT3 impact area from the AIWW to 4 miles seaward. Sweep the marshes, creeks, and AIWW between North Onslow Beach Tower (Grid 931288), Bear Tower (grid 974342), and Bear Inlet (Grid 955332). Sweep the beach between North Onslow Beach Tower and Bear Inlet as well as four miles seaward. Report any whale sightings to BLACKBURN. Report personnel and surface craft contacts to Navy Guard Boat with minimum four (4) digit grid. Do you have any questions at this time?"

f. BLACKBURN will ask the sweep aircraft to contact the Navy Guard Boat on CH 16 (Marine VHF common) expecting a further switch to CH 72 to discuss contacts. If unable to establish/maintain communication with Navy Guard Boats on CH 16 (156.800) or CH 72 (156.625) the sweep aircraft will contact BLACKBURN. Military aircraft without Marine VHF radio capability may establish communications the Navy Guard Boats on 34.70 FM. If any aircraft is unable to establish communications with Navy Guard Boats, BLACKBURN will relay all findings to Navy Guard Boats.

g. When the sweep is complete, the aircraft will be held on station until BLACKBURN can verify with the Range OIC/RSO and the Navy Guard Boats that the area is clear and they are satisfied with the sweep that was conducted.

If the Range OIC/RSO and the Navy Guard Boat are satisfied with the sweep, BLACKBURN will state to the aircraft: "I understand you had positive communication with the Navy Guard Boats. Confirm you have identified all personnel and surface craft contacts to Navy Guard Boats and Navy Guard Boats have cleared contacts from the area." Ask the sweep aircraft for requested route and clearance if possible.
RANGE NAME: I-1

DESCRIPTION: Baffled Small Arms Range
Pistols, Rifle, Shotgun Range

PRIMARY RANGE USE:
1. Small Arms Qualification/Requalification Range
2. Non-Lethal Wpns Range
3. Shotgun (Non-Lethal Only)

ALTERNATE RANGE USES: Small Arms Familiarization

LOCATION: Grid Coordinate: 84272783

PRIMARY DIRECTION OF FIRE: 118 degrees magnetic

WEAPONS ACCOMMODATED: All military issues pistols (.45/.40 cal or less)
All Rifles (7.62mm or less)
All Sniper Rifles (M40/MK-11/MK-12
12 Gauge Shotgun

AMMUNITION AUTHORIZED: Pistol, .45 cal/.40 cal/9mm
Rifle, 7.62mm or less
All 12 gauge non-lethal ammunition
No armor piercing or tracer type ammunition authorized on this range.
12 Gauge Shotgun Buck shot/Slug (USCG Only) with wooden protectors

TARGETS/SIMULATORS/DEVICES: 16 firing points

FACILITIES (Number of each):
Head Facilities: 2 Port-a-Johns
POV Parking Area: ETA-1
Range House: 1
Range Tables: 5
Bleachers: 1
Metal Storage Building: 1
Loud Speaker System: 1

UTILITIES AVAILABLE: Electricity: Yes
Lights: No
Water System: No

INSTALLED COMMUNICATIONS: Telephone: Yes
Range Use Restrictions/Comments/Conflicts

1. Firing lines are located at 7, 15, and 25 meters for Marine Units. Firing Lines for USCG/US Navy JMTC are located at 3, 7, 10, 12, 15, 17, 20, and 25 meters.

2. Recreational shooting (Civilian Weapons/Ammunition) is not authorized on this range.

3. Live fire and maneuver for Marine units are not authorized. USCG/Navy JMTC are authorized forward and backward movement while engaging targets as long as all shooters are on line and controlled as per the JMTC/USCG POIs and the annual special range request. Lateral movement is not authorized on this range. All shooters are required to wear helmets and flak jackets during such live fire and movement firing exercises.

4. Night use is authorized if properly scheduled in RFMSS.

5. Class 3B and Class 4 LASER devices are not authorized on this range.

6. Hearing and eye protection is required.

7. Non-Lethal ammunition cannot be fired into the bullet trap system itself. JMTC/USCG is authorized to fire shotgun non-lethal ammunition into the wooden walls that run along the length of the range only and must pick-up and remove all non-lethal ammunition debris from the range.

8. Range I-1 will be checked out and checked in at Range Control by all units. Units should deconflict with the Marine Corps Engineer School (MCES) Demo Range Staff during normal working hours or Courthouse Bay Area Officer of the Day at 450-7275 during non-working hours/weekends/holidays.

9. The area behind the bullet trap is off limits to all personnel.

Other Considerations

1. This range is assigned to Commanding Officer, MC Base and must be scheduled in RFMSS and signed for at Range Control. No
one unit has priority for this range due to its location in the Courthouse Bay/Marine Corps Engineer School (MCES) area.

2. A range contractor will set up the range and provide a qualified range operator. The operator will provide one E-type silhouette and two bull’s eye paper replacements per firing point, along with target pasties and a stapler. If the using unit requires additional targets/bull’s eyes, the unit must furnish them. Contact the contracting officer representative (COR) at 451-4480/2411 with any contract support issues. The range contractor must be on the contracted range the entire time scheduled.

3. Units must occupy a contractor-supported range with a responsible unit training representative (Not necessarily the Range OIC/RSO) within 1 hour of the “HOT” time or the range will be cancelled.

4. Using units must notify Range Control/BLACKBURN at least (4) four hours in advance if a time extension is required. The pistol range can only be scheduled 12 hour per day.

5. A range contractor will set up the targets and run the range. The unit will contact the contractor if troubleshooting of targets are required.

6. The targets system on this range use compressed air system that are operated by the contractor.

7. The range contractor will hold the only key to the building. JMTC is authorized a storage shed/container on this range but must maintain it and ensure it is secured as required.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on this range.

3. POVs are not authorized on this range. All POVs must use the range designated parking area outside the ETA-1 gate.

4. Red range flag will be flown at entrance of the range.

5. A government safety vehicle and corpsman must be present on the range prior to commencing training.
6. A range guard will be posted near the firing line/entrance.

7. Using units are responsible for a detailed police call of the entire range, in front of the bullet trap/target area, all facilities, the parking/staging and surrounding areas when training is complete.

8. Range must be inspected and cleared by a Range Inspector prior to departing range.

9. Range OIC/RSO will complete and submit a range report or use ICE Comment upon completion of all training and the turn-in of range.

10. Minimum safe distance for all 12-gauge non-lethal ammunition must be in place, enforced, and supervised as required by the command.

11. When firing 7.62mm weapons all loading and unloading will take place under the baffling only. Muzzles will only be pointed toward the bullet trap only. Additional safety procedures must be in place, enforced due to the larger surface danger zone issues with 7.62mm. At no time will 7.62mm weapons be pointed above the horizon toward the wooden baffling system. Using unit must ensure the waterways surrounding this range are clear of all boaters before conducting live fire.
RANGE NAME: K-211

DESCRIPTION: Grenade Launcher Range

PRIMARY RANGE USE: MK-19 Grenade Launcher Range

ALTERNATE RANGE USES:
1. M203/M32 Fam Fire Range
2. M240B/G Medium Machinegun Range
3. Rocket Range
4. 81mm/60mm Mortar Range

LOCATION: Grid Coordinate: 78393558

PRIMARY DIRECTION OF FIRE: 154 degrees magnetic

WEAPONS ACCOMMODATED:
M203/M32 Grenade Launcher
MK-19 Grenade Launcher
M240B/G Machinegun
60mm/81mm Mortars
AT-4, M72A7 LAW, MK-153 SMAW

AMMUNITION AUTHORIZED:
40mm (All DODICs)
7.62mm linked (All DODICs)
5.56mm linked (All DODICs)
AT-4 Rocket/9mm Trainers
M72A7 Rocket/21mm Sub-Cal Trainer
MK-153 SMAW (All DODICs)
60mm/81mm Mortars (All DODICs)

TARGETS/SIMULATORS/DEVICES:
Hard Targets: 20 armor hulks

FACILITIES (Number of each):
Head Facilities: 8 Port-a-Johns
Range Towers: 1
Bleachers with Overhead Cover: 1
Range Tables: 3
POV Parking: Range 400 Parking Lot

UTILITIES AVAILABLE:
Electricity: No
Lights: No
Water System: None

INSTALLED COMMUNICATIONS:
Phone Jack on the Tower

AREA SUITABILITY
Company/Platoon/Section

Range Use Restrictions/Comments/Conflicts
1. **The first 40 meters of this range is a “No Fire Zone” for all dud producing ordnance.** Using units are authorized to move forward up to 40 meters down range to establish firing positions or place targets for small arms range requirements. Additional targets must have prior approval from Range Control and Base EOD support is required to move farther down range. Vehicles with mounted weapons systems are authorized in front of the firing berm or on top of the berm. No more then two (2) vehicles at a time on top of the firing berm. All vehicle safety measures must be in place while driving up and down the firing berm.

2. Down range movement beyond the approved 40 meters is not authorized without Base EOD support.

3. This range is authorized for night use if properly scheduled in RFMSS.

4. Class 3B and Class 4 LASERs devices are authorized from 153 to 157 degrees magnetic down range.

5. When firing the MK-19, no hard targets will be engaged any closer than 310 meters. Using units must use ballistic goggles, sleeves down, and gloves when firing the MK-19.

6. When firing the M203 40mm, no hard targets will be engaged any closer than 130 meters with HE rounds or any closer than 165 meters with M433 HEDP rounds.

7. When firing the M240B/G Machinegun, no hard targets will be engaged any closer than 100 meters due to the ricochet hazard.

8. A minimum of 6 meter safe separation will be maintained between firing positions when firing any grenade launchers.

9. No attempt will be made to clear or mark duds. Range OIC/RSO will place the unit in a check fire if any dud is determined to be a hazard to training unit and contact Range Control/BLACKBURN for Base EOD support. If not a hazard, notify Range Control of the approximate location and number of all duds upon completion of training.

10. Firing from vehicles is authorized. No more than two (2) vehicles are authorized at one time on the berm or in front of the berm at a time. All vehicle engines will be turned off, wheels chocked, driver out of the vehicle, hand brake set, and weapon T&E mounted. A minimum of 6 meters separation will be maintained between vehicles during live fire.
11. Free gun firing must be requested and approved by Range Control. All live fire and the effects of live fire must be within the approved surface danger zone of K-211 at all times.

12. All using units must ensure all live fire restrictions are in place for firing rockets/mortars on this range to ensure the entire area such as back blast is clear and the minimum live rocket engagement areas are in place. When firing mortars all minimum engagement areas are in place such as 300 meters for 60mm and 400 meters for 81mm mortars.

13. All required PPE must be worn while on the berm or forward of the berm while this range is in a “HOT” Status.

Other Considerations. This range is affected by the activation of New River Air Station’s Runway 1. If the runway is activated, Range Control will notify the Range OIC/RSO of the required actions to be taken. Range Control will contact the Range OIC/RSO when normal training can resume.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is only authorized on this range by special range request.

3. Digging on this range/berm is not authorized except what is required for the proper deployment and safety of designated weapon systems. Sandbags must be provided and filled by the unit prior to occupying this range. Prior to departing the range, the unit will ensure all sandbags are removed and that holes are filled in and leveled out.

4. All live fire must be conducted on top or directly in front of the berm unless authorized by Range Control.

5. POVs are not authorized on this range, along the paved road, tank trails, or adjacent training areas. Use the designated gravel parking area over by the R400 Road.

6. This range must be inspected and cleared by a range inspector prior to departing the range/training area. Range OIC/RSO will complete and submit a ICE Comment upon completion of training and turn-in of range. Report all maintenance
problems/issues to a range inspector, Range Control and or use ICE Comment.

7. Red range flag will be flown at the entrance to this range.

8. A government safety vehicle and a corpsman must be present on the range prior to commencing any live fire training.

9. All non-participating or observing personnel will remain in the bleachers, behind the berm and outside of the range fan and if rockets are being fired out side the back blast area for that weapon system.

10. All personnel must wear helmets, flak jackets, hearing and eye protection while live fire training is being conducted.

11. The using unit is responsible for a detailed police call of the entire range, all facilities, and the parking/staging areas when training is completed. The unit will ensure the removal of all ammunition dunnage/trash from the range to include sandbags, trash tactical wire, wood, and scrap metal, target material or any other items on the range.
**RANGE NAME:** K-212

**DESCRIPTION:** Temporary Light Anti-Armor Weapon and Shoulder-Launcher Multipurpose Assault Weapon Range

**PRIMARY RANGE USE:** Temporary AT-4/M72A7 Anti-Tank/Anti-Armor Weapon/MK-153 SMAW Range

**ALTERNATE RANGE USES:**
1. MK153 SMAW Field Firing Range
2. AT-4 Field Firing Range
3. M72A7 Field Firing Range
4. M203/M32A1 (TP Only) Fam-Fire Range

**STATUS:** Active

**LOCATION:**

Grid Coordinate: 78203544

**PRIMARY DIRECTION OF FIRE:** 140 degrees magnetic

**WEAPONS ACCOMMODATED:**
M203/M32 Grenade Launcher (TP Only)
MK-153, 83mm SMAW,
AT-4, 84mm Rocket
M72A7, 66mm LAW

**AMMUNITION AUTHORIZED:**
40mm M203 Trainer Practice (DODIC B519)
9mm Spotting Rifle for MK153 SMAW (DODIC AX-11)
9mm for AT-4 Training Device (DODIC A358)
AT-4 M136 84mm Rocket (DODIC C995)
83mm SMAW MK153 (DODICs HX05/HX06/HX07)
M72A7 Trainer 21mm (DODIC HA21)
M72A7 66mm HEAT Rocket (DODIC H557)

**TARGETS/SIMULATORS/DEVICES**
3 Hard Targets (Old Army M113)
Target 1 is at 150 Meters
Target 2 is at 200 Meters
Target 3 is at 250 Meters

**FACILITIES (Number of each):**
Head Facilities: 0
Range Towers: 1
Overhead Cover: 1
Range Tables: 1

A-145
POV Parking Area: None

UTILITIES AVAILABLE:
- Electricity: No
- Lights: No
- Water System: No

INSTALLED COMMUNICATIONS:
- Telephone: Located on K-211

AREA SUITABILITY
Platoon/Section

Range Use Restrictions/Comments/Conflicts

NOTE: This range will be placed in an in-active/closed status once Phase 2 of the K-Range enhancement plan is completed.

1. Red-cockaded woodpecker habitat areas are near this range. Training is restricted in the assigned RCW areas. No vehicle traffic or training will be conducted in specifically designated RCW habitat areas.

2. Maneuvers are not authorized on this range. Do not move forward of the single firing point down range on this live fire range.

3. Authorized for night use if properly scheduled in RFMSS.

4. Class 1, 2, and 3A LASER devices are authorized. Class 3B and 4 LASER devices are not authorized on this range.

5. Down range movement is prohibited unless escorted by Base EOD. All personnel, equipment, and vehicles must remain clear of down range area.

6. No attempt will be made to clear or mark the location of duds down range. Range OIC/RSO will place the unit in a check fire if any dud is determined to be a hazard to training and contact Range Control/BLACKBURN for Base EOD support.

7. Additional targetry on range is not authorized unless prior approval from Range Control. Unit must contact Base EOD for support to place any targets down range into the K-2 Impact Area.

8. Firing from military vehicles is not authorized on this range.
Other Considerations

1. This range is affected by the activation of New River Air Station’s Runway 1. Any weapon systems firing above the 500 foot ceiling will be affected. Range Control will notify the Range OIC/RSO of the necessary and required procedures/actions to be taken. Range Control will contact the Range OIC/RSO when normal training can resume.

2. Road guards are required when firing the MK-153 SMAW, M72A7, and AT-4. Road guards will be positioned near the range flagpole located on South Verona Loop Road.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on this range.

3. Digging on this range is not authorized except that required for the sole purpose of proper deployment and safety of designated weapon systems. Sandbags must be provided and filled by the unit prior to occupying the range. Prior to departing the range, the using unit will ensure all sandbags are removed and holes are filled in and leveled out.

4. All firing must be conducted in the designated firing pit/firing wall platform. This range has a single firing position.

5. POVs are not authorized on this range, tank trail, or adjacent training areas. All POVs must use the designated parking area on K-400 range gravel parking lot.

6. Report all maintenance problems/issues to a range inspector or Range Control.

7. Red range flag will be flown at the entrance to this range.

8. A governemnt safety vehicle and corpsman must be present on the range prior to commencing any live fire training.

9. All non-participating or observing personnel will remain in the overhead covered area and outside of the range fan and back blast at all times. Range OIC/RSO must be aware of weapon system back blast requirements. All personnel not engaged in firing will remain clear of back blast area.
10. All personnel must wear helmets, flak jackets, hearing and eye protection while live fire training is being conducted.

11. The using unit is responsible for a detailed police call of the entire range, all facilities on this range, parking, and staging areas when training is completed.

12. The Range OIC/RSO will notify Range Control the approximate location and number of all duds upon completion of training.

13. Range must be inspected and cleared by a range inspector prior to departing range/training area.

14. Range OIC/RSO will complete and submit a range report/ICE Comment upon completion of training and the turn-in of range.

15. Units will not leave any trash on this range. All trash must be removed by the using unit.

16. Small Arms (7.62mm/5.56mm ammunition) is not authorized on this range other than the sub-cal 9mm training devices for the AT-4, 9mm spotting rounds for MK-153 and the 21mm Sub-Cal training device for the M72A7 LAW.

17. Only one live rocket can be fired at a time on this range. Pair firing is not authorized without approval with a special range request (SRR) from Range Control.
RANGE NAME: K-302

DESCRIPTION: Battle Sight Zero/10 Meter Qualification Range

PRIMARY RANGE USE: M16A2/M-4 Battle Sight Zero and SAW/IAR 10 Meter Qualification Range

1. Rifle Familiarization Range
2. Pistol Familiarization Range
3. Shotgun Familiarization Range
4. SAW/IAR 10 Meter Qualification Range
5. Non-Lethal Weapons Range
6. CMP Range (Limited)

ALTERNATE RANGE USES:

LOCATION: Grid Coordinate: 792360

PRIMARY DIRECTION OF FIRE: 185 degrees

WEAPONS ACCOMMODATED: All pistols (.45/40 Caliber or less)
M16/M4 Rifle
M249 (SAW) Squad Automatic Weapon
M27 (IAR) Infantry Automatic Rifle
12 Gauge Shotgun

AMMUNITION AUTHORIZED: All pistol ammunition
5.56mm ball, tracer, linked
All shotgun ammunition

TARGETS/SIMULATORS/DEVICES: 50 Possible firing points
(Units must provide BZO/Qualification Targets and Target Holders)

FACILITIES (Number of each):
Head Facilities: None
Range Tables: 0
POV Parking Area: None

UTILITIES AVAILABLE: Electricity: No
Lights: Yes
Water System: No

INSTALLED COMMUNICATIONS: Telephone Jack: Yes
Unit must bring phone
**AREA SUITABILITY:**

Platoon/Company

Range Use Restrictions/Comments/Conflicts

1. Red-cockaded woodpecker habitat near the range. No vehicle traffic or training will be conducted in specifically designated RCW habitat area.

2. Maneuvers are not authorized unless conducting CMP.

3. Authorized for night use. Night vision devices authorized.

4. Class 3B and 4 LASER are not authorized on this range.

5. Movement beyond 100 meters is prohibited unless escorted by Base EOD personnel. Unit must contact Base EOD direct for support.

6. BZO/Zero targets are only authorized within the first 100 meters of the range. All designated firing will be directed toward the K-2 Impact Area within the approved surface danger zone for K-302 at all times.

7. Units must provide appropriate target material. EOD support not required for target placement within the designated 100 meter firing area.

**Other Considerations.** This range is affected by the activation of New River Air Station’s Runway 1. Range Control will notify the Range OIC/RSO of the required actions to be taken if the runway is activated. Range Control will contact the Range OIC/RSO when normal training can resume.

**Special Instructions**

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on range.

3. Digging on the range is not authorized except that required for proper deployment and safety of designated weapon systems/targets. Sandbags must be provided and filled by the unit prior to occupying the range. Prior to departing the range, the unit will remove all sandbags and fill in all holes.

4. Range must be inspected and cleared by a range inspector prior to departing range/training area. Report all maintenance
problems to a range inspector and via ICE. Range OIC/RSO will complete and submit a range report upon completion of training and turn-in of range.

5. POVs are not authorized on this range, tank trail, or the adjacent training areas.

6. Red range flag will be flown at the entrance to the range.

7. A government safety vehicle and corpsman must be present on the range prior to commencing live fire training.

8. All non-participating or observing personnel will remain in the bleachers and outside of the range fan.

9. All personnel must wear helmets, flak jackets, hearing and eye protection while live fire is being conducted down range.

10. Using unit is responsible for a detailed police call of the range, all facilities, and the parking/staging areas when training is completed. The unit will ensure the removal of all dunnage/trash from the range to include tactical wire, wood, and scrap metal is removed from the range.
RANGE NAME: K-315

DESCRIPTION: Day/Night and Combat Field Firing Range

PRIMARY RANGE USE: Infantry Familiarization Firing Range

ALTERNATE RANGE USES:
1. Shotgun Familiarization Range
2. Pistol Familiarization Range
3. CMP Range
4. Night Field Firing Range

LOCATION: Grid Coordinate: 80913612

PRIMARY DIRECTION OF FIRE: 225 degrees magnetic

WEAPONS ACCOMMODATED:
- All military issue pistols (.45 Cal/40 Cal/9mm)
- 12 Gauge Shotgun
- M16/M4 Rifles
- M249 Squad Automatic Weapon (SAW)
- M27 Infantry Automatic Rifle (IAR)
- AK-47 (DODIC A102/A103)

AMMUNITION AUTHORIZED:
- All Pistol Ammunition
- 5.56mm (ball, tracer, and linked)
- All 12 Gauge Shotgun ammunition
- 7.62mm X 39mm for the AK-47

TARGETS/SIMULATORS/DEVICES: The using unit must provide pits or other type targets.

FACILITIES (Number of each):
- Head Facilities: 10
- Range Towers: 1
- Bleachers: 1
- Overhead Cover: 1
- Ammo Tables: 5
- POV Parking Area: None

UTILITIES AVAILABLE:
- Electricity: Yes
- Lights: Yes
- Water System: No

INSTALLED COMMUNICATIONS:
- Telephone Jack: Yes
- Unit must bring a phone.

AREA SUITABILITY: Platoon/Company

A-152
Range Use Restrictions/Comments/Conflicts

1. Maneuvers are authorized on this range up to 80 meters down range.

2. Firing berm does not have any designated firing points. Firing is authorized from the berm or forward within the 80 meter designated firing area. All live fire must be towards the K-2 impact area. BZO targets may be placed within the 80 meter firing area without Base EOD support. Down range movement beyond the 80 meter firing area is prohibited unless escorted by Base EOD.

3. Authorized for night use if properly scheduled in RFMSS. Night vision devices are authorized.

4. Class 3B and 4 LASERs devices are not authorized on this range.

5. Recreational shooting is not authorized on this range.

6. Firing from tactical vehicles is not authorized without a special range request (SRR) via the chain of command.

Other Considerations

1. This range is affected by the activation of New River Air Station’s Runway 1. Range Control will notify the Range OIC/RSO of the required procedures to be taken and when normal training can resume.

2. The using unit is required to provide a qualified range operator familiar with target operations of the PITS if the unit requested them. Target systems and the hand held control unit must be scheduled and picked up by the using unit. Scheduling for PITS Targets must be done at least a minimum of 48 hours in advance. Training is available on the handheld unit Monday through Friday 0800-1200 at the contractor warehouse, Bldg 1404 on Elm Street. It is the responsibility on the Range OIC to ensure the PITS Targetry is well protected with sandbags and steel plates. Contact the contracting officer representative (COR) at 451-4480/2411 with any contract support issues.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.
2. Bivouacking on this range is authorized only by special range request only.

3. Digging on this range is not authorized except that required for the proper deployment and the safety of the weapon systems. Sandbags must be provided and filled by the unit prior to occupying this range. Prior to departing the range, the unit will ensure all sandbags are removed and holes are filled in and leveled out.

4. POVs are not authorized on this range, tank trail, or adjacent training areas. All POVs must use the designated parking area adjacent to ALZ-20.

5. Report all maintenance problems/issues to a range inspector, Range Control when you turn in the the range. This range must be inspected and cleared by a range inspector prior to departing the range/training area. Range OIC/RSO will complete and submit a range report or a ICE Comment upon completion of training and turn-in of range.

6. All live fire and the effects of live fire must be within the approved surface danger zone for K-315 at all times.

7. Red range flag will be flown at the entrance to the range.

8. A government safety vehicle and corpsman must be present on the range prior to commencing any live fire training.

9. All personnel must wear helmets, flak jackets, hearing and eye protection while training is being conducted. Observing personnel will remain in the bleachers or outside of the range fan/danger areas at all times.

10. All units signed for this range are responsible for a detailed police call of the entire range, all facilities, and the parking/staging areas when training is completed. The unit will ensure the removal of all dunnage from the range to include wood, target material like pallets, brass, links and all scrap metal. Units should ensure that all brass, links are policed up and removed from all sandy areas down range.
**RANGE NAME:** K-317

**DESCRIPTION:** Close Combat Pistol/Rifle and CMP Range

**PRIMARY RANGE USE:** Close Combat/CMP Range

**ALTERNATE RANGE USES:**
1. Shotgun Range
2. Rifle Quick Kill Range
3. Combat Pistol Range
4. Rifle BZO Range
5. Night Live Fire Range

**LOCATION:** Grid Coordinate: 81183607

**PRIMARY DIRECTION OF FIRE:** 224 degrees magnetic

**WEAPONS ACCOMMODATED:**
- All Pistols (.45 Caliber or less)
- 12 Gauge Shotgun
- M16/M4 Rifle
- M249 Squad Automatic Weapon (SAW)
- M27 Infantry Automatic Rifle (IAR)
- AK-47 Rifle

**AMMUNITION AUTHORIZED:**
- All Pistol Ammunition
- All 12 Gauge Ammunition
- 5.56mm (Ball, Tracer, Linked)
- 7.62mm x 39mm DODIC A102/A103

**TARGETS/SIMULATORS/DEVICES**
Unit must provide PITS or other type target material and target holders. Unit must remove any target material added to this range.

**FACILITIES (Number of each):**
- Head Facilities: None
- Bleachers: 1
- Range Tables: 3
- POV Parking Area: None
- Overhead Cover: 1

**UTILITIES AVAILABLE:**
- Electricity: No
- Lights: No
- Water System: No

**INSTALLED COMMUNICATIONS:**
- Telephone Jack: Yes
  Unit must bring a Phone

**AREA SUITABILITY:** Platoon/Company

A-155
Range Use Restrictions/Comments/Conflicts

1. Maneuvers are authorized up to 40 meters down range.

2. Firing berm does not have designated firing points. All designated firing must be directed towards the K-2 impact area and within the approved surface danger zone of K-317 at all times.

3. This range is authorized for night use if properly scheduled in RFMSS. Night vision devices are authorized.

4. Class 3B and 4 LASER devices are not authorized on this range.

5. Recreational shooting with civilian weapons are not authorized on this range.

6. Tactical vehicles are not authorized on the berm or down range.

Other Considerations

1. This range is affected by the activation of New River Air Station’s Runway 1. Range Control will notify the range ROIC/RSO of the required procedures to be taken and when normal training can resume.

2. The using unit is required to provide a qualified range operator familiar with target operations of the PITS. Target systems and the hand held control unit must be scheduled and picked up by the using unit. Scheduling for PITS Targets must be done at least a minimum of 48 hours in advance. Training is available on the handheld unit Monday through Friday 0800-1200 at the contractor warehouse, Bldg 1404 on Elm Street. It is the responsibility on the ROIC to ensure the PITS Targetry is well protected with sandbags and steel plates. Contact the contracting officer representative (COR) at 451-4480/2411 with any contract support issues.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.
2. Bivouacking is not authorized on this range without a special range request.

3. Digging on the range is not authorized except that required for the sole purpose of proper deployment and safety of designated weapon systems. Sandbags must be provided and filled by the unit prior to occupying the range. Prior to departing the range, the unit will ensure all sandbags are removed and all holes are filled in and leveled out.

4. POVs are not authorized on this range, tank trail, or adjacent training areas. All POVs must use the designated parking area adjacent to ALZ-20.

5. Report all maintenance problems/issues to a range inspector, Range Control or report it to ICE Comment. This range must be inspected and cleared by a range inspector prior to departing range/training area. Range OIC/RSO will complete and submit a range report/ICE Comment upon completion of training and the turn-in of range.

6. Red range flag will be flown at the entrance to the range.

7. A government safety vehicle and a corpsman must be present on the range prior to commencing any training.

8. All non-participating or observing personnel will remain in the bleachers or outside of the range fan/danger area.

9. All personnel must wear helmets, flak jackets, hearing and eye protection while training is being conducted.

10. All units signed for this range are responsible for a detailed police call of the entire range, all facilities, and the parking/staging areas when training is completed. The unit will ensure the removal of all dunnage from the range to include wood, target material like pallets, and scrap metal. Units should ensure that all brass, links are policed up and removed from all sandy areas down range.
RANGE NAME: K-319

DESCRIPTION: Field Firing Range

PRIMARY RANGE USE: Fire and Movement Range
(Short Distance of 100 meters)

ALTERNATE RANGE USES:
1. Day/Night Live Fire Range
2. Shotgun/Pistol Fam Firing Range
3. BZO/Zero Weapon Range
4. CMP Range

LOCATION: Grid Coordinate: 81453609

PRIMARY DIRECTION OF FIRE: 192 degrees magnetic

WEAPONS ACCOMMODATED:
All Pistols (.45 Caliber or less)
M16/M4 Rifle
12 Gauge Shotguns
M240B/G Machineguns
M249 Squad Automatic Weapon (SAW)
M27 Infantry Automatic Rifle (IAR)
M203/M32 Grenade Launcher
AK-47 Rifle

AMMUNITION AUTHORIZED:
All Pistol Ammunition
5.56mm (Ball, Tracers, Linked)
7.62mm Linked
7.62mm x 39 for the AK-47
All 12 Gauge Ammunition
40mm TP (DODIC B519-Only)

TARGETS/SIMULATORS/DEVICES
Unit must provide PITS or other type targets and target holders.

FACILITIES (Number of each):
Head Facilities: 9
Range Tower: 1
Range Tables: 3
Bleachers: 1
Overhead Cover: 1
POV Parking Area: Adjacent to ALZ 20

UTILITIES AVAILABLE:
Electricity: No
Lights: No
Water System: No

INSTALLED COMMUNICATIONS:
Telephone: Yes (Phone Jack)
Unit must bring a phone.

**AREA SUITABILITY:** Company/Platoon

**Range Use Restrictions/Comments/Conflicts**

1. Maneuvers are authorized but restricted. Limit of advance is 100 meters downrange. Movement beyond the 100 meters is prohibited unless escorted by Base EOD personnel.

2. Authorized for night use if properly scheduled in RFMSS. Night vision devices are authorized on this range.

3. Class 3B and 4 LASER devices are not authorized on this range.

4. Range consists of a firing berm with no designated firing points and assault firing lanes with no designated firing points. Cross range firing is not authorized on this range.

5. Vehicles are authorized to fire from in front of the firing berm, two vehicles at a time. Vehicles must be 6 meters apart, chocked, with engine off, and driver/A-driver out of the vehicle. The T&E must be used; free gun is not authorized on this range.

6. Adequate safety personnel will be assigned to each firing vehicle. Ground guides are required to escort the vehicle in and out of the range firing area.

7. BZO/Zero targets are authorized within the 100 meter maneuvering area without Base EOD support.

8. M203/M32 Grenade Launchers are not authorized to engage targets within the 100 meter maneuvering area.

9. Range OIC/RSO will ensure adequate number of safety personnel is assigned to control maneuver exercises. Range OIC/RSO will accompany each fire team down range during fire and movement. Range OIC/RSO will be equipped with appropriate communication and signaling devices while down range.

10. Dry runs/rehearsals will be conducted before conducting live fire and movement. Range OIC/RSO will ensure all personnel are familiar with the firing lanes, firing points, direction of fire, limits of fire and movement.
Other Considerations

1. This range is affected by the activation of New River Air Station’s Runway 1. Range Control will notify the range ROIC/RSO of the required procedures to be taken and when normal training can resume.

2. The using unit can set up additional small arms targets at 100 meters. Only wooden stakes are authorized to hold targets.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is authorized on this range only by special range request.

3. Digging on this range is not authorized except that required for proper deployment and safety of designated weapons. Sandbags must be provided and filled by the unit prior to occupying the range. Prior to departing the range, the unit will ensure all sandbags are removed and all holes are filled in.

4. POVs are not authorized on this range, tank trail, or adjacent training areas. All POVs must use the designated parking area adjacent to ALZ-20.

5. Report all maintenance problems/issues to a range inspector. This range must be inspected and cleared by a range inspector prior to departing the range/training area. Range OIC/RSO will complete and submit a range report/ICE Comment upon completion of training and the turn-in of range.

6. Range OIC/RSO must verify all weapons range safety cards and direction of fire.

7. Red range flag will be flown at the entrance to the range.

8. A government safety vehicle and a corpsman must be present on the range prior to commencing any training.

9. Observers will remain in the bleachers and outside of the range fan/hazard area at all times.

10. All personnel must wear helmets, flak jackets, hearing and eye protection while training is being conducted.
11. The using unit will be responsible for a detailed police call of the entire range, all facilities, parking and staging areas when training is completed. The unit will ensure the removal of all dunnage/trash from the range to include tactical wire, wood, brass, links, target material, and scrap metal.
RANGE NAME: K-321/K-321A

DESCRIPTION: M249 Squad Automatic Rifle Transition Range (K-321)

PRIMARY RANGE USE: Squad Automatic Weapon (SAW) and Infantry Automatic Rifle (IAR) Transition Range (K-321)

ALTERNATE RANGE USES:
1. Squad Fire/Movement Range (K-321A)
2. CMP Range (K-321A)
3. BZO/Zero Range (K-321)
4. Night Live Fire Range
5. Military Shotgun Range

LOCATION: Grid Coordinate: 81923606

PRIMARY DIRECTION OF FIRE: 222 degrees magnetic

WEAPONS ACCOMMODATED: All Pistols (.45 Caliber or less) 12 Gauge Shotguns M16/M4 Rifles M249 Squad Automatic Weapon M203/M32 Grenade Launchers AK-47 Rifle

AMMUNITION AUTHORIZED: All Pistol Ammunition 5.56mm Ball, Tracers, Linked 40mm TP/ILLUM (DODIC B519/B535-Only) 7.62mm x 39 for the AK-47

TARGETS/SIMULATORS/DEVICES The using unit must provide PITS

FACILITIES (Number of each):
- Head Facilities: 4 Port-a-Johns
- Range Towers: 1
- Bleachers: 1
- Overhead Cover: 1
- Range Tables: 3
- Range Shed: 1 (SOI)
- POV Parking Area: None

UTILITIES AVAILABLE: Electricity: Yes Lights: Yes Water System: No

INSTALLED COMMUNICATIONS: Telephone: Yes, Yellow Direct Line
AREA SUITABILITY: 

Platoon/Squad/Section

Range Use Restrictions/Comments/Conflicts

1. When this range is used for static live fire from the firing berm, it is listed as and scheduled in RFMSS as K-321. When used for Squad Live Fire and Movement or CMP, it should be scheduled in RFMSS as K-321A. Units must ensure they schedule the proper range for their assigned training event. K-321A will be scheduled when live fire and maneuvers and movement downrange are required or needed. Maneuvers are authorized for K-321A but restricted up to 400 meters down range only. K-321A, with Marines downrange, conflicts with K-323, K-325, and K-319. Movement beyond 400 meters (the last set of PITS target bunkers) requires Base EOD escort/support.

2. Authorized for night use if properly scheduled in RFMSS. Night vision devices are authorized.

3. Class 3B and 4 LASER devices are authorized on K-321 and K-321A if the unit has the required Laser Range Safety Officer.

4. This range consists of a firing berm and assault firing lanes with no designated firing points. Cross range firing is not authorized on this range. Range has 25 concrete PITS Target stations (5 per lane).

5. Movement beyond 400 meters is prohibited unless escorted by Base EOD personnel. Unit must contact Base EOD for support.

6. BZO/Zero targets are only authorized within the first 100 meters, down range, and forward of the berm.

7. M203/M32 Grenade Launchers are not authorized to engage the PITS targets. Units must provide other appropriate target material. Unit must police up all expended M230/M32 40mm debris/dunnage like the parachutes down range and remove them.

8. Vehicles are not authorized on the top of the dirt berm. Vehicles with mounted 7.62mm Machineguns or the M249 SAW conducting live fire is only authorized from the front side of the berm. No more than two vehicles may fire at one time and must have the engine turned off, with the wheels chocked, and the driver/a driver out of the vehicle. T&E device must be used at all times, free gun is not authorized on this range.
Other Considerations

1. This range is affected by the activation of New River Air Station’s Runway 1. Range Control will notify the Range OIC/RSO of the required procedures to be taken and when normal training can resume.

2. The using unit is required to provide a qualified range operator familiar with target operations of the PITS. Target systems and the hand held control unit must be scheduled and picked up by the using unit. Scheduling for PITS Targets must be done at least a minimum of 48 hours in advance. Training is available on the handheld unit Monday through Friday 0800-1200 at the contractor warehouse, Bldg 1404 on Elm Street. It is the responsibility on the ROIC to ensure the PITS Targetry is well protected with the required sandbags and steel plates. Contact the contracting officer representative (COR) at 451-4480/2411 with any contract support issues.

3. When using PITS, the using unit is required to provide a qualified range operator familiar with target operations of the remote control unit. The unit will contact the contractor if troubleshooting of targets or remote control unit is required.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is only authorized on this range by special range request.

3. Digging on this range is not authorized except that required for the proper deployment and safety of designated weapon systems. Sandbags must be provided and filled by the unit prior to occupying this range. Prior to departing the range, the unit will ensure all sandbags are removed and all holes are filled in and leveled out.

4. POVs are not authorized on this range, tank trail, or adjacent training areas. All POVs must use the designated parking area adjacent to ALZ-20.

5. Report all maintenance problems/issues to a range inspector, Range Control. Range must be inspected and cleared by a range inspector prior to departing the range/training area. Range OIC/RSO will complete and submit a range report/ICE Comments upon completion of training and the turn-in of range.
6. Red range flag will be flown at the entrance to the range.

7. A government safety vehicle and a corpsman must be present on this range prior to commencing training.

8. All observing personnel will remain in the bleachers or outside of the range safety fan/hazard area.

9. All personnel, including instructors, must wear helmets, flak jackets, hearing and eye protection while live fire training is being conducted.

10. Range OIC/RSO will ensure that a adequate number of safety personnel are assigned to control all live fire and movement exercises.

11. Using unit is responsible for a complete and detailed police call of the entire range complex, to include the entire down range area, PITS bunkers if used, all other range facilities, and the parking/staging areas when training is completed. The unit will ensure the removal of all dunnage from this range to include brass, links, SAW plastic ammunition containers, target material, tactical wire, wood, and all scrap metal.
RANGE NAME: K-323
DESCRIPTION: Grenade Launcher Range
PRIMARY RANGE USE: Grenade Launcher Range
ALTERNATE RANGE USES: M203/M32 Non-Lethal Range
LOCATION: Grid Coordinate: 82153580
PRIMARY DIRECTION OF FIRE: 230 degrees magnetic
WEAPONS ACCOMMODATED: M203/M32 Grenade Launchers
AMMUNITION AUTHORIZED: (TP only) 40mm Ammunition
40mm Non-Lethal Ammunition
DUD PRODUCING AMMUNITION IS NOT AUTHORIZED, 40mm HEDP/HE IS NOT AUTHORIZED ON RANGE K323

TARGETS/SIMULATORS/DEVICES
- Zero Panels at 200 meters
- 4 Windows Targets at 100 meters
- 4 Bunker Targets at 105-115 meters
- 4 Bunker Targets at 135-150 meters
- 4 Automatic Weapons at 200-250 meters
- 4 Troop Emplacements at 275-300 meters
- 4 Troop Emplacements at 325-350 meters

FACILITIES (Number of each):
- Head Facilities: 6
- Range Tower: None
- Range Tables: 3
- POV Parking Area: None

UTILITIES AVAILABLE:
- Electricity: No
- Lights: No
- Water System: No

INSTALLED COMMUNICATIONS:
- Telephone Phone Jack: Yes

AREA SUITABILITY:
- Platoon/Company
Range Use Restrictions/Comments/Conflicts

1. This range conflicts with Range K-321A.

2. Range consists of 4 Fighting Positions, 4 Sandbag Walls, and 4 Wooden Wall structures for shooting positions.

3. Maneuvers are not authorized down range. Movement forward of the firing berm is not authorized unless escorted by EOD.

4. Authorized for night use if properly scheduled in RFMSS. Night vision devices are authorized on this range.

5. Class 3B and 4 LASER devices are not authorized on this range.

6. Cross range firing is not authorized on K-323.

7. The first 80 meters is a “No Fire Zone”. All personnel, equipment and vehicles will remain clear of this area.

8. Dud producing 40mm ammunition is not authorized on this range.

9. Additional targets are not authorized to be placed down range on this range.

10. Firing from tactical vehicles is not authorized on this range. Vehicles are not authorized on berm or forward of the firing berm.

Other Considerations. This range is affected by the activation of New River Air Station’s Runway 1. Range Control will notify the Range OIC/RSO of the required procedures to be taken and when normal training can resume.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking authorized on this range only by special request only.

3. Digging is not authorized on the range. Do not remove sandbags from the sandbag walls for other purposes.
4. POVs are not authorized on this range, tank trail, or adjacent training areas. All POVs must use the designated parking area adjacent to ALZ-20.

5. Report all maintenance problems to a range inspector, Range Control and or use ICE Comments. Range must be inspected and cleared by a range inspector prior to departing range/training area. Range OIC/RSO will complete and submit a range report upon completion of training and turn-in of range.

6. Red range flag will be flown at the entrance to the range.

7. A government safety vehicle and corpsman must be present on this range prior to commencing training.

8. All observing personnel will remain outside of the range safety fan and the firing line.

9. All personnel must wear helmets, flak jackets, hearing and eye protection while live fire training is being conducted.

10. Range OIC/RSO will ensure adequate number of safety personnel are assigned to control each of the firing points.

11. Using unit is responsible for a detailed police call of the entire range, all facilities, and parking/staging areas when training is completed. The using unit will ensure the removal of all dunnage from the range to include tactical wire, wood, ammunition dunnage and scrap metal. Unit will ensure all holes are filled in and leveled out.

12. No more than four shooters on the berm at the same time on this range.

13. The using unit will replace all damaged sandbags on the sandbag firing positions.

14. The using unit will ensure all wooden covers to the fighting positions/fox holes are replaced after the firing event. The using unit must conduct a police call of the inside of the fighting positions/fox holes before departing

15. The MK-19 40mm linked is not authorized on this range.
## RANGE NAME:
K-325

## DESCRIPTION:
Combat Marksmanship Program Range

## PRIMARY RANGE USE:
CMP Range

## ALTERNATE RANGE USES:
1. Shotgun Familiarization Range
2. Pistol Familiarization Range
3. Night Vision Device Range

## LOCATION:
Grid Coordinate: 82343568

## PRIMARY DIRECTION OF FIRE:
246 degrees magnetic

## WEAPONS ACCOMMODATED:
- All Pistols (.45 Caliber or less)
- 12 Gauge Shotgun
- M16/M4 Rifles
- M249 Squad Automatic Weapon (SAW)
- M27 Infantry Automatic Rifle (IAR)

## AMMUNITION AUTHORIZED:
- All Military Pistol Ammunition
- 5.56mm (Ball, Tracer, Linked)
- 12 Gauge Shotgun ammunition (All)

## TARGETS/SIMULATORS/DEVICES
Using unit must provide PITS or other type targets material for this range.

## FACILITIES (Number of each):
- Head Facilities: 5 Port-a-Johns
- Range Towers: 1
- Ammo Tables: 3
- POV Parking Area: None

## UTILITIES AVAILABLE:
- Electricity: No
- Lights: No
- Water System: No

## INSTALLED COMMUNICATIONS:
- Telephone Phone Jack: Yes
- Unit must bring a phone

## AREA SUITABILITY:
Platoon/Squad

Range Use Restrictions/Comments/Conflicts

1. Maneuvers are authorized on this range up to 100 meters down range only.
2. Range consists of 8 concrete firing bunkers within the berm area. Firing is authorized from inside the bunkers, from the top of the berm area or forward within the 100 meter designated firing area. Firing berm does not have designated firing points. All live fire must be directed toward the K-2 Impact Area within the approved surface danger zone of K-325. PITS or BZO targets may be placed within the 100 meter firing area without Base EOD support. Down range movement beyond the 100 meter firing area is prohibited unless escorted by Base EOD.

3. Authorized for night use if properly scheduled in RFMSS. Night vision devices authorized.

4. Class 3B and 4 LASER devices are not authorized on this range.

5. Recreational shooting is not authorized on this range.

Other Considerations

1. This range is affected by the activation of New River Air Station’s Runway 1. Range Control will notify the range Range OIC/RSO of the required procedures to be taken and when normal training can resume.

2. The using unit is required to provide a qualified range operator familiar with the target operations of the PITS systems. Target systems and the hand held remote control unit must be scheduled and picked up by the using unit. Scheduling for PITS Targets must be done at least a minimum of 48 hours in advance. Training is available on the handheld remote control unit Monday through Friday 0800-1200 at the contractor warehouse, Bldg 1404 on Elm Street. It is the responsibility on the Range OIC to ensure the PITS Targetry is well protected with the required number of sandbags and steel plates. Contact the contracting officer representative (COR) at 4480/2411 with any contract support issues.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking on this range authorized only by special range request.

3. Digging on this range is not authorized except when required for the proper deployment and safety of the weapon systems.
Sandbags must be provided and filled by the unit prior to occupying the range. Prior to departing the range, the unit will ensure all sandbags are removed and all holes are filled in and leveled.

4. POVs are not authorized on this range, the tank trails, or the surrounding training areas. POVs must park adjacent to ALZ-20.

5. Report all maintenance problems to a range inspector, Range Control or use ICE Comment. Range must be inspected and cleared by a range inspector prior to departing range/training area. Range OIC/RSO will complete and submit a range report/ICE Comment upon completion of training and turn-in of range.

6. Red range flag will be flown at the entrance to the range.

7. A government safety vehicle and corpsman must be present on the range prior to commencing training.

8. All personnel must wear helmets, flak jackets, hearing and eye protection while live fire training is being conducted. Observing personnel will remain in the bleachers or outside of the range safety fan at all times.

9. The using unit is responsible for a complete and detailed police call of the entire range, all facilities, and parking/staging areas when training is completed. The unit will ensure the removal of all dunnage/trash from the range to include brass, links, clips, tactical wire, wood, all target material, and scrap metal that may have been used.

10. Final range coordination brief will be conducted by a Range Inspector when the using unit occupies the range. Units occupying on weekends, holidays, and/or long weekends will ensure the final range coordination brief is received prior to Friday and/or no later than the last regular work day prior to the weekend/holiday/long weekend with a Range Inspector, located at building SR-46, in the GRSA on CC road across from SR-6. Briefs can take place on the weekends at the range if arranged by Range Control Scheduling or BLACKBURN with the duty Range Inspector prior to that Friday.
RANGE NAME: K-402

DESCRIPTION: Fire and Maneuver Range

PRIMARY RANGE USE: Individual Tactical Training Range

ALTERNATE RANGE USES:
1. Infantry Moving Target Range
2. M249 SAW Transition Range
3. Squad Battle Drill Range
4. Unknown Distance Range
5. Night Firing Range
6. Weapon/LASER Range

LOCATION: Grid Coordinate: 77763507

PRIMARY DIRECTION OF FIRE: 125 degrees magnetic

WEAPONS ACCOMMODATED:
M16/M4 Rifle, SCAR (5.56mm only)
M249 Squad Automatic Weapon (SAW)
M27 (IAR) Infantry Automatic Rifle
M203/M32 40mm (Illumination Only)

AMMUNITION AUTHORIZED:
5.56mm (ball, linked, and tracer)
40mm/handheld illumination (Only)

TARGETS/SIMULATORS/DEVICES
1. RETS Targets (Number of Targets listed below)
2. Battlefield Sound Effect Simulator (Total 2)
3. Smoke Generators (Total 2)

FACILITIES (Number of each):
Head Facilities: TBD
Bleachers With/Overhead Cover: 1
Range Tables: 2
Range Tower: 1 (35 Foot, ST-65)
Target Operator Building: 1
Target Storage Sheds: None
POV Parking Area: K-400 Area
Bivouac Site: Grid 775351

UTILITIES AVAILABLE:
Electricity: Yes, Target Operator Only
Lights: Yes, Total (5)
Water System: No

INSTALLED COMMUNICATIONS:
Telephone (Plug in Phone Jack)
449-0381, unit must bring a phone.
The Range is set up as follows

1. The 50 meter target line has (1) one row of 10 Stationary Infantry Targets (SITS).

2. The 100 meter target line has (2) two 75 foot Moving Infantry Targets (MITS) and (1) one Stationary Infantry Target (SITS) in the center.

3. The 150 meter target line has (9) nine Stationary Infantry Targets (SITS) in (3) three cluster of (3) three targets and (6) are double target arm lifters.

4. The 200 meter target line has (2) two 75 foot Moving Infantry Targets (MITS) at about a 30/40 degree angle and (1) one Stationary Infantry Target (SITS) in the center.

5. The 250 meter target line has (9) nine Stationary Infantry Targets (SITS) in (3) three cluster of (3) three targets and (6) are double target arm lifters.

6. The 300 meter target line has (1) one row of 10 Stationary Infantry Targets (SITS).

**NOTE:** All weapons should be BZO/Zeroed prior to using this range. If the using unit must BZO/Zero weapons it will be done in front of the tower using the 50 meter target berm as a backstop.

**NOTE:** Using unit are not authorized to add any additional targets down range on K402.

**Range Use Restrictions/Comments/Conflicts**

1. Surface Danger Zone (SDZ) for this range conflicts with Range K-402A shoot house and the K-402A mock-up shoot house if SESAMS are scheduled.

2. Fire and maneuver is authorized if properly scheduled in RFMSS and signed for. Limit of advance is 300 meters down range. Movement beyond 300 meters is prohibited unless escorted by Base EOD personnel and coordinated with Range Control. The moving infantry targets (MITS) should not be used/engaged during
fire and maneuver. The MITS are not intended for the fire and movement/maneuver course. Only the stationary infantry targets (SITS) are to be engaged during fire and movement/maneuver training events.

3. Authorized for night use if properly scheduled in RFMSS for the required time. Night vision devices, handheld, or M203/ M32 illumination rounds (DODIC B535) are authorized on this range. Unit will be responsible for policing all debris like the expended parachutes and other type dunnage from the down range area up to the 300 meter line.

4. Live fire is only authorized within the first 300 meters of the range. Cross range firing is not authorized on K-402. All live fire and the effects of live fire must be within the approved SDZ for K-402 at all times.

5. Class 4 LASER devices are not authorized on this range. Class 1, 2, 3A, and 3B LASER devices are authorized if scheduled in RFMSS properly. Class 3B LASER devices requires a LASER Range Safety Officer (LRSO).

6. M203/M32 Training Practice 40mm round (DODIC B519) is not authorized on this range. Only the 40mm illumination round/hand held illumination pop-ups are approved.

7. This range requires a road guard or road guards at the entrance/entrances to the range. It is the responsibility of the Range OIC/RSO to ensure the road guard/road guards are placed properly in the correct locations. The road guards will have and maintain internal communication with the Range OIC/RSO while training/live fire is being conducted. Road guards must be particularly vigilant for intruders circumventing their checkpoints/gates.

8. Vehicular movement downrange is not authorized by using units.

9. If sandbags are added to the range by a using unit they must be removed. Nothing will be left down range that would delay or disrupt range maintenance requirements like grass cutting.

10. Using units are not authorized to engage any SITS Target closer then 25 meters. Engaging MITS during fire and movement is not authorized.
11. To minimize the surface danger zone on the MITS, the targets should be engaged from firing point 3 on the left side of the range and from firing point 7 for the right side of the range.

12. This range has trip/fall hazards if maneuvering past the 50 meter target sets. The target coffins and track coffins are all pretty well hidden from view until you are right on top of them. There are also concrete electrical boxes that are raised about three inches above the deck behind the target sets. Specific mention needs to be made to incorporate required pre-fire rehearsals/walkthroughs of shooters. Units must be aware of the trip hazards to appropriate special instructions addressing rehearsals and dry fires. Personnel/units must not walk on or stand on moving target tracks or control mechanisms.

Other Considerations

1. This range is affected by the activation of New River Air Station’s Runway 1. Range Control will notify the range Range OIC/RSO of the required procedures to be taken and when normal training can resume.

2. Request to modify computerized target scenarios must be submitted through the unit’s chain of command to Range Control. The request must be submitted ten (10) working days in advance from the first day of training. Contact the contracting officer representative at 451-4480/2411 with any contract support issues.

3. This range can be scheduled for a maximum of 16 hours per day. The range contractor must be on the contracted range the entire time scheduled. This range is not authorized for live fire unless a range contractor is present on the range; the range is scheduled in RFMSS, and signed for.

4. Units must occupy a contractor-supported range with a responsible unit or contracted training representative (Not necessarily the Range OIC/RSO) within 1 hour of the scheduled “HOT” time or the range will be cancelled for that day.

5. The using units that requires a time extension on the range must request it at least four (4) hours in advance of their scheduled completion “COLD” time in order to allow for an alteration to the scheduled contractor support. This request for time extension will be made through Range Scheduling during
normal working hours. If after normal working hours the unit will contact BLACKBURN.

6. The unit is responsible for becoming acquainted with approved training scenarios the contractor has installed prior to training session.

7. Final range coordination brief will be conducted by a Range Inspector when the using unit occupies the range. Units occupying on weekends, holidays, and/or long weekends will ensure the final range coordination brief is received prior to Friday and/or no later than the last regular work day prior to the weekend/holiday/long weekend with a Range Inspector, located at building SR-46, in the GRSA on CC road across from SR-6. Briefs can take place on the weekends at the range if arranged by Range Control Scheduling or BLACKBURN with the duty Range Inspector prior to that Friday.

8. Under high wind conditions of 35 knots or higher, the range operator (contractor) will shut down the range and all targets placed in a down position to prevent damage to both the targets and target mechanisms.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on this range. Bivouacking will only take place across the gravel road in the old K-405 Hand Grenade Range area at grid 775351 by an e-mail special range request.

3. Digging on this range is not authorized except that required for the proper deployment and safety of designated weapon systems. Prior to departing the range, the unit will ensure all sandbags are removed from down range area up to 300 meter line.

4. POVs are not authorized on this range, the tank trail or adjacent surrounding training/bivouac areas. All POVs must use the designated gravel parking area off the South Verona Loop Road and the start of K-400 ranges.

5. Report all maintenance problems to a range inspector. Range must be inspected and cleared by a range inspector prior to departing range/training area. Range OIC/RSO will complete and submit a range report/ICE Comment upon completion of training and turn-in of range.
6. Range OIC/RSO will ensure that K-402A/K-402A Mock-Up is secured of all personnel and equipment prior to requesting to go “HOT”. Range K-402A Mock-Up SESAMS can not be used if K402 is scheduled.

7. Red range flag will be flown at the entrance to the range on the range sign.

8. A government safety vehicle and corpsman must be present on the range prior to commencing any training on this range.

9. All non-participating personnel will remain in the bleachers or outside of the range safety fan.

10. All personnel must wear helmets, flak jackets, hearing and eye protection while training is being conducted from the firing berm and down range.

11. Range OIC/RSO will ensure adequate number of safety personnel are assigned to control maneuver exercises. Range OIC/RSO will accompany each fire team/squad (maneuver unit) down range during fire and movement. Range OIC/RSO will be equipped with appropriate communication and signaling devices while down range.

12. Dry runs/rehearsals must be conducted under the same conditions (Day or Night). Dry runs will be conducted prior to any live fire event. Range OIC/RSO will ensure all personnel are familiar firing lanes, firing points, limits of fire and advancement, and sector of fires.

13. The using units are responsible for a detailed police call of the entire range complex to include down range up to 300 meters, all facilities, bivouac site, bleacher area, Port-a-Johns area, and the parking/staging areas when training is completed. The unit will ensure the removal of all dunnage to include live fire brass, links from the range, tactical wire, wood, additional target material, debris and any scrap metal down range. Units will not throw ammunition dunnage over the berm or in the woods/treeline on this range.

14. Do not disturb or remove any targets systems (SITS/MITS) from this range. Using unit is not authorized to add additional targets to this range without a special range request.
15. It is the responsibility of the Range OIC/RSO to ensure that all lights are turned off before securing from the range.

16. Live fire and maneuver: A special range request is not required as long as a standard scenario (Fire Team/Squad Frontal Attack Only) is planned, employed, and used properly. It will consist of attacking straight down the middle of the range. Supporting machinegun fire/overhead machinegun fire is not authorized on K-402.
RANGE NAME: K-402A

DESCRIPTION: House/Room Clearing Range

PRIMARY RANGE USE: Military Operations in Urbanized Terrain

ALTERNATE RANGE USES: 1. Live-Fire Shooting House

LOCATION: Grid Coordinate: 77763517

PRIMARY DIRECTION OF FIRE: All live fire will be conducted inside the house only. Live fire outside the structure is not authorized.

WEAPONS ACCOMMODATED: All Military Issued Pistols (.45/40 Caliber or less) 12 Gauge Shotgun M16/M4 Rifles

AMMUNITION AUTHORIZED: All Pistol Ammunition All 12 Gauge Ammunition 5.56mm (Ball ammunition only) Hand Grenade (Practice Only) Hand Grenade Fuze (Practice Only)

TARGETS/SIMULATORS/DEVICES 1. One story, fiber-mesh concrete clearing house with 4 rooms, no roof or windows. 2. Unit must provide own targets and wooden supports.

FACILITIES (Number of each): Head Facilities: 0 Range Tables: 2 Range Tower: None POV Parking Area: K-400 Area Wooden Mock-up: 1

UTILITIES AVAILABLE: Electricity: No Lights: No Water System: No

INSTALLED COMMUNICATIONS: Telephone Jack: Yes Unit must bring a phone

AREA SUITABILITY: Squad
Range Use Restrictions/Comments/Conflicts

1. The surface danger zone for this will conflict with Range K-402.

2. Maneuvers are restricted to the inside of the shoothouse only.

3. Authorized for night use if properly scheduled in RFMSS. Night vision devices are authorized.

4. Class 3B and 4 LASER devices are not authorized to be used on this range.

5. Only semi-automatic live fire is authorized inside the structure, automatic live fire fire is not authorized inside the structure/complex.

6. This is not a live fire grenade house. Only training practice grenades with fuzes are authorized on the inside of this range. Units seeking/requesting such live fire grenade training should schedule MAC 3.

7. Firing outside of the structure is not authorized. Range OIC/RSO will ensure through the target placement and range safety briefing that no rounds exit the shoothouse. Weapons must be cleared inside the shoothouse using proper weapons clearing procedures orienting the weapons down and at a 45 degree angle toward the deck. The Range OIC/RSO must check each weapon before departing the inside of the structure.

8. Left and right lateral limits are painted inside the house to define firing points. All targets will be placed on the down range side of all house walls (130 degrees PDF). A horizontal red and white-striped line, six inches wide is painted two meters above the deck to define the maximum elevation of any weapon.

9. The using unit will not have instructors or observers on top of the walls while training is being conducted.

Other Considerations. This range is affected by the activation of New River Air Station’s Runway 1. Range Control will notify the Range OIC/RSO of the required procedures to be taken and when normal training can resume.

Special Instructions
1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on this range without a special range request.

3. Digging inside the structure/shoothouse is not authorized.

4. POVs are not authorized on this range, the tank trail, or adjacent surrounding training areas. All POVs must use the designated gravel parking area off the South Verona Loop Road and start of K-400 ranges.

5. Report all maintenance problems to a range inspector or use ICE Comment. This range must be inspected and cleared by a range inspector prior to departing range/muck-up/training area. Range OIC/RSO will complete and submit a range report/ICE Comment upon completion of training and turn-in of range.

6. Range OIC/RSO will ensure down range side of shoothouse and K402 are clear of all personnel and equipment prior to requesting to go HOT.

7. Red range flag will be flown at the entrance to the range.

8. A government safety vehicle and corpsman must be present on the range prior to commencing any training.

9. All non-participating personnel will remain outside of the range safety fan/hazard areas.

10. Range OIC/RSO will ensure an adequate number of safety personnel are assigned to each element to supervise all training. Safety personnel are not authorized on top of house/structure.

11. At least two dry runs/rehearsals will be conducted in the wooden mock-up across the street using blank ammunition and practice grenades.

12. Range OIC/RSO will accompany each firing element and be equipped with appropriate communication and signaling devices if required.

13. All personnel must wear helmets, flak jackets, hearing and eye protection while conducting live fire training inside the structure at all times.
14. The using unit is responsible for a detailed police call of the entire range, all facilities, and parking/staging areas when training is completed. The unit will ensure the removal of all dunnage like brass, all target material from the inside of the range and the wooden mock-up.
RANGE NAME: K-406A

DESCRIPTION: CMP Range

PRIMARY RANGE USE: CMP Range

ALTERNATE RANGE USES:
1. M249/M27 Qual Range
2. Combat Pistol Range
3. Shotgun Range

LOCATION: Grid Coordinate: 77693474

PRIMARY DIRECTION OF FIRE: 107 degrees magnetic

WEAPONS ACCOMMODATED:
All Military Issue Pistols (.45 Caliber or less)
12 Gauge Shotgun
M16/M4 Rifles
M249 (SAW) Squad Automatic Weapon
M27 (IAR) Infantry Automatic Weapon

AMMUNITION AUTHORIZED:
All Pistol Ammunition
All 12 Gauge Ammunition
5.56mm (ball/linked/tracer)
Blank Ammunition
Smoke/Illumination Grenades

TARGETS/SIMULATORS/DEVICES: None

FACILITIES(Number of each):
Head Facilities: Port-a-Johns
Overhead Cover: 1
Range Tables: 3
POV Parking Area: K-400 Area

UTILITIES AVAILABLE:
Electricity: Yes
Lights: Yes
Water System: No

INSTALLED COMMUNICATIONS:
Telephone Phone Jack: Yes
Unit must bring a phone

AREA SUITABILITY: Squad
Range Use Restrictions/Comments/Conflicts

1. Maneuvers are restricted to about 100 meters downrange.

2. Authorized for night use if properly scheduled in RFMSS. Night vision devices are authorized.

3. Class 3B and 4 LASER devices are not authorized on this range.

4. Illumination and smoke grenades are not authorized on this range.

5. Firing from the top of the separation dirt berms is not authorized.

6. All designated firing will be directed towards the K-2 Impact Area. Firing into the dirt berms that separate the range from K-402 and K-406B is not authorized.

Other Considerations

1. This range is affected by the activation of New River Air Station’s Runway 1. Range Control will notify the Range OIC/RSO of the required procedures to be taken and when normal training can resume.

2. The using unit is required to provide a qualified range operator familiar with target operations of the PITS if requested or used. Target systems and the hand held remote control unit must be scheduled and picked up by the using unit. Scheduling for PITS targets must be done at least a minimum of 48 hours in advance. Training is available on the handheld unit Monday through Friday 0800-1200 at the contractor warehouse, Bldg 1404 on Elm Street, 451-8132. It is the responsibility on the Range OIC to ensure the PITS Targetry is well protected with the required sandbags and steel plates. Contact the contracting officer representative (COR) at 451-4480/2411 with any contract support issues.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on this range without a special range request.
3. Digging on this range is not authorized except that required for proper deployment and safety of designated weapon systems. Sandbags must be provided and filled by the unit prior to occupying the range. Prior to departing the range, the unit will ensure all sandbags are removed and all holes are filled and leveled out.

4. POVs are not authorized on this range, the tank trail, or adjacent surrounding training areas. All POVs must use the designated gravel parking area off the South Verona Loop Road and start of K-400 ranges.

5. Report all maintenance problems to a range inspector or use ICE Comment. This range must be inspected and cleared by a range inspector prior to departing the range/training area. Range OIC/RSO will complete and submit a range report/ICE Comment during the turn-in of this range.

6. Range OIC/RSO will ensure down range side is clear of all personnel/equipment prior to requesting to go HOT.

7. Red range flag will be flown at the entrance to the range.

8. A government safety vehicle and corpsman must be present on the range prior to commencing any training.

9. All non-participating or observing personnel will remain outside of the range safety fan/hazard area.

10. Range OIC/RSO will ensure an adequate number of safety personnel are assigned to supervise live fire training.

11. The Range OIC/RSO will ensure all personnel are familiar with safety requirements, firing point/lanes, release, and limits of advance prior to conducting any live-fire operations.

12. Range OIC or the RSO will accompany each firing element and will be equipped with appropriate communication and signaling devices as required.

13. All personnel must wear helmets, flak jackets, hearing and eye protection while live fire training is being conducted.

14. The using unit will be responsible for a detailed police call of the entire range, all facilities, and parking/staging areas when training is completed. The unit will ensure the
removal of all dunnage like brass, links from the range to include tactical wire, wood, and scrap metal.
**RANGE NAME:** K-406B

**DESCRIPTION:** Close Combat Range

**PRIMARY RANGE USE:**
1. Close Combat Range
2. CMP Range (Behind the Structure)
3. Friend/Foe Reaction Range

**ALTERNATE RANGE USES:** Small Arms (Quick Kill) Range

**LOCATION:**
Grid Coordinate: 77683467

**PRIMARY DIRECTION OF FIRE:** 105 degrees magnetic

**WEAPONS ACCOMMODATED:**
All Military Issued Pistols
(.45 Caliber or less)
12 Gauge Shotgun
M16/M4 Rifle

**AMMUNITION AUTHORIZED:**
All Pistol Ammunition
All 12 Gauge Ammunition
5.56mm Ammunition (Ball)

**TARGETS/SIMULATORS/DEVICES**
1. Concrete fiber mesh shooting structure featuring window and flanking targets.
2. Unit must provide PITS Targets.

**FACILITIES (Number of each):**
Head Facilities: Port-a-Johns
Overhead Cover: 1
Range Tower: 1
Range Tables: 3
POV Parking Area: K-400 Area

**UTILITIES AVAILABLE:**
Electricity: Yes
Lights: No
Water System: No

**INSTALLED COMMUNICATIONS:**
Telephone Phone Jack: Yes
Unit must bring a phone

**AREA SUITABILITY:** Squad/Fire Team

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Range Use Restrictions/Comments/Conflicts

1. This range conflicts with Range K-407 if scheduled.
2. Maneuvers are restricted to about 80 meters past the downrange standing wall/structure.

3. Authorized for night use if properly scheduled in RFMSS. Night vision devices are authorized.

4. Class 3B and 4 LASER devices are not authorized on this range.

5. Standing targets with wooden stakes authorized for CMP only. Unit are not authorized any steel target supports on this range.

6. All designated firing will be directed towards the K-2 Impact Area only. Firing into or from the dirt berms that separate the range from K-406A and K407 is not authorized.

7. Rounds impacting the structure will be limited to window opening only. Firing on the structure anywhere else is prohibited. Target placement will be limited to window/door openings only.

8. Vehicles are not authorized on the firing berm, in front of the shooting wall or behind the wall structure.

Other Considerations

1. This range is affected by the activation of New River Air Station’s Runway 1. Range Control will notify the range ROIC/RSO of the required procedures to be taken and when normal training can resume.

2. The using unit is required to provide a qualified range operator familiar with target operations of the PITS in requested. The target systems and the hand held control unit must be scheduled and picked up by the using unit. Scheduling for PITS Targets must be done at least a minimum of 48 hours in advance. Training is available on the handheld unit Monday through Friday 0800-1200 at the contractor warehouse, Bldg 1404 on Elm Street, 451-8132. It is the responsibility on the ROIC to ensure the PITS Targetry is well protected with sandbags and steel plates. Contact the contracting officer representative (COR) at 451-4480/2411 with any contract support issues.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.
2. Bivouacking is not authorized on this range without a special range request.

3. Digging is not authorized on this range.

4. POVs are not authorized on this range, the tank trail or adjacent surrounding training areas. All POVs must use the designated gravel parking area off the South Verona Loop Road and start of K-400 ranges.

5. Report all maintenance problems to a range inspector or use ICE Comment. Range must be inspected and cleared by a range inspector prior to departing range/training area. Range OIC/RSO will complete and submit a range report upon completion of training and the turn-in of range to Range Control.

6. Range OIC/RSO will ensure down ranges area of K-406A and K-407 are clear of all personnel and equipment before going into a “HOT” status.

7. Red range flag will be flown at the entrance to the range.

8. A government safety vehicle and corpsman must be present on the range prior to commencing any live fire training.

9. All non-participating or observing personnel will remain outside of the range safety fan.

10. Range OIC/RSO will ensure an adequate number of safety personnel are assigned to supervise all training. Range OIC/RSO will accompany each firing element/team. All personnel will be equipped with appropriate communication/signaling devices.

11. Maneuvering is restricted to the dirt berm area only. Movement will be parallel on the berm and toward the shooting structure. Only one shooter at a time may engage the target area if firing at the windows. Units are authorized to conduct live fire behind the structure if conducting CMP type training.

12. Dry runs and rehearsals will be conducted. The Range OIC/RSO will ensure all personnel are familiar with safety requirements, firing point/lanes, release, and limits of advance prior to conducting live-fire operations.

13. All personnel must wear helmets, flak jackets, hearing and eye protection while live fire training is being conducted.
14. The using unit is responsible for a detailed police call of the entire range complex, all facilities, and parking/staging areas when training is completed. The unit will ensure the removal of all dunnage like brass, links, from the range to include tactical wire, wood, target material used and any and all scrap metal.
RANGE NAME: K-407

DESCRIPTION: Live Fire Ambush Range (Day/Night)

PRIMARY RANGE USE: Live Fire Ambush Range

ALTERNATE RANGE USES: 1. Night Vision Device Firing Range
                          2. Quick Reaction Range

LOCATION: Grid Coordinate: 77723445

PRIMARY DIRECTION OF FIRE: 104 degrees magnetic

WEAPONS ACCOMMODATED: All Military Issued Pistols (.45/40 Caliber or less)
                        12 Gauge Shotgun
                        M16/M4 Rifle
                        M249 Squad Automatic Weapons
                        M27 Infantry Automatic Rifle
                        M18A1 Claymore Mine

AMMUNITION AUTHORIZED: All Military Pistol Ammunition
                        12 Gauge Shotgun Ammunition
                        5.56mm (Ball/Tracer/Linked)
                        M18A1 Claymore Mine (Day Only)
                        Smoke/Illumination grenades
                        M49A1 Trip Flare
                        Artillery Simulators

TARGETS/SIMULATORS/DEVICES: 1. Range is subdivided into two different ranges for day and night.
                               2. Unit must provide PITS Targets or other suitable target material.
                               3. Designated Claymore pit.

FACILITIES(Number of each): Head Facilities: None
                           Range Tower: None
                           POV Parking Area: K-400 Area
                           Range Tables: 2

UTILITIES AVAILABLE: Electricity: No
                     Lights: No
                     Water System: No

INSTALLED COMMUNICATIONS: Telephone Phone Jack: Yes
                           Unit must bring a phone

A-191
Area Suitability: Squad/Platoon

Range Use Restrictions/Comments/Conflicts


2. Authorized for night use if properly scheduled in RFMSS. Night vision devices are authorized on this range.

3. Class 3B and 4 LASER devices are not authorized on this range.

4. Claymore Mines will only be used in their designated demo pit down range on the Day Live Ambush Range. Only one Claymore Mine in a demo pit area at a time. All Claymore Mines will be aimed so the blast is directed towards the center of the K-2 Impact Area only. Range OIC/RSO will be familiar with all safety requirements associated with the Claymore Mine such as operations, deployment, safety procedures, misfire procedures as set forth in the TM and other required references.

5. Range configured to support day and night ambush training in different areas, separated by trees: Daytime ambush training on far left range (closest to K-406B); Nighttime ambush training on right side of range (closest to K-408).

6. Maneuvers are authorized but restricted and the limit of advance is 100 meters down range. Cross range firing is not authorized on this range. Movement beyond the tree line requires Base EOD support.

7. The M49 trip flare is authorized only on the night ambush side. All trip flares will be positioned so they ignite below waist level and center of the down range area. The using unit must clean-up, police up all debris, after use and remove all debris from the range.

Other Considerations

1. This range is affected by the activation of New River Air Station’s Runway 1. Range Control will notify the Range OIC/RSO of the required procedures to be taken and when normal training can resume.

2. Request for the use of Claymore Mines must be submitted through the unit’s chain of command to Range Control. The
Special Range Request must be submitted at least ten (10) working days in advance from the first day of training. Planning and usage must in accordance with FM 3-34.214 Explosive and Demolitions and the TM on the claymore mine.

3. The using unit is required to provide a qualified range operator familiar with target operations of the PITS Targets. The target systems and the hand held remote control unit must be scheduled and picked up by the using unit. Scheduling for PITS Targets must be done at least a minimum of 48 hours in advance. Training is available on the handheld remote control unit Monday through Friday 0800-1200 at the contractor warehouse, Bldg 1404 on Elm Street. It is the responsibility on the Range OIC to ensure the PITS Targetry is well protected with the required sandbags and steel plates. Contact the contracting officer representative (COR) at 451-4480/2411 with any contract support issues.

4. Use of Claymore Mines must cease at least one hour prior to sunset.

Special Instructions

1. Be familiar with Chapter 5 of this SOP and all references.

2. Bivouacking is not authorized on this range without a special range request.

3. Digging on this range is not authorized except for the requirement for proper deployment and safety of designated weapon systems/Claymore Mines. Sandbags must be provided and filled by the unit prior to occupying the range. Prior to departing the range, the unit will ensure all sandbags are removed and all holes are filled in and leveled out.

4. POVs are not authorized on this range, the tank trail or the surrounding training areas. All POVs must use the designated gravel parking area off the South Verona Loop Road at the start of K-400 ranges.

5. Report all maintenance problems to a range inspector. This range must be inspected and cleared by a range inspector prior to departing range/training area. Range OIC/RSO will complete and submit a range report/ICE Comment upon completion of training and turn-in of range to Range Control.
6. Range OIC/RSO will ensure K-408, K-406B are secured of all personnel/equipment prior to requesting to go into a “HOT” status.

7. Range OIC/RSO must verify the proper placement of the M49 Trip Flare and the M18A1 Claymore Mine down range and that all safety procedures are in place before going into a “HOT” status.

8. Red range flag will be flown at the entrance to the range.

9. A government safety vehicle and corpsman must be present on the range prior to commencing any live fire training.

10. All non-participating personnel will remain outside of the Range safety fan.

11. All personnel must wear helmets, flak jackets, hearing and eye protection while live fire training is being conducted.

12. Range OIC/RSO will ensure the adequate number of safety personnel are assigned to control maneuver exercises. Range OIC or the RSO will accompany each fire team down range during fire and movement if scheduled. All personnel will be equipped with appropriate communication and signaling devices while down range.

13. Dry runs will be conducted prior to any live fire training. Range OIC/RSO will ensure all personnel are familiar with the firing lanes, firing points, limits of fire, all safety procedures, and movement forward limits.

14. If a dud/misfire occurs on this range with the Claymore mine, Range OIC/RSO will place the range in an immediate “CHECK FIRE” and notify BLACKBURN/Range Control. BLACKBURN/Range Control will contact Base EOD personnel for assistance/support.

15. Using unit is responsible for a detailed police call of the entire range, all facilities, and parking/staging areas when training is completed. The unit will ensure the removal of all dunnage from the range to include brass, links, tactical wire, wood, target material, and Claymore Mine components.

16. Claymore Mines will only be used on the day live fire ambush side and the using unit must remove the wire and debris. The using unit will ensure proper safety distance area in place for the Claymore Mine and provide a back blast sandbag wall as required.
RANGE NAME: K-408

DESCRIPTION: Urban Obstacle Course

PRIMARY RANGE USE: Military Operations in Urbanized Terrain (MOUT)

ALTERNATE RANGE USES: 1. Urban Obstacle Course
                         2. Close Quarter Battle Firing Range
                         3. Night Target Engagement Firing Range

LOCATION: Grid Coordinate: 77553427

PRIMARY DIRECTION OF FIRE: 114 degrees magnetic

WEAPONS ACCOMMODATED: All Military Issued Pistols (.45 Caliber or less)
                       12 Gauge Shotgun
                       M16/M4 Rifle
                       M249 SAW (Special Range Request Only)

AMMUNITION AUTHORIZED: All Military Pistol Ammunition
                        All 12 Gauge Shotgun Ammunition
                        5.56mm (Ball, Tracer, Linked)
                        Smoke/Illumination Grenades
                        M49A1 Trip Flare
                        Artillery Simulators

TARGETS/SIMULATORS/DEVICES Contractor Supported Range: 17 PITs stations; 10 MOUT assault structures.

FACILITIES(Number of each): Head Facilities: Port-a-Johns
                           Rope Tower: 1, unit must ask for rope
                           Overhead Cover: 1
                           Range Tables: 3
                           Contractor Shed/Container: 1
                           POV Parking Area: K-400 Area

UTILITIES AVAILABLE: Electricity: Yes
                     Lights: Yes
                     Water System: No

INSTALLED COMMUNICATIONS: Telephone Jack: Yes
                          (Unit must bring a phone)
AREA SUITABILITY: Squad/Platoon

Range Use Restrictions/Comments/Conflicts

1. Conflicts with Range K-407. Range OIC/RSO will ensure K-407 is secured of all personnel and equipment. Unit must also ensure Foy's Landing/Boat Ramp/Waterway is clear of any boaters by observing the area before going into a "HOT" status.

2. Maneuvers are restricted to the rear where the obstacles are located, no movement downrange past the targets systems is authorized on this range.

3. Authorized for night use if properly scheduled in RFMSS. Night vision devices are authorized on this range.

4. Class 3B and 4 LASER devices are not authorized on this range.

5. Cross range firing is not authorized on this range. Movement beyond tree line prohibited unless escorted by Base EOD personnel.

6. Smoke/Illumination Grenades, M49A1 Trip Flare, and artillery simulators are not authorized in tunnel obstacle. Using unit should insure the tunnel is cleared and checked before going into a "HOT" status.

Other Considerations

1. This range is affected by the activation of New River Air Station’s Runway 1. Range Control will notify the Range OIC/RSO of the necessary procedures to be taken and when normal training can resume.

2. A range contractor will set up the range and ensure the targets are working properly with the using unit before departing. Contact the contracting officer representative at 451-4480/2411 with any contract support issues or problems with the targets.

3. Using units that require a time extension on this range must request it at least four (4) hours in advance of their scheduled completion (COLD) time in order to allow for an alteration to the scheduled contractor support. This request for time extension will be made through Range Scheduling during normal working hours and BLACKBURN after hours.
4. Units must occupy a contractor-supported range with a responsible unit training representative (not necessarily the Range OIC/RSO) within 1 hour of the “HOT” time or the range will be cancelled for that day.

5. This range can be scheduled for a maximum of 8 hours per day only.

6. Digging on this range is not authorized except for the proper deployment and safety of designated weapon systems. Sandbags must be provided and filled by the unit prior to occupying the range. Prior to departing the range, the unit will ensure all sandbags are removed and holes are filled in and leveled out.

7. Range Control has the climbing rope which is available for checkout if requested/needed. The using unit is responsible for checking it out and ensuring the climbing rope arrives on the range. The climbing rope will be returned to Range Control upon completion of the training during the range check-in with Range Control. Units are not authorized to leave the rope on the range, it must be returned to Range Control.

8. No more than six shooters (3 Pairs of 2 Marines each) are authorized on the K-408 MOUT live fire assault course at a time.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on this range without special request.

3. POVs are not authorized on this range, the tank trail, or adjacent surrounding training areas. All POVs must use the designated gravel parking area off the South Verona Loop Road and the start of K-400 ranges.

4. Range OIC/RSO will verify and check all obstacles to make sure they are safe.

5. Report all maintenance problems to a range inspector or use ICE Comment. Range must be inspected and cleared by a range inspector prior to departing the range/training area. Range OIC/RSO will complete and submit a range report/ICE Comment upon completion of training and turn-in of range.
6. A government safety vehicle and corpsman must be present on the range prior to commencing any live fire training.

7. Red range flag will be flown at the entrance to the range.

8. All personnel must wear helmets, flak jackets, hearing and eye protection while live fire training is being conducted.

9. All non-participating or observing personnel will remain outside of the range safety fan/hazard area/firing line area.

10. Range OIC/RSO will ensure adequate number of safety personnel are assigned to control the scheduled exercise. Range OIC/RSO will accompany each fire team down range during the fire and movement. All personnel will be equipped with appropriate communication and signaling devices on this range as required.

11. Fire and Movement is authorized to get from one assault obstacle/firing station to another in pairs. Movement is restricted to a direct route, parallel with firing line at all times. Unit must ensure weapons are always pointed down range, weapon safety is engaged on the weapon before moving to the next location.

12. Dry runs and rehearsals will be conducted prior to the scheduled live fire event under the same conditions (Day/Night). The Range OIC/RSO will ensure all personnel are familiar with the firing line, all firing points, sectors of fire, obstacles, firing limits, target locations, and limits of movement. All weapons must be cleared and checked before departing from the firing line. The using unit will place the weapon safety on when moving from the firing point to the next firing point/obstacle.

13. After exiting the dirt tunnel, the using unit must ensure the muzzle of the rifle(s) is clear of dirt and debris and checked before firing the weapon at the next firing point. Only one (1) Marine should be in the tunnel at a time.

14. The using unit is responsible for a detailed police call of the entire range, all facilities, and parking/staging areas when training is completed. The unit will ensure the removal of all dunnage from the range to include, brass, links, any additional target material, tactical wire, wood, and scrap metal.
RANGE NAME: K-501/K501A

DESCRIPTION: K-501 M16/M4/M249 SAW Range
K-501A M16/M4/M249 SAW BZO/Zero/CMP Range

PRIMARY RANGE USE: M16/M249 SAW Static Live Fire Range

ALTERNATE RANGE USES: 1. Rifle Familiarization Range
2. SAW/IAR Familiarization Range
3. SAW/IAR Transition Range
4. Unknown Distance Range
5. Night Firing Range
6. LASER Pointer Range

LOCATION: Grid Coordinate K-501: 78863619
Grid Coordinate K-501A: 78973623

PRIMARY DIRECTION OF FIRE: 146 degrees magnetic for K-501
226 degrees magnetic for K-501A

WEAPONS ACCOMMODATED: For both K-501/K501A
M16/M4 Rifle
M249 (SAW) Squad Automatic Weapon
M27 (IAR) Infantry Automatic Rifle

AMMUNITION AUTHORIZED: 5.56mm (Ball, Tracer, Linked)

TARGETS/SIMULATORS/DEVICES: Range K-501:
M16/M249 Static Live Fire Range:
Targets 50 to 800 Meters.
Target lines at 50, 100, 200, 300, 400, 500, and 800 meters.
15 lanes with 6 targets in each lane except the 800 meter line which only has 10 targets. Target lanes are marked with white and black numbers.

Total of 100 Stationary Infantry Targets (SITS) E type-silhouette pop up type targets on this range
Range K-501A:
BZO/Zero/CMP Range:
This range has 10 lanes with target holders at 25 and 50 meters.
Using unit must provide it own targets and target supports.

FACILITIES (Number of each):
Head Facilities, Male/Female: 0
Control Tower: 1 (ST73)
Bleachers/Classroom: 1 (SVL502)
Range Tables: 2
POV Parking Area: Yes
Ammo Breakdown Area: 1 (SVL501)
Bivouac Site: 1 (Across Road)
Firing Berm: 1
Flag Pole: 1
Light Poles: 6
Firing Roofs: 3
Firing Doorways: 3
Port-a-Johns: (TBD)

UTILITIES AVAILABLE:
Electricity: Yes
Lights: Yes (White/Blue)
Water System: No
PA System: Yes
Range lights: Yes

INSTALLED COMMUNICATIONS:
Telephone Number (TBD)

AREA SUITABILITY:
Platoon/Squad/Fire Team

Range Use Restrictions/Comments/Conflicts

1. This range does not conflict with any other live fire ranges.

2. Live fire and movement/maneuvers is not authorized on this range. This range is only a static fire range from the dirt firing berm.

3. Authorized for night use. Night vision devices are authorized. Class 1, 2, 3A, and 3B LASERs are authorized if properly scheduled in RFMSS. Class 4 LASER devices are not authorized on this range. Class 3B LASERs requires a LASER Range Safety Officer (LRSO) from the using unit.
4. This range requires two (2) road guards at the gravel entrances to the range. A map overlay indicating the range fan, the road guard locations will be provided when range is checked out. It is the responsibility of the Range OIC/RSO to ensure that road guards are placed properly in the correct locations. Road guards will have and maintain internal communication with the Range OIC/RSO while training/live fire is being conducted. Road guard must be particularly vigilant for intruders.

5. Vehicular movement downrange is not authorized by the training unit.

6. RETs are operated by a variety of scenarios for training that are preset electronically and operated by the Range Contractor. There is a list of scenarios to choose from or the unit can have the contractor design scenarios.

7. This range has designated/assigned firing points and shooters are to engage only targets in their lane. Cross range firing is not authorized on K501 and K501A. All live fire and the effects of live fire must be within the approved lanes and surface danger zones (SDZ) for K501 and K501A at all times.

8. This range is not approved for 7.62mm ammunition for machineguns, sniper rifles, and foreign weapons.

9. No privately owned weapons or ammunition authorized on this range.

Other Considerations

1. This range is affected by the activation of New River Air Station’s Runway 1. Range Control will notify the Range OIC/RSO of the required procedures to be taken and when normal training can resume.

2. Request to modify computerized target scenarios must be submitted through the unit’s chain of command to Range Control. The request must be submitted ten (10) working days in advance from the first day of training. Contact the contracting officer representative at 451-4480/2411 with any contract support issues.

3. This range can be scheduled for a maximum of 16 hours per day. The range contractor must be on the contracted range the entire time scheduled. This range is not authorized for live fire unless a range contractor is present on the range. The
range must be scheduled in RFMSS properly, and signed for by the Unit Range OIC.

4. Units must occupy a contractor-supported range with a responsible unit or contracted training representative (Not necessarily the Range OIC/RSO) within 1 hour of the scheduled "HOT" time or the range will be cancelled for that day.

5. The unit is responsible for becoming acquainted with approved training scenarios the contractor has installed prior to training session.

6. The using units that requires a time extension on the range must request it at least four (4) hours in advance of their scheduled completion "COLD" time in order to allow for an alteration to the scheduled contractor support if available. This request for time extension will be made through Range Scheduling by the unit’s S-3 section during normal working hours. If after normal working hours the using unit will contact BLACKBURN direct.

7. Final range coordination brief will be conducted by a Range Inspector when the using unit occupies the range. Units occupying on weekends, holidays, and/or long weekends will ensure the final range coordination brief is received prior to Friday and/or no later than the last regular work day prior to the weekend/holiday/long weekend with a Range Inspector, located at building SR-46, in the GRSA on CC road across from SR-6. Briefs can take place on the weekends at the range if arranged by Range Control Scheduling or BLACKBURN with the duty Range Inspector prior to that Friday.

8. Under high wind conditions of 35 knots or higher, the range operator (contractor) will shut down the range and all targets will be placed in a down position to prevent damage to both the targets and target lifting mechanisms.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on this range. Bivouacking will only take place across the Rhodes Point Road in the KB training area at grid 788-364. The KB training area must be scheduled in RFMSS.
3. Digging on this range is not authorized. Sandbags if used must be provided and filled by the unit prior to occupying the range. Prior to departing the range, the unit will ensure all sandbags are removed from the range.

4. POVs are not authorized to park on this range, on Rhodes Point Road, adjacent training areas or along the paved Verona Loop Road. POVs must use the designated gravel parking area on the corner of Rhodes Point Road and Verona Loop Road.

5. Red range flag will be flown at the entrance to the range.

6. Government safety vehicle and corpsman must be present on the range prior to commencing training.

7. All non-participating or observing personnel will remain outside of the range fan/firing line.

8. All personnel must wear helmets, flak jackets, hearing, and eye protection while live fire training is being conducted.

9. Range OIC/RSO will ensure adequate number of safety personnel are assigned to control the live fire events.

10. Range OIC/RSO will ensure all personnel are familiar with the designated firing lanes/markers, firing points, sectors of fires, limits of fires. The firing lanes/markers are not targets and should not be fire upon.

11. The using unit will be responsible for a detailed police call of the entire range complex, all facilities, bivouac site, outdoor classroom/bleacher area, port-a-johns area, and the parking/staging areas when training is completed.

12. The unit will ensure the removal and proper disposal of all dunnage/trash from the range to include brass, links, SAW ammunition plastic containers, tactical wire, and any wood, scrap metal, or any other material/debris on this range. Units will not throw ammunition dunnage over the berm or in the woods/tree line on this range.

13. Range OIC/RSO will complete and submit a range report upon completion of training and turn-in of the range. Report all maintenance problems/issues to a range inspector or via ICE Comment.
14. It is the responsibility of the Range OIC/RSO to ensure all lights are turned off from the outside of the tower, the overhead covered/bleacher area, and ammo break down area. The range contractor is only responsible for the lights inside the tower. The metal doors to the outdoor classroom are latched down/secured, and wooden firing enhancements are lying down.

16. Authorized for night live fire if properly scheduled in RFMSS for the required times. Night vision devices and handheld illumination rounds are authorized on this range. Unit will be responsible for policing all debris like the expended parachutes and other type dunnage from the down range area.

17. Range OIC/RSO will ensure all personnel are familiar range marker, firing lanes, firing points, and sector of fires.

18. Do not disturb or remove any targets systems (SITS) from this range. Using unit is not authorized to add addition targets to this range without a special range request to Range control 10 working days in advance.

19. K501/K503A can be in a “HOT” Status at the same time and have one (1) Range OIC for both ranges and two (2) different RSOs, one for each range, but only if both ranges are scheduled by the same unit.
RANGE NAME: K-503/K503A

DESCRIPTION: K-503 M16/M4 Rifle
K-503A M16/M4 Rifle BZO/Zero/CMP Range

PRIMARY RANGE USE: M16/M4 Static Live Fire Range

ALTERNATE RANGE USES: 1. Rifle Familiarization Range
3. Rifle Unknown Distance Range
4. Rifle Night Firing Range
5. Rifle/LASER Pointer Range

LOCATION: Grid Coordinate K-503: 79763608
Grid Coordinate K-503A: 79663607

PRIMARY DIRECTION OF FIRE: 146 degrees magnetic for K-503
226 degrees magnetic for K-503A

WEAPONS ACCOMMODATED: M16/M4 Rifle
M249 SAW/M27 IAR (Special Range Request Only)

AMMUNITION AUTHORIZED: 5.56mm (Ball, Tracer)

TARGETS/SIMULATORS/DEVICES: Range K-503:
M16/M4 Static Live Fire Range:
Targets at 50 to 500 meters.
Target lines at 50, 100, 150, 200, 300, 350, 400, and 500 meters.

15 lanes with 9 targets in each lane. Target lanes are marked with white and black numbers.

Total of 135 Stationary Infantry Targets (SITS)

9 Infantry Moving Targets (MITS), 3 MITS at the 50, 100, and 200 meters

Range K-503A:
BZO/Zero/CMP Range:
This range has 10 lanes with target holders at 25 and 50 meters. Using unit must provide
it own targets and target supports.

**FACILITIES (Number of each):**
- Head Facilities, Male/Female: 0
- Control Tower: 1 (ST74)
- Bleachers/Classroom: 1 (SVL531)
- Range Tables: 0
- POV Parking Area: Yes
- Ammo Breakdown Area: 1 (SVL530)
- Bivouac Site: 1
- Across road near ALZ-20
- Firing Berm: 1
- Flag Pole: 1
- Light Poles: 6
- Port-a-Johns: (TBD)

**UTILITIES AVAILABLE:**
- Electricity: Yes
- Lights: Yes (White/Blue)
- Water System: No
- PA System: Yes
- Range lights: Yes

**INSTALLED COMMUNICATIONS:**
- Telephone Number (TBD)

**AREA SUITABILITY:**
- Platoon/Squad/Fire Team

**Range Use Restrictions/Comments/Conflicts**

1. This range does not conflict with any other live fire ranges.

2. Live fire and movement/maneuvers is not authorized on this range. This range is only a static fire range from the dirt firing berm.

3. Authorized for night use. Night vision devices are authorized. Class 1, 2, 3A, and 3B LASER devices are authorized if properly scheduled in RFMSS. Class 4 LASER devices are not authorized on this range. Class 3B LASERs requires a LASER Range Safety Officer (LRSO) from the using unit.

4. This range requires two (2) road guards at the gravel entrances to the range. A map overlay indicating the range fan, the road guard locations will be provided when range is checked out. It is the responsibility of the Range OIC/RSO to ensure road guards are placed properly in the correct locations. Road guards will have and maintain internal communication with the
Range OIC/RSO while training/live fire is being conducted. Road guard must be particularly vigilant for intruders.

5. Vehicular movement downrange is not authorized by the training unit.

6. RETs are operated by approved scenarios that are preset electronically and operated by the Range Contractor.

7. This range has designated/assigned firing points. Cross range firing is not authorized on K503 and K503A. All live fire and the effects of live fire must be within the approved lanes and the surface danger zones (SDZ) for K503 and K503A at all times.

8. This range can be scheduled for the M249 SAW 5.56mm linked and the M27 Infantry Automatic Rifle (IAR) by special range request only.

9. This range is not approved for 7.62mm ammunition for machineguns, sniper rifles, and foreign weapons.

10. No privately owned weapons or ammunition authorized on this range.

Other Considerations

1. This range is affected by the activation of New River Air Station’s Runway 1. Range Control will notify the range Range OIC/RSO of the required procedures to be taken and when normal training can resume.

2. Request to modify computerized target scenarios must be submitted through the unit’s chain of command to Range Control. The request must be submitted ten (10) working days in advance from the first day of training. Contact the contracting officer representative at 451-4480/2411 with any contract support issues.

3. This range can be scheduled for a maximum of 16 hours per day. The range contractor must be on the contracted range the entire time scheduled. This range is not authorized for live fire unless a range contractor is present on the range. The range must be scheduled in RFMSS properly, and signed for by the using unit Range OIC.
4. Units must occupy a contractor-supported range with a responsible unit or contracted training representative (Not necessarily the Range OIC/RSO) within 1 hour of the scheduled “HOT” time or the range will be cancelled for that day.

5. The unit is responsible for becoming acquainted with approved training scenarios the contractor has installed prior to training session.

6. Using units that require a time extension on the range must request it at least four (4) hours in advance of their scheduled completion “COLD” time in order to allow for an alteration to the scheduled contractor support. This request for time extension will be made through Range Scheduling by the unit’s S-3 section during normal working hours. If after normal working hours the unit will contact BLACKBURN direct.

7. Final range coordination brief will be conducted by a Range Inspector when the using unit occupies the range. Units occupying on weekends, holidays, and/or long weekends will ensure the final range coordination brief is received prior to Friday and/or no later than the last regular work day prior to the weekend/holiday/long weekend with a Range Inspector, located at building SR-46, in the GRSA on CC road across from SR-6. Briefs can take place on the weekends at the range if arranged by Range Control Scheduling or BLACKBURN with the duty Range Inspector prior to that Friday.

8. Under high wind conditions of 35 knots or higher, the range operator (contractor) will shut down the range and all targets will be placed in a down position to prevent damage to both the targets and target lifting mechanisms.

Special Instructions

1. Be familiar with Chapter 5 of this SOP and all references.

2. Bivouacking is not authorized on this range. Bivouacking will only take place across the Rhodes Point Road in the KB training area at grid 801363 next to ALZ-20. The KB training area must be scheduled in RFMSS.

3. Digging on this range is not authorized. Sandbags if used must be provided and filled by the unit prior to occupying the range. Prior to departing the range, the unit will ensure all sandbags are removed from the range.
4. POVs are not authorized to park on this range, on Rhodes Point Road, adjacent training areas or along the paved Verona Loop Road. POVs must use the designated gravel parking area on the corner of Rhodes Point Road and Verona Loop Road or the parking area near ALZ-20.

5. Red range flag will be flown at the entrance to the range.

6. Government safety vehicle and corpsman must be present on the range prior to commencing training.

7. All non-participating or observing personnel will remain outside of the range fan/firing line.

8. All personnel must wear helmets, flak jackets, hearing and eye protection while live fire training is being conducted.

9. Range OIC/RSO will ensure adequate number of safety personnel are assigned to control the live fire events.

10. Range OIC/RSO will ensure all personnel are familiar with the designated firing lanes/markers, firing points, sectors of fires, and limits of fires. The firing lanes/markers are not targets and should not be fired upon.

11. The using unit will be responsible for a detailed police call of the entire range complex, all facilities, bivouac site, outdoor classroom/bleacher area, port-a-johns area, and the parking/staging areas when training is completed.

12. The unit will ensure the removal of all dunnage from the range to include brass, links, SAW ammunition plastic containers, and any wood, scrap metal, or any other material/debris on this range. Units will not throw ammunition dunnage over the berm or in the woods/tree line on this range.

13. Range OIC/RSO will complete and submit a range report upon completion of training and turn-in of the range. Report all maintenance problems/issues to a range inspector or via ICE Comment.

14. It is the responsibility of the Range OIC/RSO to ensure all lights are turned off from the outside of the tower, the overhead covered/bleacher area, and ammo break down area. The range contractor is only responsible for the lights inside the tower. The metal doors to the outdoor classroom are latched down/secured, and wooden firing enhancements are lying down.
15. Authorized for night live fire if properly scheduled in RFMSS for the required times. Night vision devices and handheld illumination rounds are authorized on this range. Unit will be responsible for policing all debris like the expended parachutes and other type dunnage from the down range area only.

16. Range OIC/RSO will ensure all personnel are familiar range marker, firing lanes, firing points, and sector of fires.

17. Do not disturb or remove any targets systems/material (SITS/MITS) from this range. The using unit is not authorized to add additional targets to this range without a special range request to Range Control 10 days in advance.

18. K503/K503A can be in a “HOT” Status at the same time and have one (1) Range OIC for both ranges and two (2) different RSOs, one for each range, but only if both ranges are scheduled by the same unit.
RANGE NAME: K-504A/K-504B
DESCRIPTION: M203/M32 Grenade Launcher Range
PRIMARY RANGE USE: M203/M32 Grenade Launcher Range
ALTERNATE RANGE USES: M203/M32 Non-Lethal Range
LOCATION: Grid Coordinate: 80243628
PRIMARY DIRECTION OF FIRE: 180 degrees magnetic
WEAPONS ACCOMMODATED: M203/M32 Grenade Launchers
AMMUNITION AUTHORIZED: 40mm Ammunition (All DODICs, except CS)
40mm Non-Lethal Ammunition (All DODICs)
40mm HEDP/HE is authorized on K-504A which is the range on the left hand side of the range only.
40mm training practice ammunition DODIC B519 is authorized on K-504B on the right hand side of the range only.

TARGETS/SIMULATORS/DEVICES
2 Zero Panels (Armor Targets) at 200 meters (One on each side with large white “Z” painted on the hulk).
3 Window Targets at 100 meters. (On the training practice side only).
6 Bunker Targets at 105-115 meters. (Three on each side).
4 Armor Targets at 135-150 meters. (Two on each side).
3 Mortar Pits at 200-250 meters. (One on K-504A and two on K-504B).
6 Troop Emplacements at 275-300 meters. (Three on each side).
6 Troop Emplacements at 325-350 meters. (Three on each side).

FACILITIES (Number of each):
Bleachers/Classroom: 1 (SVL541)
Range Tables: 2
POV Parking Area: Yes, near ALZ-20
Ammo Breakdown Area: 1 (SVL540)
Bivouac Site: 1 (ALZ-20)
Firing Berm: 1
Firing Points (Sand bag/Wooden Walls) 1
Flag Pole: 1
Light Poles: 6 (Blue/White)
Port-a-Johns: (TBD)
12 Fire Points (6 on each side)

**UTILITIES AVAILABLE:**
Electricity: Yes
Lights: Yes
Water System: No
PA System: Yes

**INSTALLED COMMUNICATIONS:**
Telephone: Yes (Telephone Number, TBD)

**AREA SUITABILITY:**
Company/Platoon

Range Use Restrictions/Comments/Conflicts

1. This range does not conflict with any other live fire ranges within the K-2 Impact Area. Both K-504A and K-504B can be “HOT” at the same time if properly scheduled in RFMSS and signed for by the same unit. K-504A and K-504B can not be scheduled by different units.

2. Live fire and movement/maneuvers is not authorized on this range. This range is only a M203/M32 static live fire range from the dirt firing berm/firing positions.

3. Authorized for night use if properly scheduled in RFMSS. Night vision devices are authorized. Class 1, 2, 3A, and 3B LASERs are authorized if properly scheduled in RFMSS. Class 4 LASERs devices are not authorized on this range. Class 3B LASERs require a LASER Range Safety Officer (LRSO) from the using unit.

4. This range consists of 3 Sandbag Walls, and 3 Wooden Wall structures for shooting/firing positions on each side of this range.

5. Movement forward of the firing berm is not authorized unless scheduled and escorted by Base EOD.

6. The first 80 meters is a “No Fire Zone”. All personnel, equipment, fired ammunition impacts, and vehicles will remain clear of this area.

7. Dud producing 40mm ammunition (HE/HEDP) is authorized on
K-504A range only (Left Hand Side).

8. Additional targets are not authorized to be placed down range on this range.

9. Firing from tactical vehicles is not authorized on this range. Vehicles are not authorized on firing berm, grass areas, or forward of the firing berm.

10. The range is equipped with (7) seven yellow metal poles down the center of the range that divides the HE/HEDP ammunition side which is K-504A and from the training practice (TP) ammunition side which is K-504B. These are not targets.

11. This range has designated/assigned firing points/direction of fire. Cross range firing is not authorized on K-504A and K-504B. All live fire and the effects of live fire must be within the approved lanes and SDZ for K-504A and K-504B at all times.

12. This range is not approved for small arms ammunition.

13. No privately owned weapons or ammunition authorized on this range.

14. Final range coordination brief will be conducted by a Range Inspector when the using unit occupies the range. Units occupying on weekends, holidays, and/or long weekends will ensure the final range coordination brief is received prior to Friday and/or no later than the last regular work day prior to the weekend/holiday/long weekend with a Range Inspector, located at building SR-46, in the GRSA on CC road across from SR-6. Briefs can take place on the weekends at the range if arranged by Range Control Scheduling or BLACKBURN with the duty Range Inspector prior to that Friday.

Other Considerations

1. This range is affected by the activation of New River Air Station’s Runway 1. Range Control will notify the Range OIC/RSO of the required procedures to be taken and when normal training can resume.

2. This range requires two (2) road guards at the gravel entrances to the range. It is the responsibility of the Range OIC/RSO to ensure that road guards are placed properly in the correct locations. The road guards will have and maintain
internal communication with the Range OIC/RSO while training/live fire is being conducted. The road guards must be particularly vigilant for intruders to this range.

3. All DODICs for 40mm M203/M32 are authorized to be fired except 40mm CS as long as all minimum safe distances (165 meters for HEDP, 130 meters for HE) are in place, enforced, and supervised. HEDP/HE ammunition is not authorized to be fired at the window targets which are on the training practice side only (K-504B) of the range.

4. Using unit will report all ammunition fired down range that did not function properly as UXO.

5. All personnel will be instructed in the proper use of all safety precautions/immediate action procedures for the M203/M32 and the 40mm ammunition before conducting any live fire. Unit must build a dud/misfire pit on the side of the berm if needed. All dud/misfire rounds must be removed either by the unit or Base EOD when departing the range. Dud rounds down range will not be removed by the unit but will be reported to BLACKBURN.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on this range. Bivouacking will only take place across the Rhodes Point Road in the KB training area at grid 801363 which is near ALZ-20. The KB training area must be scheduled in RFMSS.

3. Digging is not authorized on the range except for the dud/misfire pit on the outer edge of the dirt firing berm. Do not remove sandbags from the sandbag walls for any other purpose.

4. It is the responsibility of the Range OIC/RSO to ensure all lights are turned off from the outside of the tower, the overhead covered/bleacher area, and ammo break down area. The range contractor is only responsible for the lights inside the tower. The metal doors to the outdoor classroom must be latched down/secured in the closed position.

5. POVs are not authorized on this range, the tank trail or adjacent training areas. All POV parking will be located near ALZ-20/Bivouac Site which is across the Rhodes Point Road.
6. Report all maintenance problems to a range inspector and or use ICE Comments. Range must be inspected and cleared by a range inspector prior to departing range/training area. Range OIC or RSO will complete and submit a range report upon completion of training and turn-in of range.

7. Red range flag will be flown at the entrance to the range.

8. A safety vehicle and corpsman must be present on this range prior to commencing training.

9. All observing personnel will remain outside of the range safety fan and the firing line.

10. All personnel must wear helmets, flak jackets, hearing and eye protection while live fire training is being conducted.

11. Range OIC/RSO will ensure adequate number of safety personnel are assigned to control each of the firing points.

12. The using unit will be responsible for a detailed police call of the entire range complex, all facilities, bivouac site, outdoor classroom/bleacher area, port-a-johns area, and the parking/staging areas when training is completed.

13. No more than six (6) shooters on the firing berm at the same time on this range. Three (3) on each side (HE/HEDP and TP Side)

14. The using unit will replace all damaged sandbags on the sandbag firing positions prior to the range inspection and departing the range.

15. The MK-19 40mm linked machinegun is not authorized on K504A or K-504B.

16. Do not disturb or remove any targets material from this range. The using unit is not authorized to add addition targets to this range.

17. Firing M203/M32 40mm in pairs (two) is authorized on this range. Firing more then one (1) M203/M32 at a time is authorized as long as all safety procedures are in place and enforced.
RANGE NAME: K-510

DESCRIPTION: Live Hand Grenade Range

PRIMARY RANGE USE: Live Hand Grenade Range

ALTERNATE RANGE USES: 1. Hand Grenade Distance and Accuracy Course (Non-Live Fire)
                        2. Hand Grenade Assault Course (Non-Live Fire)

STATUS: Active

LOCATION: Grid Coordinate: Center 80833720

PRIMARY DIRECTION OF FIRE: 320 degrees magnetic

WEAPONS ACCOMMODATED: Hand Grenades

AMMUNITION AUTHORIZED: Hand Grenade, Practice DODIC G811
                        Practice Grenade Fuse DODIC G878
                        M67 Hand Grenade, HE, Fragmentation DODIC G881

TARGETS/SIMULATORS/DEVICES
1. Open fragmentation grenade impact area with six (6) throwing pits and the aiming stakes.
2. One (1) practice throwing area with four (4) practice pits structures and aiming stakes.

FACILITIES (Number of each): Head Facilities: 14 Port-a-Johns
                             Range Tables: 1
                             Range Observation Tower: 1
                             Practice Throwing Range: 1
                             Practice Throwing Pits: 4
                             Fragmentation Throwing Pits: 6
                             POV Parking Area: Near ALZ-20 only

UTILITIES AVAILABLE: Electricity: Yes (Tower)
                    Lights: Yes (Tower)
                    Water System: No
                    Sound System: Yes

INSTALLED COMMUNICATIONS: Telephone: Yes
AREA SUITABILITY: Company/Platoon

Note: Hand Grenade Distance and Accuracy Course (Non-Live Fire) and the Hand Grenade Assault Course (Non-Live Fire) are included with K510 when scheduled properly in RFMSS and signed for. Unit is responsible for the entire complex/area.

Range Use Restrictions/Comments/Conflicts

1. Maneuver down range is not authorized.

2. Night use is not authorized on this range.

3. Placement of targets down range is not authorized on this range.

4. Range will be return to original condition upon completion of live fire training. The using unit will be provided dirt to fill in and level out all holes/craters down range in the impact area.

5. Handling and throwing of live hand grenades will cease-fire one (1) hour prior to sunset.

6. All throwing pits will be supervised by a qualified SNCO/NCO at all times.

7. Left and right lateral limit markers define the boundaries of impact area down range. A center marker defines maximum throwing distance. Range OIC/RSO will ensure no grenades explode outside designated K-510 impact area.

8. No more than one (1) live hand grenade will be thrown at a time. A detonation must occur before the next live hand grenade is thrown from the next throwing pit down range. The Range OIC/RSO must control the sequence of throwing. On the command of the Range OIC/RSO, Marines will enter from the left hand side of the wall to the throwing pits and they will depart the pits to the right hand side after throwing the live grenade and on the command of the Range OIC/RSO.

9. High explosive fragmentation hand grenades are not authorized on the Practice Grenade Ranges. Practice Hand Grenades are not authorized on the live grenade impact area or live fire grenade pits.
10. It is mandatory that as a minimum, 2 practice grenades are thrown by each person on the non-live fire practice grenade range and all other safety procedures are briefed and rehearsed prior to throwing live hand grenades. The using unit must conduct immediate action drills for a dropped grenade in the practice pits before any live fire training can take place.

11. Range Control will be notified for all hand grenade duds.

12. When using K-510 Hand Grenade Range, the “COOK OFF or MILKING” methods of releasing the spoon and counting down to throw the grenade is not authorized for training.

13. At no time will the using unit place any objects or material in the impact area (Example would be tires/plastic E-Type targets on sticks) on the live grenade range side or practice grenade range side.

14. At no time will live hand grenades be thrown into any standing water. Base EOD may be contacted to conduct an on site inspection to verify that the impact area is clear of all standing water if requested via BLACKBURN.

15. Range K-510 Range conflicts with KB/KD Training Area.

16. The using unit must place sandbags (two serviceable sandbags) on the outside of the live fire grenade pits to cover up the drain holes. This is a mandatory requirement that must be in place, enforced, and checked by the Range OIC/RSO and the Range Inspector before requesting to go on a “HOT” status.

Other Considerations

1. This live fire range requires a Gunnery Sergeant or above to be the Range OIC and the Range OIC must sign for this Range up to 5 days in advance or at least 24 hours in advance.

2. Range Control will schedule Base EOD support when the range is scheduled in RFMSS and will ensure support will be available during their requested scheduled dates and times. The unit is required to notify Base EOD in the case the required training support dates have changed or the range has been cancelled. Base EOD will sweep the impact area once a week or on request if required.

Special Instructions
1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on this range without special range request.

3. Digging is not authorized on this range. Fill dirt will only come from the dirt piles provided. At no time will dirt be removed from the dividing range dirt berms. Units must keep all personnel off the berms at all times. Only enter and exit at the proper locations on this range.

4. POVs are not authorized on this range, tank trail, or adjacent training areas. All POVs must use the designated parking area adjacent to ALZ-20.

5. Report all maintenance problems to a range inspector or use ICE Comment.

6. Range OIC/RSO will ensure all personnel and equipment are clear of impact area and surrounding SDZ for live grenade training.

7. A road guard will be placed at the gate to the entrance of the range complex and must have the required communication at all times to the Range OIC/RSO.

8. A red range flag will be flown at the entrance to the range.

9. A government safety vehicle and corpsman must be present on the range prior to commencing any live fire training.

10. All non-participating personnel will be protected by the concrete wall and on the inside of the yellow safety line and they must be in required helmets, flak jackets, sleeves down, and wearing proper hearing and eye protection. Observing personnel must be inside the range tower to view live hand grenades being used and the using unit is limited to no more than 10 Marines at a time.

11. Range OIC/RSO will ensure properly trained safety personnel (NCOs/SNCOs) are assigned to supervise the all live fire training in the throwing pits.

12. All personnel must wear helmets, flak jackets, hearing and eye protection, while live fire training is being conducted.
13. If a dud or misfire hand grenade occurs on the grenade range, the Range OIC/RSO will place the entire range in an immediate “CHECK FIRE” and notify BLACKBURN/Range Control to request support from Base EOD. The using unit must request permission to continue throwing of live hand grenades on the other side of the separating berm of the dud grenade. Training with non-live practice grenades on the practice grenade range may continue. Upon arrival of Base EOD and after the mandatory wait time, the rest of the range will be placed in a “CHECK FIRE” so Base EOD can go down range and clear the dud hand grenade from the range. The unit will remain in a complete “CHECK FIRE” until lifted by Range Control/BLACKBURN personnel and Base EOD.

14. Range OIC/RSO will notify Range Control that training has been completed and that all live hand grenades are accounted for and all have functioned properly/detonated. The Range OIC/RSO will place the unit into a “CHECK FIRE” and will conduct a sweep down range before allowing the entire working party/unit down range. The unit will be allowed to go “COLD” and go down range to conduct range repair and a detailed police call of the entire range.

15. A detailed police call and restoration of the impact areas will be conducted upon receiving a “COLD TIME” and a range inspector must inspect the entire range.

16. The range, all facilities to include the inside of the tower, and the parking/staging areas, outdoor classroom, the hand grenade assault course, distance and accuracy course, will be policed up and inspected. The unit will ensure the removal of all trash and ammunition dunnage from the range.

17. All hand grenade spoons, pins, and clips will be removed/policed up from throwing pits and the down range impact area. All holes will be filled in and the entire area raked smooth. A pile of dirt is provided on the range at both ends down range on each impact area as a source of dirt. Range Control will provide two (2) racks, shovels and two (2) wheel barrel. The items are locked up in a shed (VL-339) and must be accounted for by the Range OIC/RSO before departing.

18. Range must be inspected and cleared by a range inspector prior to departing the range/training area.
19. Range OIC/RSO will complete and submit a range report upon completion of training and the turn-in of the range to Range Control.

20. Either the Range OIC/RSO will be in the tower during the entire live fire training event. Minimum number of personnel (maximum tower occupancy is 10) will be in the tower at any one time. Personnel are not authorized to enter or exit the tower at the same time that live grenades are being thrown.

21. The last person from the using unit leaving the range will ensure that all lights, PA system are turned off and the range gate, tower door, is closed and locked/checked. The using unit will also ensure all yard rakes, shovels, and wheel barrels are also locked up in the shed (VL-339) and accounted for before departing the range.

22. Final range coordination brief will be conducted by a Range Inspector when the using unit occupies the range. Units occupying on weekends, holidays, and/or long weekends will ensure the final range coordination brief is received prior to Friday and/or no later than the last regular work day prior to the weekend/holiday/long weekend with a Range Inspector, located at building SR-46, in the GRSA on CC road across from SR-6. Briefs can take place on the weekends at the range if arranged by Range Control Scheduling or BLACKBURN with the duty Range Inspector prior to that Friday.
**RANGE NAME:**
L-5

**DESCRIPTION:**
Infantry Live Fire Maneuver Range

**PRIMARY RANGE USE:**
Infantry Live Fire Maneuver Range

**ALTERNATE RANGE USES:**
1. Multi-Purpose Medium Machinegun Range
   (Limited Range up to 800 Meters)
2. CMP Range
3. Field Firing Range
4. M249 SAW Range
5. Weapon/LASER Range

**LOCATION:**
Grid Coordinate: 73543114

**PRIMARY DIRECTION OF FIRE:**
026 degrees magnetic

**WEAPONS ACCOMMODATED:**
Military Pistols
M16/M4 Rifle
Military Shotguns
M249 Squad Automatic Weapon
M27 Infantry Automatic Rifle
M240B/G Medium Machinegun
M203/M32 Grenade Launcher

**AMMUNITION AUTHORIZED:**
9mm/.45 cal/40 cal Pistol Ammunition
5.56mm (Ball, Tracer, and Linked)
7.62mm (Linked)
40mm TP/Illum Only (DODIC B519, B535)
All 12 Gauge Shotgun Ammunition

**TARGETS/SIMULATORS/DEVICES**
5 Pop-up Moving Infantry Tgts
149 Pop-up Stationary Infantry Tgts

**FACILITIES (Number of each):**
Head Facilities: Port-a-Johns
Range House: 1
Range Tower: 1
Range Tables: 3
Range Covered Area: 1
Range Shed: 1 (SOI)
POV Parking Area: 1
Bivouac Site: LA/LB Training Areas

**UTILITIES AVAILABLE:**
Electricity: Yes
Lights: Yes
Water System: Yes

INSTALLED COMMUNICATIONS: Telephone: Yes

AREA SUITABILITY: Platoon/Squad/Fire Team

Range Use Restrictions/Comments/ Conflicts

1. Conflicts with LA, LE, and the LF Training Areas. In the event of a low-flying aircraft, unit will go into a “CHECK FIRE” and notify BLACKBURN immediately.

2. Fire and maneuver/movement is authorized on this range.

3. Authorized for night use if properly scheduled in RFMSS for the times that meet the contracted/scheduled hours. Night vision devices are authorized on this range.

4. All Classes of LASERs (Class 1, 2, 3A, 3B, and 4) are authorized on this range if properly scheduled in RFMSS and the unit has a LASER Range Safety Officer (LRSO).

5. This range requires (1) road guard and has several gates that must be checked and secured. Range Control will provide a road guard/gate map once the range is checked out.

6. Vehicular movement downrange is restricted to existing dirt roads only. Vehicular stationary firing is limited to two vehicles at a time, 6 meters apart, in front of the firing berm, with engine off, vehicle chocked/blocked, driver/a-driver out and weapons mounted with the T&E. Vehicles are not authorized on top of the dirt firing berm.

7. Firing is authorized from the berm with Rifles, Squad Automatic Weapons, ground mounted M240B/G 7.62mm machineguns.

8. Cross range firing is not authorized on L-5. All live fire and the effects of live fire must be within the approved SDZ for L-5 at all times.

9. M203/M32 Grenade Launchers are not authorized to fire at the RETS Targets. Only Training Practice (TP) ammunition is authorized. The using units must provide suitable target material and it must be removed after the training event. All M203/M32 40mm TP/Illum debris/dunnage must be removed from the entire range after the training event.
Other Considerations

1. This range is affected by the activation of New River Air Station’s Runway 1. Range Control will notify the range Range OIC/RSO of the necessary procedures to be taken and when normal live fire training can resume.

2. When using L-5 for fire and movement exercises the total number of personnel should not exceed squad size (13 to 15 Marines at a time) due to the width of the range.

3. Request to modify the computerized target scenarios must be submitted through the unit’s chain of command to Range Control. The request must be submitted ten (10) working days in advance from the first day of training. Contact the contracting officer representative at 451-4480/2411 with any contract support issues. The range contractor must be on the contracted range the entire time scheduled and being used for training.

4. The using units that require a time extension on this range must request it at least four (4) hours in advance of their scheduled completion (COLD) time in order to allow for an alteration to the scheduled contractor support. The request for time extensions must be made through Range Scheduling during normal working hours. After hours call BLACKBURN.

5. Units must occupy a contractor-supported range with a responsible unit or a training representative (Not necessarily the Range OIC/RSO) within 1 hour of the scheduled “HOT” time or the range will be cancelled for that day.

6. The unit is responsible for becoming acquainted with the training scenarios the contractor has prior to the training session.

7. Range Contractors operate the RETs Target computer system based on multiple preset electronic scenarios. This range can only be scheduled for 12 hours per day and must be scheduled in RFMSS between 2 days and 90 days in advance.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on this range without permission from Range Control. The using unit must schedule the LA/LB training areas and bivouac just behind the range.
3. Digging on this range is not authorized except when required for the proper deployment and safety of designated weapon systems. Sandbags must be provided and filled by the unit prior to occupying the range. Prior to departing the range, the unit will ensure all sandbags are removed and holes are filled in and leveled out. Do not fill sandbags from the dirt berm.

4. POV parking is authorized on this range but is limited in the gravel parking lot behind the range complex. POVs can not park on the tank trail or adjoining training areas. All POVs must use designated parking area only and are not authorized down range or parking on the grass. Units should supervise and limit the number of POVs parking on this range.

5. Report all maintenance problems to a range inspector or use ICE Comment. The range must be inspected and cleared by a range inspector prior to departing the range/training areas. The down range area must also be included in the police call and the range inspection. The Range OIC/RSO will complete and submit a range report/ICE Comment upon completion of the required, scheduled training and turn-in of range.

6. A map overlay indicating the range fan, current road guard placement and all gate closures will be provided when range is checked out. It is the responsibility of the Range OIC/RSO to ensure that the road guard is placed properly, briefed on his duties and all gates are properly secured prior to going “HOT” and a range sweep is conducted of the surrounding training areas. The road guard must maintain internal communication with the Range OIC/RSO while training is being conducted. The road guard must be particularly vigilant for intruders circumventing the checkpoint.

7. Range OIC/RSO must verify all weapons range safety cards if required for the machinegun support by fire position.

8. Red range flag will be flown at the entrance to the range along Highway 210.

9. Live fire and maneuver: A special range request is not required as long as one of the standard two (2) scenarios that are commonly used are planned/employed. These consist of attacking straight down the middle of the range (Frontal Attack) or conducting an envelopment on the left hand side of the range using the terrain to mask movement. Supporting machinegun fire
is authorized if all safety procedures are in place but overhead machinegun fire on L-5 is not authorized on this range.

10. A government safety vehicle and corpsman must be present on the range prior to commencing any live fire training.

11. All non-participating personnel will remain outside the range fan and are not allowed downrange beyond the large dirt berm.

12. All personnel must wear helmets, flak jackets, hearing and eye protection while live fire training is being conducted.

13. Range OIC/RSO will ensure adequate numbers of safety personnel (PSO/ARSO) are assigned to control the entire maneuver exercise and all other elements. Range OIC or the RSO will accompany each fire team/squad down range during fire and movement. Range OIC/RSO will be equipped with appropriate communication and signaling devices while down range.

14. Dry runs/rehearsals will be conducted under the same conditions (Day or Night). The Range OIC/RSO will ensure all personnel are familiar with the firing lanes, firing points, sectors of fire, limits of fire and advancement, and all other requirements.

15. The using unit is responsible for a detailed police call of the entire range complex to include down range, surrounding training areas if scheduled and used, all facilities, and parking/staging areas when training is completed. The unit will ensure the removal of all dunnage/trash from the range to include additional targets, sandbags, tactical wire, wood, and scrap metal.

16. Tracers/pyrotechnics cannot be used on this range in a Fire Readiness condition 5 or higher.

17. This range is not authorized for live fire unless a range contractor is physically present on the range the entire time.
RANGE NAME: MOUT Assault Course 1 (MAC-1)

DESCRIPTION: Urban Quick Kill Range for Fire Team/Squad Size Units.


ALTERNATE RANGE USES: Urban Battle Drill Range

LOCATION: Grid Coordinate: 93513773

PRIMARY DIRECTION OF FIRE: 325 degrees magnetic

WEAPONS ACCOMMODATED: All pistols (.45 Cal or less) M16/M4 Rifle 12 Gauge Shotgun

AMMUNITION AUTHORIZED: All Pistol Ammunition 5.56mm (Ball Only) All 12 gauge Shotgun Ammunition All Blank Ammunition Hand Grenade (TP only) Artillery Simulators TRACER AMMUNITION IS NOT AUTHORIZED ON THIS RANGE

TARGETS/SIMULATORS/DEVICES: 5 building facades 8 window targets 4 door targets 7 emplacement targets

FACILITIES (Number of each): Head Facilities: None POV Parking Area: None

UTILITIES AVAILABLE: Electricity: Yes (Targets Only) Lights: No Water System: No

INSTALLED COMMUNICATIONS: None

AREA SUITABILITY Squad/Fire Team
Range Use Restrictions/Comments/Conflicts

1. Live fire and movement/maneuvers are authorized on this range as long as all live fire and the effects of live fire are within the surface danger zone of MAC-1 at all times.

2. Authorized for night use if properly scheduled in RFMSS. Night vision devices authorized.

3. Class 3B and Class 4 LASERs are not authorized on this range.

4. Illumination and smoke grenades are authorized only on the outside of wooden structures/facades. Practice hand grenades with fuzes are authorized inside and outside the structures/facades.

5. Conflict with G-3 TOW, TLZ Raven, TLZ Pigeon, ALZ-28, Training Areas FC, FE, and FF.

6. This range requires 4 road guards with communication. Units will be provided with a map with all road guard locations.

Other Consideration

1. Requests to modify computerized target scenarios must be submitted through the unit’s chain of command to Range Control. The request must be submitted ten (10) working days in advance of the first day of training. Contact the contracting officer representative at 451-4480/2411 with any contract support issues. The range contractor must be on the contracted range the entire time scheduled.

2. The using units that require a time extension on the range must request it at least four (4) hours in advance of their scheduled completion (COLD) time in order to allow for an alteration to the scheduled contractor support. This request for time extension will be made through Range Scheduling during normal working hours. After hours call BLACKBURN.

3. Units must occupy a contractor-supported range with a responsible unit or contracted training representative (Not necessarily the Range OIC/RSO) within 1 hour of the “HOT” time or the range will be cancelled for that day.

4. This range can be scheduled for a maximum of 10 hours per day.
5. The unit is responsible for becoming acquainted with the training scenarios the contractor has prior to their training session.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on the MAC Ranges. Bivouacking is authorized at the MOUT bivouac site only located in FC training area.

3. Digging is not authorized on the MAC Ranges.

4. Units will not create additional mouse holes in the Buildings/Facades.

5. No open warming fires authorized on the MAC Ranges.

6. POVs are not authorized on the MAC Ranges, tank trail, or adjacent training areas. Units are not authorized to park along Lyman Road.

7. Report all maintenance problems to a range inspector or use ICE Comment. Range must be inspected and cleared by a range inspector prior to departing range/training area. Range OIC/RSO will complete and submit a range report and or ICE upon completion of training and turn-in of range.

8. Range OIC/RSO will ensure ALZ-28, FC, FE, and FF training areas are secured of all personnel, vehicles, and equipment.

9. A map overlay indicating the range fan, current road guard placements and gate closures will be provided when range is checked out. It is the responsibility of the Range OIC/RSO to ensure that all road guards are placed properly. All road guards will have and maintain internal communication with the Range OIC/RSO while training is being conducted. Road guards must be particularly vigilant for intruders/vehicles circumventing their checkpoints.

10. Range OIC/RSO will deconflict road guard placements and relief with other MAC ranges, F-2, F-4, F-5, F-25T, and F-18/F-18 7.62mm Match/F-18 .50 cal.

11. All live fire and the effects of live fire must be within the approved surface danger zone for MAC-1 at all times.
12. Red range flag will be flown at the entrance to the range and on the pole at the entrance to the MAC Ranges.

13. A government safety vehicle and corpsman must be present on the range prior to commencing training.

14. All non-participating personnel will remain outside of the range fan and across the tank trail.

15. All personnel must wear helmets, flak jackets, hearing and eye protection while live fire training is being conducted.

16. Range OIC/RSO will ensure adequate number of safety personnel are assigned to control the maneuver elements/exercises. Range OIC/RSO will accompany each fire team down range during fire and movement. Range OIC/RSO will be equipped with appropriate communication and signaling devices while down range.

17. Dry runs (day or night) will be conducted prior to going into a HOT status. Range OIC/RSO will ensure all personnel are familiar with firing lanes, firing points, sectors of fire, limits of fire and advancement.

18. Using unit is responsible for a detailed police call of the entire range, all facilities, and parking/staging areas when training is completed. The unit will ensure the removal of all dunnage/trash from the range to include additional targets, brass, links, ammunition dunnage, tactical wire, wood, and scrap metal.

19. Tactical vehicles are not authorized on this range or down range.

20. At no time will units conduct training on the dirt safety berms or fire over them.
RANGE NAME: MOUT Assault Course 2 (MAC-2)

DESCRIPTION: Search and Kill Range

PRIMARY RANGE USE: Search and Kill Range, Basic Room Entry and Clearing Range.

ALTERNATE RANGE USES: Urban Battle Drill Range

LOCATION: Grid Coordinate: 93573777

PRIMARY DIRECTION OF FIRE: 325 degrees magnetic

WEAPONS ACCOMMODATED: All Military Pistols (.45 Caliber or less)
M16/M4 Rifle
12 Gauge Shotguns

AMMUNITION AUTHORIZED: All Military Pistol Ammunition
5.56mm (Ball Only)
All 12 Gauge Shotgun Ammunition
All Blank Ammunition
Hand Grenade, Practice and Fuze Artillery Simulators.

TRACER AMMUNITION IS NOT AUTHORIZED ON THIS RANGE

TARGETS/SIMULATORS/DEVICES: 3 structures/facades
5 window targets
1 door target
11 lights mounted on 6X6 posts

FACILITIES(Number of each): Head Facilities: None
Range Tables: 2
POV Parking Area: None

UTILITIES AVAILABLE: Electricity: Yes (Targets Only).
Lights: No
Water System: No

INSTALLED COMMUNICATIONS: None

AREA SUITABILITY: Fire Team/Squad

A-231
Range Use Restrictions/Comments/Conflicts

1. Live fire and movement/maneuver is authorized on this range.

2. Authorized for night use if properly scheduled in RFMSS. Night vision devices authorized.

3. Class 3B and Class 4 LASERs are not authorized on this range.

4. Illumination and smoke grenades are authorized only on the outside of wooden structures/facades. Practice hand grenades with fuzes are authorized inside and outside the structures/facades.

5. Conflict with G-3 TOW, MAC-3, TLZ Raven, TLZ Pigeon, ALZ-28, Training Areas FC, FE, and FF.

6. This range requires 4 road guards with communication. Units will be provided with a map with all road guard locations.

Other Considerations

1. Request to modify computerized target scenarios must be submitted through the unit’s chain of command to Range Control. The request must be submitted ten (10) working days in advance from the first day of training. Contact the contracting officer representative at 451-4480/2411 with any contract support issues. The range contractor must be on the contracted range the entire time scheduled.

2. The using units that require a time extension on the range must request it at least four (4) hours in advance of their scheduled completion (COLD) time in order to allow for an alteration to the scheduled contractor support. This request for time extension will be made through Range Scheduling during normal working hours. After working hours call BLACKBURN.

3. Units must occupy a contractor-supported range with a responsible unit or contracted training representative (Not necessarily the Range OIC/RSO) within 1 hour of the “HOT” time or the range will be cancelled for that day.

4. This range can be scheduled for a maximum of 10 hours per day.
5. The unit is responsible for becoming acquainted with training scenarios the contractor has prior to training session.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on the MAC Ranges. Bivouacking is authorized at the MOUT bivouac site only located in FC training area.

3. Digging is not authorized on the MAC Ranges.

4. Units will not create additional mouse holes in the Buildings/Facades.

5. No open warming fires authorized on the MAC Ranges.

6. POVs are not authorized on MAC Ranges, tank trail, or adjacent training areas. Units are not authorized to park along Lyman Road.

7. Report all maintenance problems to a range inspector or use ICE Comment. Range must be inspected and cleared by a range inspector prior to departing range/training area. Range OIC/RSO will complete and submit a range report and or ICE Comment upon completion of training and turn-in of range.

8. Range OIC/RSO will ensure ALZ-28, FC, FE, and FF training areas are secured of all personnel, vehicles, and equipment.

9. A map overlay indicating the range fan, current road guard placements and gate closures will be provided when range is checked out. It is the responsibility of the Range OIC/RSO to ensure that all road guards are placed properly. All road guards will have and maintain internal communication with the Range OIC/RSO while training is being conducted. Road guards must be particularly vigilant for intruders/vehicles circumventing their checkpoints.

10. Range OIC/RSO will deconflict road guard placement and relief with other MAC ranges, F-2, F-4, F-5, F-25T, and F-18/ F-18 7.62mm Match/F-18 .50 cal.

11. All live fire and the effects of live fire must be within the approved SDZ for MAC-2 at all times.
12. Red range flag will be flown at the entrance to the range and on the pole at the entrance to the MAC Ranges.

13. A government safety vehicle and corpsman must be present on the range prior to commencing training.

14. All non-participating personnel will remain outside of the range fan and across the tank trail.

15. All personnel must wear helmets, flak jackets, hearing and eye protection while training is being conducted.

16. Range OIC/RSO will ensure adequate number of safety personnel are assigned to control the maneuver elements/exercises. Range OIC/RSO will accompany each fire team down range during fire and movement. Range OIC/RSO will be equipped with appropriate communication and signaling devices while down range.

17. Dry runs will be conducted (day or night) prior to going into a HOT status. Range OIC/RSO will ensure all personnel are familiar with firing lanes, firing points, sectors of fire, limits of fire and advancement.

18. Using unit is responsible for a detailed police call of the entire range, all facilities, and parking/staging areas when training is completed. The unit will ensure the removal of all dunnage/trash from the range to include additional targets, brass, links, ammunition dunnage, tactical wire, wood, and scrap metal.

19. Tactical vehicles are not authorized on this range or down range.

20. At no time will units conduct training on the dirt safety berms or fire over them.

21. MAC-2 must be in a “COLD” status and all Marines must be off the range when MAC-3 is in a “HOT” status.
RANGE NAME: MOUT Assault Course 3 (MAC-3)

DESCRIPTION: Live Fire Grenade House

PRIMARY RANGE USE:
1. Close Quarters Battle (CQB)
2. Live Fire Grenade House

ALTERNATE RANGE USES:
1. Urban Battle Drill Range
2. SESAMS Shoot House (Mock-up Only)

LOCATION: Grid Coordinate: 93583781

PRIMARY DIRECTION OF FIRE: N/A
Only inside of the building at designated targets.
(No live fire outside of the building)

WEAPONS ACCOMMODATED:
All Military Pistols (.45 Cal or less)
M16A2/M-4 Rifles
12 Gauge Shotguns

AMMUNITION AUTHORIZED:
All Military Pistol Ammunition
5.56mm Ball Ammunition (DODIC A059)
All 12 Gauge Shotgun Ammunition
5.56mm Blank Ammunition
M-67 Fragmentation Hand Grenade
SESAMS (DODIC AA12 and AA21)
Practice Hand Grenade (DODIC G916)
Training Fuses (DODIC G878)
Arty Simulators

TARGETS/SIMULATORS/DEVICES: Unit must provide targets

FACILITIES (Number of each):
Head Facilities: None
Range Tables: 2
POV Parking Area: None

UTILITIES AVAILABLE:
Electricity: No
Lights: No
Water System: No

INSTALLED COMMUNICATIONS: None

AREA SUITABILITY: Fire Team/Squad Size Units
Range Use Restrictions/Comments/Conflicts

NOTE: All Marines throwing live hand grenades on this range must have thrown a live hand grenade on a standard hand grenade range within the past year (12 months). This range will not be used as a replacement for annual hand grenade training/qualification.

This range requires a Special Range Request (SRR) within 10 working days with scheme of maneuver, safety plan, signed, and reviewed ORM Worksheet as per Appendix J of this SOP. This range is considered a high risk training event.

A separate handout will be issued with additional requirements/guidance at the time this range is signed out. A face to face brief will also take place with the unit Range OIC and the Base Range Safety Specialist.

1. Maneuver inside the building/structure is authorized. Live fire/movement outside of the building is not authorized. The use of a live fire blocking force outside of the building is not authorized.

2. The building is authorized for night use with small arms, flashlights, and night vision devices only; however, use of live M-67 Fragmentation Hand Grenades will cease one hour before darkness.

3. Class 3B and 4 LASERs are not authorized on this range. MILES 2000 gear is authorized in the wooden mock-up building only.

4. Use of MAC-3 conflicts with G-3 TOW, MAC-2, MAC-4, ALZ 28, TLZ Raven, TLZ Pigeon, and Training Areas FC, FE, and FF.

5. MAC-3 Range only requires (1) road guard at the entrance to the range.

6. Automatic live fire is not authorized inside MAC-3. The M249 SAW/M27 IAR is not authorized on this range. Tracer ammunition is not authorized on this range.

7. Tactical vehicles are not authorized on this range or down range.

8. Units are authorized to use cardboard/plastic echo type silhouette targets inside the structure but must remove them
after the training event. Targets must be mounted on 2 x 2 \textbf{WOODEN STAKES ONLY} due to the ricochet hazard. The MOUT Complex Staff/Range Inspector will inspect and approve the target emplacement before conducting any live fire with small arms and/or live grenades. Targets will be shifted occasionally to avoid inordinate amount of damage to any one building panel/wall. At no time will targets be nailed/attached to the walls.

9. Units must conduct rehearsals with practice grenades in the mock-up and conduct run dry rehearsals in the live fire building before going “HOT” with live grenades/live fire. Using Unit must police up all practice grenades and debris before going “HOT” with live grenades.

10. Using unit will supervise and enforce muzzle awareness at all times inside and outside the MAC-3 structure/building. Weapons must be cleared/checked inside the MAC-3 structure. Do not mix live ammunition with blank ammunition on this range and the unit should inspect all weapon magazines before conducting training.

11. Recommend units bring a bullhorn for command and control.

12. All safety precautions for the M-67 Fragmentation Hand Grenade listed in FM 3-23.30/TM-1330-15/1 must be in place, enforced, and supervised by the Range OIC/RSO at all times.

13. No Smoke Grenades, WP Grenades, Illumination Grenades, CS Grenades, or Pyrotechnics of any kind are authorized inside the MAC-3 structure/building. All live fire and the effects of live fire must be within the approved SDZ for MAC-3 at all times.

14. MAC-3 range is limited to thirty (30) live M-67 Fragmentation Hand Grenades per day. If needed, the using unit must request to use more than 30 grenades in the special range request.

15. Once the safety pin has been pulled, the grenade must immediately be thrown. \textit{“COOK OFF or MILKING”} methods of releasing the spoon and counting down to throw the grenade is not authorized for training. No attempt will be made to re-insert the safety pin. Only (1) one live grenade will be thrown inside the facility at a time. Live grenades are only authorized in the approved rooms.

16. The Range Safety Officer will move with the personnel being trained and will constantly observe and prevent safety
violations. Ensure all shooters are positively controlled. All weapons safety rules and conditions will be in place, enforced, and supervised.

17. Grenade throwing points are designated with a large red dot on the walls with letters “TP” (Throwing Position) in white. Large red arrows on the walls designate direction of throw. Marines will wait at least (3) three seconds after the grenade detonates, before entering the room in order to allow the smoke/dust to clear. If the room is still filled with smoke/dust the unit should delay even longer to allow better visibility and safety inside the rooms/building before entering.

18. Should a dud grenade occur, call “CEASE FIRE” and wait 30 seconds before anyone moves from the throwing position. Clear the building and notify BLACKBURN immediately for Base EOD support. All personnel must exit the building with Condition Four weapons and should not be exposed to the dud grenade in case it explodes. The unit will relocate across the tank trail. At no time will any type of training be conducted inside the building/rooms until the dud grenade is cleared by Base EOD.

19. The using unit is required to fill in holes, rake down, and level out the sandy areas inside the building and remove all debris from the building i.e. spoons, clips, brass large pieces of the hand grenades before departing the range.

20. Two rooms have been designated as no grenade rooms, as displayed on the range handout.

21. Using units are not authorized to add any material like furniture and wooden pallets to the inside of this training building.

Other Considerations

1. A horizontal red line, six inches wide, is painted inside the building, two (2) meters above the deck to define the maximum elevation of all small arm weapons. This requirement is to be enforced and supervised by the Range OIC/RSO.

2. Vehicles are not authorized on this range or down range.

3. A diagram of the building with the floor plan will be provided when the range is checked out from range control.
4. At no time will more than one fire team be used per room; no more than one squad will be in the building at a time. Using unit will ensure proper dispersion between shooters/clearing teams.

5. A dedicated safety vehicle and corpsman must be present on the range prior to commencing training.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on this range. Bivouacking is authorized at the MOUT bivouac site only.

3. Digging is not authorized on this range.

4. No open warming fires are authorized on this range.

5. POVs are not authorized on this range, tank trails, or the surrounding training areas.

6. Report all maintenance problems to a range inspector or use ICE Comment. The range must be inspected and cleared by a range inspector prior to departing the range/training area. Range OIC/RSO will complete and submit a range report/ICE Comment upon completion of training and turn-in of range.

7. Range OIC/RSO will ensure ALZ-28, FC training area are secured of all personnel, vehicles, and equipment.

8. A map overlay indicating the range fan, current road guard placement and gate closure will be provided when range is checked out. It is the responsibility of the Range OIC/RSO to ensure that the road guard is placed properly. The road guard must have and maintain positive internal communication with the Range OIC/RSO while training is being conducted. The road guard must be particularly vigilant for intruders and vehicles circumventing the checkpoint.

9. Range OIC/RSO will deconflict road guard placement and relief as required.

10. Two red range flags will be flown at the entrance to the MAC Ranges and the MAC-3 Range.
11. All non-participating personnel will remain outside of the range fan and across the tank trail but still must be wearing all PPE because of the 150 meter rule for live hand grenades.

12. While training is being conducted all personnel (including all instructors) must wear helmets, flak jackets, hearing and eye protection.

13. Range OIC/RSO will ensure adequate numbers of safety personnel are assigned to control the maneuver element/exercise at all times. RSO will be equipped with appropriate communication while down range.

14. Rehearsals (Dry Runs) must be conducted with practice hand grenades in the mock-up and building before going “HOT”. Range OIC/RSO will ensure all personnel are familiar with firing lanes, firing points, sectors of fire, limits of fire, grenade safety procedures, battle drills, and clearing drills.

15. The using unit is responsible for a detailed police call of the entire range area, building, bivouac area if used, and the road guard position when the scheduled training is completed. The unit will ensure the removal of all ammunition dunnage/trash from the range and building to include additional targets, brass, spent shotgun shells, pins, clips, and large pieces of scrap metal. The using unit must bring rakes and shovels for raking down and leveling out the inside the building.

16. A wooden door with frame has been added on the last room to prevent Marines/Shooters from exiting the facility conducting live fire, or from throwing a live grenade out of the facility or from firing small arms outside the last room of the building.

17. Grenades should be thrown underhanded in the structure rooms to prevent the grenade from being thrown over the wall, bouncing back or landing in the door ways. This range supports both left and right-handed throwers if all safety procedures are in place, supervised, and enforced.

18. The using unit will contact and schedule Base EOD support by contacting Base EOD at 449-0558 at least (5) five working days before the scheduled event in case of a dud grenade inside the structure.

19. This live fire range requires a Gunnery Sergeant (E-7) or above as the Range Officer in Charge (Range OIC) and a Staff Sergeant (E-6) or above as the Range Safety Officer (RSO).
21. At no time will units conduct training on the dirt safety berms or fire over them.
RANGE NAME: MOUT Assault Course 4 (MAC-4)

DESCRIPTION: Cover and Clear

PRIMARY RANGE USE: Fire Team MOUT

ALTERNATE RANGE USES: 1. Urban Battle Drill Range
                          2. CQB Range

LOCATION: Grid Coordinate: 93623786

PRIMARY DIRECTION OF FIRE: 326 degrees magnetic

WEAPONS ACCOMMODATED: All Military Pistols (.45 Caliber or less)
                       M16/M-4 Rifle
                       12 Gauge Shotgun

AMMUNITION AUTHORIZED: All Pistol Ammunition
                        5.56mm (Ball Only)
                        All 12 gauge Shotgun Ammunition
                        All Blank Ammunition
                        Hand Grenade (TP Only)
                        Artillery Simulators
                        TRACER AMMUNITION IS NOT AUTHORIZED ON THIS RANGE.

TARGETS/SIMULATORS/DEVICES: None

FACILITIES (Number of each): Head Facilities: None
                             Range Tables: 2
                             POV Parking Area: None

UTILITIES AVAILABLE: Electricity: No
                     Lights: No
                     Water System: No

INSTALLED COMMUNICATIONS: None (Unit must provide phone)

AREA SUITABILITY Fire Team/Squad

Range Use Restrictions/Comments/Conflicts:

1. Live fire and movement/maneuver is authorized on this range.
2. Authorized for night use if properly scheduled in RFMSS. Night vision devices are authorized on this range.

3. Class 3B and Class 4 LASERs are not authorized on this range.

4. Illumination and smoke grenades are authorized only on the outside of wooden structures/facades. Practice hand grenades with fuzes are authorized inside and outside the structures/facades.

5. Conflict with G-3 TOW, MAC-3, TLZ Raven, TLZ Pigeon, ALZ-28, Training Areas FC, FE, and FF.

6. This range requires 4 road guards with communication. Units will be provided with a map with all road guard locations.

Other Considerations

1. Maximum number of personnel authorized to conduct live fire training at one time up to 13 personnel (1 squad).

2. Unit must provide its own targets for this range.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on the MAC Ranges. Bivouacking is authorized at the MOUT bivouac site that is located in FC training area and must be coordinated with the MOUT Staff.

3. Digging is not authorized on the MAC Ranges.

4. Units will not create additional mouse holes in the Buildings/Facades.

5. No open warming fires authorized on the MAC Ranges.

6. POVs are not authorized on the MAC Ranges, tank trail, or adjacent training areas. Units are not authorized to park along Lyman Road.

7. Report all maintenance problems to a range inspector or use ICE Comment. Range must be inspected and cleared by a range inspector prior to departing range/training area. Range OIC/RSO
will complete and submit a range report and or ICE upon completion of training and turn-in of range.

8. Range OIC/RSO will ensure ALZ-28, FC, FE, and FF training areas are secured of all personnel, vehicles, and equipment.

9. A map overlay indicating the range fan, current road guard placements and gate closures will be provided when range is checked out. It is the responsibility of the Range OIC/RSO to ensure that all road guards are placed properly. All road guards will have and maintain internal communication with the Range OIC/RSO while training is being conducted. Road guards must be particularly vigilant for intruders/vehicles circumventing their checkpoints.

10. Range OIC/RSO will deconflict road guard placement and relief with other MAC ranges, F-2, F-4, F-5, F-25T, and F-18/F-18 7.62mm Match/F-18 .50 cal.

11. All live fire and the effects of live fire must be within the approved surface danger zone for MAC-4 at all times.

12. Red range flag will be flown at the entrance to the range and on the pole at the entrance to the MAC Ranges.

13. A safety vehicle and corpsman must be present on the range prior to commencing training.

14. All non-participating personnel will remain outside of the range fan and across the tank trail.

15. All personnel must wear helmets, flak jackets, hearing and eye protection while live fire training is being conducted.

16. Range OIC/RSO will ensure adequate number of safety personnel are assigned to control the maneuver elements /exercises. Range OIC/RSO will accompany each fire team/squad down range during the fire and movement. Range OIC/RSO will be equipped with appropriate communication and signaling devices while down range.

17. Dry runs (day or night) will be conducted prior to going into a HOT status. Range OIC/RSO will ensure all personnel are familiar with firing lanes, firing points, sectors of fire, limits of fire, and advancement.
18. Using unit is responsible for a detailed police call of the entire range, all facilities, and parking/staging areas when training is completed. The unit will ensure the removal of all dunnage from the range to include additional targets, brass, links, ammunition dunnage, tactical wire, wood, and scrap metal.

19. Tactical vehicles are not authorized on this range or down range.

20. At no time will units conduct training on the dirt safety berms or fire over them.

21. MAC-4 must be in a “COLD” status and all Marines must be off the range when MAC-3 is in a “HOT” status.
**RANGE NAME:** MOUT Assault Course 5 (MAC-5)

**DESCRIPTION:** Dodge City

**PRIMARY RANGE USE:** Basic Squad MOUT Range

**ALTERNATE RANGE USES:**
1. Urban Battle Drill Range
2. Stairwell/Room Clearing Range

**LOCATION:** Grid Coordinate: 93663790

**PRIMARY DIRECTION OF FIRE:** 325 degrees magnetic

**WEAPONS ACCOMMODATED:**
- All military pistols (.45 Cal or less)
- M16/M-4 Rifle
- 12 Gauge Shotgun

**AMMUNITION AUTHORIZED:**
- All Pistol Ammunition
- 5.56mm (Ball Only)
- All 12 gauge Shotgun Ammunition
- All Blank Ammunition
- Hand Grenade, Practice
- Artillery Simulators

**TRACER AMMUNITION IS NOT AUTHORIZED ON THIS RANGE**

**TARGETS/SIMULATORS/DEVICES:**
- 8 PITS Stations

**FACILITIES (Number of each):**
- Head Facilities: None
- Range Tables: 1
- POV Parking Area: None

**UTILITIES AVAILABLE:**
- Electricity: No
- Lights: No
- Water System: No

**INSTALLED COMMUNICATIONS:** None

**AREA SUITABILITY** Squad/Fire Team

Range Use Restrictions/Comments/Conflicts

1. Live fire and movement/maneuver is authorized on this range.
2. Authorized for night use. Night vision devices are authorized on this range.

3. Class 3B and Class 4 LASERs are not authorized on this range.

4. Illumination and smoke grenades are authorized only on the outside of wooden structures/facades only. Practice hand grenades with fuzes are authorized inside and outside the structures/facades.

5. Conflict with G-3 TOW, TLZ Raven, TLZ Pigeon, ALZ-28, Training Areas FC, FE, and FF.

6. This range requires 4 road guards with communication. Units will be provided with a map with all road guard locations.

Other Considerations

1. Maximum number of personnel authorized to conduct live fire training at one time up to 13 personnel (1 squad).

2. Unit must provide targets.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on the MAC Ranges. Bivouacking is authorized at the MOUT bivouac site only located in FC training area.

3. Digging is not authorized on the MAC Ranges.

4. Units will not create additional mouse holes in the Buildings/Facades.

5. No open warming fires authorized on the MAC Ranges.

6. POVs are not authorized on the MAC Ranges, tank trail, or adjacent training areas. Units are not authorized to park along Lyman Road.

7. Report all maintenance problems to a range inspector or use ICE Comment. Range must be inspected and cleared by a range inspector prior to departing range/training area. Range OIC/RSO

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will complete and submit a range report and or ICE upon completion of training and turn-in of range.

8. Range OIC/RSO will ensure ALZ-28, FC, FE, and FF training areas are secured of all personnel, vehicles, and equipment.

9. A map overlay indicating the range fan, current road guard placements and gate closures will be provided when range is checked out. It is the responsibility of the Range OIC/RSO to ensure that all road guards are placed properly. All road guards will have and maintain internal communication with the Range OIC/RSO while training is being conducted. Road guards must be particularly vigilant for intruders/vehicles circumventing their checkpoints.

10. Range OIC/RSO will deconflict road guard placements and relief with other MAC ranges, F-2, F-4, F-5, F-25T, and F-18/F-18 7.62mm Match/F-18 .50 cal.

11. All live fire and the effects of live fire must be within the approved SDZ for MAC-5 at all times.

12. Red range flag will be flown at the entrance to the range and on the pole at the entrance to the MAC Ranges.

13. A government safety vehicle and corpsman must be present on the range prior to commencing training.

14. All non-participating personnel will remain outside of the range fan and across the tank trail.

15. All personnel must wear helmets, flak jackets, hearing and eye protection while training is being conducted.

16. Range OIC/RSO will ensure adequate number of safety personnel are assigned to control the maneuver elements/exercises. Range OIC/RSO will accompany each fire team element down range during fire and movement. Range OIC/RSO will be equipped with appropriate communication and signaling devices while down range.

17. Dry runs (day or night) will be conducted prior to going into a HOT status. Range OIC/RSO will ensure all personnel are familiar with firing lanes, firing points, sectors of fire, limits of fire, and advancement.
18. Using unit is responsible for a detailed police call of the entire range, all facilities, and parking/staging areas when training is completed. The unit will ensure the removal of all dunnage/trash from the range to include additional targets, brass, links, ammunition dunnage, tactical wire, wood, and scrap metal.

19. Tactical vehicles are not authorized on this range or down range.

20. At no time will units conduct training on the dirt safety berms or fire over them.
RANGE NAME: MOUT Assault Course 6 (MAC-6)

DESCRIPTION: Enhanced Marksmanship Range

PRIMARY RANGE USE:
1. Enhanced Marksmanship Range
2. NBC Field Firing Range
3. Quick Kill Range
4. Non-Lethal Range

ALTERNATE RANGE USES:
1. Urban Battle Drill Range
2. Rifle BZO Range
3. Pistol FAM Firing Range
4. Shotgun Range
5. Combat Pistol Course Range
6. Night Firing Range

LOCATION: Grid Coordinate: 93713795

PRIMARY DIRECTION OF FIRE: 319 degrees magnetic

WEAPONS ACCOMMODATED: All Military Issue Pistols (.45 Cal or less)
M16A2/M4 Rifle
M203 (Limited)
12 Gauge Shotguns

AMMUNITION AUTHORIZED: All Pistol Ammunition
5.56mm Ball and Tracer
All 12 Gauge Shotgun Ammunition
All Blank Ammunition
All M203 Non-Lethal Ammunition
All 12 Gauge Non-Lethal Ammunition

TARGETS/SIMULATORS/DEVICES: 15 pits bunkers

FACILITIES (Number of each):
Head Facilities: None
Range Tables: 1
POV Parking Area: None

UTILITIES AVAILABLE: Electricity: No
Lights: Yes
Water System: No

INSTALLED COMMUNICATIONS: None

AREA SUITABILITY: Fire Team/Squad Size Units
Range Use Restrictions/Comments/Conflicts
1. Live fire and movement/maneuver is authorized on this range.

2. Authorized for night use if properly scheduled in RFMSS. Night vision devices are authorized.

3. Class 3B LASERs are authorized on this range if the using unit has the required LASER Range Safety Officer (LRSO).

4. Conflict with G-3 TOW, TLZ Raven, TLZ Pigeon, ALZ-28, Training Areas FC, FE, and FF.

5. This range requires 4 road guards with communication. Units will be provided with a map with all road guard locations.

Other Considerations

1. Contact the contracting officer representative (COR) at 451-4480/2411 with any support issues. Unit must schedule the use of PITS targets for this range. Units must schedule PITS target at least 48 hours in advance. Training is available on the operation of the handheld remote control unit (RCU) at the contractor warehouse Building 1404 on Elm Street.

2. The unit is required to provide a qualified target operator for the target remote control unit.

3. Maximum number of personnel authorized to conduct live fire training at one time is up to 13 personnel (1 squad).

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on the MAC Ranges. Bivouacking is authorized at the MOUT bivouac site only located in FC training area.

3. Digging is not authorized on the MAC Ranges.

4. Units will not create additional mouse holes in the buildings/facades.

5. No open warming fires authorized on the MAC Ranges.
6. POVs are not authorized on MAC Ranges, tank trail, or adjacent training areas. Units are not authorized to park along Lyman Road or tank trails.

7. Report all maintenance problems to a range inspector or use ICE Comment. Range must be inspected and cleared by a range inspector prior to departing range/training area. Range OIC/RSO will complete and submit a range report and or ICE upon completion of training and turn-in of range.

8. Range OIC/RSO will ensure ALZ-28, FC, FE, and FF training areas are secured of all personnel, vehicles, and equipment.

9. A map overlay indicating the range fan, current road guard placements and gate closures will be provided when range is checked out. It is the responsibility of the Range OIC/RSO to ensure that all road guards are placed properly. All road guards will have and maintain internal communication with the Range OIC/RSO while training is being conducted. Road guards must be particularly vigilant for intruders/vehicles circumventing their checkpoints.

10. Range OIC/RSO will deconflict road guard placements and relief with other MAC ranges, F-2, F-4, F-5, F-25T, and F-18/F-18 7.62mm Match/F-18 .50 cal.

11. All live fire and the effects of live fire must be within the approved surface danger zone for MAC-6 at all times.

12. Red range flag will be flown at the entrance to the range and on the pole at the entrance to the MAC Ranges.

13. A government safety vehicle and corpsman must be present on the range prior to commencing training.

14. All non-participating personnel will remain outside of the range fan and across the tank trail.

15. All personnel must wear helmets, flak jackets, hearing and eye protection while training is being conducted.

16. Range OIC/RSO will ensure adequate number of safety personnel are assigned to control the maneuver elements/exercises. Range OIC/RSO will accompany each fire team down range during fire and movement. Range OIC/RSO will be equipped with appropriate communication and signaling devices while down range.
17. Dry runs (day or night) will be conducted prior to going into a “HOT” status. Range OIC/RSO will ensure all personnel are familiar with firing lanes, firing points, sectors of fire, limits of fire, and advancement.

18. Using unit is responsible for a detailed police call of the entire range, all facilities, and parking/staging areas, PITS bunkers, when training is completed. The unit will ensure the removal of all dunnage/trash from the range to include additional targets, brass, links, ammunition dunnage, tactical wire, wood, and scrap metal.

19. Tactical vehicles are not authorized on or down range.

20. At no time will units conduct training on the dirt safety berms or fire over them.

21. Maximum number of personnel authorized to conduct live fire training at a time is 15 personnel.

22. Movement past the PITS target bunkers or the dirt berm is not authorized.

23. The using unit must ensure all weapons are cleared and checked to include the weapon magazines by the Range OIC/RSO before departing the range.

24. Using units will ensure proper dispersion between shooters in order to prevent “HOT” brass from hitting the other shooters.

25. The use of unit provided steel targets can only be authorized by Special Range Request.

26. The unit is authorized to emplace additional targets but must remove them after the live fire training event.

27. Vehicles are not authorized on this range or down range other then for loading and unloading targets/equipment.

28. The using unit will ensure all lights are turned off on this range after training is completed.

29. The 5.56mm linked M249 (SAW) and the M27 Infantry Automatic Weapon (IAR) is not authorized on this range.
RANGE NAME: MOUT Assault Course 7 (MAC-7)

DESCRIPTION: MOUT M203 Grenadier Gunnery Range

PRIMARY RANGE USE: MOUT M203/M32 Grenadier Gunnery Range

ALTERNATE RANGE USES: M203/M32 Battle Drill Range

STATUS: Active

LOCATION: Grid Coordinate: 93773803

PRIMARY DIRECTION OF FIRE: 325 degrees magnetic

WEAPONS ACCOMMODATED: M203/M32 40mm

AMMUNITION AUTHORIZED: M203/M32 40mm
(Training Practice Ammunition Only)
DODIC B519 (TP Ammunition Only)

TARGETS/SIMULATORS/DEVICES: 8 Firing points, 8 Targets

FACILITIES (Number of each): Head Facilities: None
Range Tower: 0
Range Tables: 2
POV Parking Area: None

UTILITIES AVAILABLE: Electricity: No
Lights: Yes
Water System: No

INSTALLED COMMUNICATIONS: None

AREA SUITABILITY: Fire Team/Squad

Range Use Restrictions/Comments/Conflicts

1. Limited maneuver down range for the M203/M32 Grenadier within their assigned lanes is authorized on this range.

2. This range is authorized for night use if properly scheduled in RFMSS.

3. Night vision/flashlight devices are authorized on this range.
4. Class 3B and 4 LASERs devices are not authorized on this range.

5. Conflict with G-3 TOW, TLZ Raven, FC, FE, and FF training areas.

6. Range requires (4) four road guards. The using unit must have a road guard at the entrance to the MAC Ranges.

7. Ensure road guards are posted in the proper locations at grids 912423, 929399, 909390, and the main MAC Range Gate.

8. Only the 40mm M203/M32 (TP) firing DODIC B519 is authorized on this range.

9. HE and HEDP 40mm live ammunition is not authorized on this range.

10. Live small arms ammunition is not authorized on this range.

11. Tactical Vehicles are not authorized on this range or down range.

12. Units are required to conduct a rehearsal (day or night) before going into a “HOT” status.

13. Units must supervise and enforce muzzle awareness at all times on this range.

14. Units should bring a bullhorn for command and control.

Other Considerations

1. This range does not have any electronic targets. All targets are metal E-Type targets. Unit is not authorized to add any targets.

2. Maximum number of personnel authorized to conduct live fire training at one time is 2 personnel with the M203/M32 for MAC-7.

3. Movement past the steel e-targets are not authorized.

4. Live Fire (40mm training practice rounds) is only authorized in the approved SDZ of MAC-7.
5. Firing the M203/M32 from vehicles is not authorized on this range.

6. The using unit must ensure all weapons are cleared and checked to include the weapon magazines by the Range OIC/RSO before departing the range.

7. Using Unit will ensure proper dispersion between shooters at all time.

8. The using units are not authorized to add additional targets to this range.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is not authorized on this range. Bivouacking is authorized at the MOUT bivouac site located in the FC training area and must be scheduled in RFMSS and must be coordinated with MOUT Staff.

3. Digging is not authorized on this range.

4. Warming fires are not authorized on the range.

5. POVs are not authorized on MAC Ranges, tank trail, or adjacent training areas. Units are not authorized to park along Lyman Road or tank trails.

6. Report all maintenance problems to a range inspector or use ICE Comment.

7. Range OIC/RSO will ensure FC, FE, FF, Training Areas are secured of all personnel and equipment.

8. A map overlay indicating the range fan, current road guard placements, and gate closures will be provided when range is checked out. It is the responsibility of the Range OIC/RSO to ensure that all road guards are properly emplaced. All road guards must have and maintain internal communication with the Range OIC/RSO while training is being conducted. Due to size of the areas where encroachment could occur during live firing; road guards must be particularly vigilant for intruders circumventing their respective checkpoints.
9. Range OIC/RSO will deconflict road guard emplacements and relief with F-2, F-4, F-5, F-25T, F-18, F-18 7.62mm Match, and F-18 .50 Cal if those ranges are scheduled.

10. Red range flag will be flown at the entrance to the MAC Ranges and MAC-7 Range.

11. Safety government vehicle and corpsman must be present on the range prior to commencing training. Tactical vehicles are not authorized down range.

12. All non-participating shooters or observing personnel will remain outside of the range fan and across the tank trail by the tower.

13. All personnel (including all instructors) must wear helmets, flak jackets, hearing and eye protection while conducting training.

14. Range OIC/RSO will ensure adequate numbers of safety personnel (PSO, Position Safety Officers) are assigned to control the maneuver exercise. Range OIC/RSO will accompany each fire team down range during fire and movement. Range OIC/RSO will be equipped with appropriate communication while down range.

15. Rehearsals (dry runs) must be conducted by the using unit. Range OIC/RSO will ensure all personnel are familiar with the firing lanes, firing points, sectors of fire, target locations, limits of fire, and advancement.

16. The using unit is responsible for a thorough police call of the entire range, road guard positions, all facilities, bivouac area, and the parking/staging areas when training is completed. The unit will ensure the removal of all ammunition dunnage from the range to include brass, spent M203/M32 training practice rounds, wood, and scrap metal. If rounds go over the wall the unit must police them up after the training event is over.

17. Range must be inspected and cleared by a range inspector prior to departing range/training area.

18. Range OIC/RSO will complete and submit a range report/ICE comments upon completion of training and the turn-in of range.
**RANGE NAME:** SR-6

**DESCRIPTION:** Infantry Platoon Battle Course

**PRIMARY RANGE USE:** Infantry Platoon Battle Course (Fire and Maneuver/Movement Range)

**ALTERNATE RANGE USES:**
1. Basic Techniques of Fire
2. Fire and Movement Range
3. Platoon Battle Drill Range
4. Vehicle Mounted Weapons Range
5. Night Attack Range (Non-Illum)

**LOCATION:**
Grid Coordinate: 71893320

**PRIMARY DIRECTION OF FIRE:** 320 degrees magnetic

**WEAPONS ACCOMMODATED:**
- All Military Pistols (.45 Caliber or less)
- 12 Gauge Shotgun
- M16/M4 Rifle
- M40/MK-11/MK-12 Sniper Rifle
- M249 Squad Automatic Weapon
- M27 Infantry Automatic Rifle
- M203/M32 Grenade Launcher
- M240B/G Machinegun (MK-43 USCG)
- AT-4/M72A7 (Trainer Only)
- SMAW MK-153 (TP Round Only)

**AMMUNITION AUTHORIZED:**
- All Pistol Ammunition
- All 12 Gauge Ammunition
- 5.56mm: Ball, Tracer, Linked, Blank
- 7.62mm: Ball, Tracer, Linked, Blank
- 40mm M203/M32: B519 Practice Round
- AT-4 9mm Spotting Round
- SMAW 9mm Spotting Round
- 83mm Inert/Practice Round
- M72A7 21mm Sub-Cal Trainer

**TARGETS/SIMULATORS/DEVICES**
- Stationary Infantry Targets (SITS): 12
- Moving Infantry Targets (MITS): 3
- Mortar Simulator Devices (MSD): 2
- Machinegun Bunkers (MGB): 3

**FACILITIES (Number of each):**
- Range Tower: 1
- Range Ammo/Weapons Storage Building: 1
- Range Classrooms: 2 (Inside/Outside)

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Range Classroom Bleachers: 3  
Head Facilities: 2 (1 Male/1 Female)  
Contractor Storage Building: 1  
POV Parking Area: None

**UTILITIES AVAILABLE:**  
Electricity: Yes  
Lights: Yes  
Water System: Yes

**INSTALLED COMMUNICATIONS:**  
Telephone in range tower

**AREA SUITABILITY:**  
Company/Platoon

**Range Use Restrictions/Comments/Conflicts**

1. SR-6 is a contractor supported range and can only be scheduled for up to **16 hours** per day. This range conflicts with Ranges SR-7, SB, SD, SF, SH, SJ, and SI training areas. This range is very close to a major civilian highway (Highway 17) and all using units must be very careful not to start range/forest fires. All forest/range fires must be reported immediately to BLACKBURN with the direction the smoke/fire may be drifting toward.

2. This range is affected by the activation of New River Air Station’s Runway 1. Range Control will notify the range Range OIC/RSO of the required procedures to be taken and when normal training can resume.

3. Must be scheduled in RFMSS one calendar month prior to the first date of usage due to the required NOTAM that has to be published/issued.

4. Final range coordination brief will be conducted by a Range Inspector when the using unit occupies the range. Units occupying on weekends, holidays, and/or long weekends will ensure the final range coordination brief is received prior to Friday and/or no later than the last regular work day prior to the weekend/holiday/long weekend with a Range Inspector, located at building SR-46, in the GRSA on CC road across from SR-6. Briefs can take place on the weekends at the range if arranged by Range Control Scheduling or BLACKBURN with the duty Range Inspector prior to that Friday.

5. Range has RETs type targets that are operated by approved scenarios that are preset electronically and operated by range contractor.
6. Live fire and maneuver/movement is authorized on this range.

7. Night live fire (non-illumination only) is authorized on this range. Night vision devices are authorized on this range.

8. Class 3B and 4 LASERs are authorized on this range if scheduled in RFMSS and the unit has the required LASER Range Safety Officer (LRSO).

9. No designated firing points on this range. Cross range firing is not authorized on SR-6 and all live fire and the effects of live fire remain within are the approved SDZ of SR-6 at all times.

10. All pyrotechnics and smoke grenades are not authorized on SR-6. Red smoke grenades are authorized for emergency use only and must be used on the road or in an ammunition can in order to avoid starting range fires.

11. Bivouacking on this range is not authorized. The bivouac site is located at grid coordinates 709318 just off Moores Ridge Road or the SM Training Area which must be scheduled in RFMSS.

12. Digging on this range is not authorized except when required for the proper deployment and safety of designated weapon systems. Sandbags must be provided and filled by the unit prior to occupying the range. Prior to departing the range, the unit will ensure all sandbags are removed and holes filled in and leveled out.

13. This range requires 1 road guard and a very large number of gate closures. A map of the required gate closures will be provided at the time the range is checked out/signed for by the Range OIC.

14. Firing from vehicle-mounted weapons may be approved by special range request for 7.62mm and below weapon systems only. Targets can be engaged by moving vehicle if requested/scheduled. Vehicle movement is restricted to the existing gravel roads only and the speed limit is 10 mph or below. At no time will vehicles be allowed off road on SR-6.

15. Base of fire (5.56mm/7.62mm) requires 100 meters clearance at all times. Targets will not be engaged closer than 25 meters with 5.56mm/7.62mm due to the ricochet hazards with the concrete bunkers.
16. Units are authorized to fire the AT-4/SMAW 9mm spotting rounds or the SMAW (TP) inert training practice rocket at the machinegun bunkers. Additional targets can only be authorized by Special Range Request. The unit must provide them and must have a plan to remove them after the training event.

Other Considerations

1. Requests to conduct day/night live fire and maneuver/movement exercises must be scheduled in RFMSS through the unit’s chain of command to Range Control.

2. Requests to use Class 3b and Class 4 LASERs must be scheduled in RFMSS through the unit’s chain of command to Range Control and have a LASER Range Safety Officer (LRSO).

3. Under high wind conditions (35 knots or higher), the range will be shut down and the targets removed to prevent damage to the targets and target mechanisms.

4. Request to modify the computerized target scenarios must be submitted through the unit’s chain of command to Range Control. The request must be submitted ten (10) working days in advance from the first day of training. Unit will provide written scheme of maneuver/scenario, safety plan, and signed operations risk assessment with each special range request. Contact the contracting officer representative at 451-4480/2411 with any contract support issues. The range contractor must be on the contracted range the entire time scheduled by the using unit.

5. The using units that require a time extension on this range must request it at least four (4) hours in advance of their scheduled completion (“COLD”) time in order to allow for an alteration to the scheduled contractor support. The request for time extensions must be made through Range Scheduling during normal working hours. After hours contact BLACKBURN.

6. The using units must occupy a contractor-supported range with a responsible unit or a training representative (not necessarily the Range OIC/RSO) within 1 hour of the scheduled “HOT” time or the range will be cancelled for that day.

7. The unit is responsible for becoming acquainted with the assigned training scenarios the contractor has prior to conducting any live fire training on SR-6.
8. Range contractors operate the RETs target computer system based on multiple preset electronic scenarios. This range can only be scheduled for up to 16 hours per day and must be scheduled in RFMSS a minimum of 30 days to 90 days in advance.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.

2. A copy of Appendix G, GSRA Complex of this RCD SOP, a map overlay with the assigned range fan, current road guard placement and a gate closures map will be provided at the time the range is signed for by the Range OIC.

3. Limited and controlled POV parking is authorized on this range but is limited in the area around building SR-608 only. POVs cannot park on the tank trail, over by SR-46 fenced in complex or adjoining training areas. All POVs must use designated parking area only and are not authorized down range or parking on the grass. Units should supervise and limit the number of POVs parking on this range.

4. Report all range maintenance problems to a range inspector or use ICE Comment. This range must be inspected and cleared by a range inspector prior to the Range OIC or RSO departing the range/training area. Range OIC or RSO will complete and submit a range report/ICE Report upon completion of training and turn-in of range.

5. Range OIC/RSO will conduct a complete range sweep to ensure all conflicting ranges and training areas are secured of all personnel and equipment. SR-6 must ensure that the Range OIC/RSO for Range SR-7 understands that no personnel are permitted beyond the 2d turnaround road when SR-6 is activated.

6. The Range OIC/RSO are responsible for ensuring all required gates are secured/locked and that the road guards are posted prior to going into a “HOT” status. All road guards will have and maintain internal communication with the Range OIC/RSO while live fire training is being conducted. Road guards must be particularly vigilant for intruders circumventing their checkpoints/gates. Periodic gate checks are required to ensure security and safety of the range during extended usage.

7. Range OIC/RSO will verify all weapons range safety cards and ensure all personnel are qualified with that weapon/weapon
system prior commencing any live fire and maneuver/movement exercise.

8. Red range flag will be flown at the entrance to the range while in a “HOT” status.

9. A government safety vehicle and corpsman must be present on the range prior to commencing any live fire training. A corpsman must accompany each maneuvering element downrange. Emergency vehicles will be staged at the range tower. TLZ Peewee, located at grid 708334, is available for MEDEVAC.

10. All non-participating personnel will remain outside of the SR-6 range fan at all times.

11. All personnel must wear required helmets, flak jackets, hearing and eye protection while conducting all live fire training.

12. Range OIC/RSO will ensure adequate number of safety personnel are assigned to the fire teams/squads conducting live fire and maneuver/movement. The Range OIC or RSO will accompany each element down range. Range OIC or RSO will be equipped with appropriate communication and signaling devices while moving down range.

13. The using unit must conduct rehearsals under the same conditions (day and night) prior to going into a “HOT” Status. The Range OIC/RSO will ensure all personnel are familiar with all firing lanes, firing points, sectors of fire, limits of fire, and limit of advance. The unit using machineguns as the base of fire or support by fire must have clear, positive, and redundant signals for shifting and/or cease-fire. All live fire and the effects of live fire must impact within the approved SR-6 surface danger zone at all times.

14. The using unit is responsible for a detailed police call of the entire range to include down range, all facilities, and buildings, and parking/staging areas when live fire training is completed. The unit will ensure the removal of all trash, ammunition dunnage like brass, links, plastic M249 SAW drums, additional target material, any tactical wire, wooden pallets, and scrap metal that may have been used. The using unit will be responsible for having cleaning gear for the heads, classroom and other facilities of SR-6.
15. The using unit will not remove anything from the buildings/structures like the chairs, tables, mock-up, or anything else outside the buildings/structures.

16. This range contains an Emergency Range Shutdown System (ERSS). Should BLACKBURN activate this system, a siren, pre-recorded voice message, and flashing lights will be lit throughout the range. Upon ERSS activation, the range will immediately go into the required “CHECK FIRE” and make Condition 4 weapons. The Range OIC/RSO will verify/check firing status and immediately notify BLACKBURN of being in a “CHECK FIRE”. BLACKBURN will notify the Range OIC/RSO once the range is safe to resume a live fire status.

17. Tactical vehicles are only authorized on the gravel tank trails and road network. No off road movement is authorized on this range. Tactical vehicles will not move forward in front of the range tower.

Gate Check Requirements. A separate handout listing all gates that need to be physically checked and locked by the Range OIC/RSO will be issued in the range binder upon range checkout at Range Control.
RANGE NAME: SR-7

DESCRIPTION: Multi-Purpose Training Range (MPTR)

PRIMARY RANGE USE: LAR Crew Qualification Firing Range

ALTERNATE RANGE USES:
1. LAR/AAV/Mounted Weapons Multi-Purpose Mechanized Assault Range
2. Basic Techniques of LAV/MG Gunnery
3. Armor Moving Target Range
4. Moving Vehicle Live Fire Range
5. Helicopter Gunnery Firing Range
6. Ground/Aerial Sniper Range
7. Machinegun Range (Limited)
8. Convoy Live Fire (Limited)
9. TOW Live Fire Range (Inert TOW Only)

LOCATION: Grid Coordinate: 72203681

PRIMARY DIRECTION OF FIRE: 268 degrees magnetic

WEAPONS ACCOMMODATED:
All Pistols (.45 Caliber or less)
12 Gauge Shotgun
M16/M4 Rifle
M40/MK-11/MK-12/M-39/DMR Sniper Rifle
M2 .50 Caliber Machinegun
M82A3 .50 cal Sniper Rifle
M203/M32 Grenade Launcher
MK-19 Grenade Launcher Machinegun
M242 Chain Gun 25mm
M249 Squad Automatic Weapon
M27 Infantry Automatic Rifle
M240B/G 7.62mm Machinegun (MK-43 USCG)
TOW2B (Training Practice Inert Only)
AT-4 9mm Trainer Only
SMAW Training Practice (TP) Only
SMAW 9mm Spotter Round
M72A7 21mm Sub Cal Trainer

WEAPONS ACCOMMODATED FOR HELICOPTER GUNNERY:
GAU-17 (7.62mm)
GAU-19 (.50cal)
M3 (.50 cal)
20mm Cannon (TP)
2.75 Rocket (TP)
Aerial TOW (TP Inert Only)
AMMUNITION AUTHORIZED:

All Military Pistol Ammunition
All 12 Gauge Ammunition
5.56mm: Ball, Tracer, Link, Blank
7.62mm: Ball, Tracer, Link, Blank
7.62mm Match Ammunition
25mm: M793 Practice Round/DODIC A976; M791 APDS-T/DODIC A974
.50 CAL Linked, Ball, Tracer, API/APIT
40mm MK-19: TP only, DODIC BA12
40mm M203/M32: TP only, DODIC B519
TOW (Inert Missile Only)
AT-4 9mm Spot Rd: 9mm TP-T M939/A358
SMAW 9mm Spot Rd: 9mm SP-TP M212/AXII
M72A7 21mm Sub Cal Trainer
NOTE: DODIC A606 is not authorized on this range.

AMMUNITION AUTHORIZED FOR HELICOPTER WEAPONS:

7.62mm (GAU-17) Ball, Linked
.50 Cal (GAU-19)
.50 cal (M2/M3)
20mm Cannon (TP-T Only)
2.75 Rocket (Inert Only)
TOW (Inert Missile Only)

TARGETS/SIMULATORS/DEVICES

Firing Lanes: 2
Defilade firing positions: 4
Stationary Infantry Targets (SITS): 72
Stationary Armor Targets (SATS): 20
Moving Armor Targets (MATS): 4

FACILITIES(Number of each):

Range Towers: 1
Observation Tower: 1
Ammunition Storage Area: 1
Range Tables: 3
Range Classrooms: 2 (Inside/Outside)
Head Facilities: 2 (Male/Female)
Range Classroom Bleachers: 3
Bivouacking Area: 6 (Concrete Slabs)
Shower Area: 1 (Gravel Area) Unit must provide shower unit.
Contractor Storage Building: 1
POV Parking Area: Next to Classroom

UTILITIES AVAILABLE:

Electricity: Yes
Lights: Yes
Water System: Yes

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**INSTALLED COMMUNICATIONS:** Telephone (Tower)

**AREA SUITABILITY:** Company/Platoon

Range Use Restrictions/Comments/Conflicts

1. SR-7 is a contractor supported range and can only be scheduled for up to **16 hours** per day. Conflicts with Range SR-6, Training Areas SA, SB, SC, SD, SE, SF, SG, SH, SI, and SJ. This range is very close to a major civilian highway (Highway 17) and all using units must be very careful not to start range fires. All forest/range fires must be reported immediately to BLACKBURN with the direction the smoke/fire may be drifting toward.

2. This range is affected by the activation of New River Air Station’s Runway 1. Range Control will notify the Range OIC /RSO of the required procedures to be taken and when normal training can resume.

3. Must be scheduled in RFMSS one calendar month prior to the first date of usage due to the required NOTAM that have to be published/issued.

4. Final range coordination brief will be conducted by a Range Inspector when the using unit occupies the range. Units occupying on weekends, holidays, and/or long weekends will ensure the final range coordination brief is received prior to Friday and/or no later than the last regular work day prior to the weekend/holiday/long weekend with a Range Inspector, located at building SR-46, in the GRSA on CC road across from SR-6. Briefs can take place on the weekends at the range if arranged by Range Control Scheduling or BLACKBURN with the duty Range Inspector prior to that Friday.

5. Range has RETs type targets that are operated by approved scenarios that are preset electronically and operated by the range contractor.

6. Live fire and maneuver/movement with tactical vehicles is authorized on this range. SR-7 has four (4) defilade firing positions to support the two (2) live fire firing lanes for wheeled and tracked vehicles. Caution should be taken by the using unit when backing any vehicle out of the defilade
positions to ensure the area is clear of all vehicles and personnel.

7. Night live fire (Non-Illumination Only) is authorized on this range if properly scheduled in RFMSS for the correct time needed. Night vision devices are authorized on this range.

8. Class 3B and 4 LASERs are authorized on this range if properly scheduled in RFMSS as “SR-7 LASER” and the unit has the required LASER Range Safety Officer (LRSO).

9. No designated firing points are on this range other than the defilade firing positions. Cross range firing is not authorized on SR-7 and all live fire must remain within the approved SDZ of SR-7 at all times.

10. Pyrotechnics and smoke grenades are not authorized on SR-7. Red smoke grenades are authorized for emergency use only and must be used/placed on the gravel roads or in an ammunition can in order to avoid starting a range fire.

11. Bivouacking on this range is authorized. The bivouac site is located across the street from the indoor and outdoor classroom.

12. Digging on this range is not authorized except when required for the proper deployment and safety of designated weapon systems. Sandbags must be provided and filled by the unit prior to occupying the range. Prior to departing the range, the unit will ensure all sandbags are removed and holes filled in and leveled out.

13. Range requires one (1) road guard and a very large number of gate closures/checks. A map of the required gate closures will be provided at the time the range is checked out/signed for by the Range OIC.

14. Firing from vehicle-mounted weapons systems is approved. Targets can be engaged by moving tactical vehicles if requested/scheduled. Vehicle movement is restricted to the existing gravel roads only and the speed limit is 10 mph or below. At no time will vehicles be allowed off road on SR-7.

15. Targets will not be engaged closer than 100 meters for 5.56mm/7.62mm and 150 meters with .50 cal machineguns due to the ricochet hazards with the concrete bunkers.
16. Additional targets can only be authorized by Special Range Request, the unit must provide them, and must have a plan to remove them after the training event.

17. Vehicles conducting static live fire may fire from either the rear (front concrete pad) or forward (gravel) areas of the berm. No more than three (3) vehicles are authorized to fire simultaneously from these areas. All vehicles will be turned off, driver out of the vehicle, wheels chocked, with hand brake set and weapons mounted on T&E. A minimum of 6 meters separation will be maintained between vehicles during firing. Free gun (machineguns) is authorized if requested/approved.

18. Aviation gunnery can be requested via Special Range Request and will be conducted in accordance with the separate air gunnery brief/SOP provided by Range Control.

19. This range must go “COLD” at 2359 each night due to the MCB “QUIET HOUR” policy with all weapons. SR-7 is not authorized to go “HOT” before 1200 on Sundays with any weapons system.

20. OP-9 Tower must be scheduled in RFMSS and signed for if the using unit is conducting elevated sniper live fire from that tower. The SR-7 Range Tower is not authorized for live fire.

Other Considerations

1. Requests to conduct day/night live fire and maneuver/movement with wheeled or tracked vehicles must be scheduled in RFMSS. Unit requesting to conduct dismounted live fire infantry must be approved by special range request only.

2. Unit requesting to use Class 3b and Class 4 LASERs must be scheduled in RFMSS as SR-7 LASER. To use Class 3b and Class 4 LASERs, the using unit must have a LASER Range Safety Officer (LRSO) on the range.

3. Under high wind conditions (35 knots or higher), the range will be shut down and the targets removed to prevent damage to the targets and target mechanisms.

4. Requests to modify the computerized target scenarios must be submitted through the unit’s chain of command to Range Control. The request must be submitted ten (10) working days in advance from the first day of training. The using unit will provide written scheme of maneuver/scenario, safety plan, and signed operations risk assessment worksheet with each special range
request. Contact the contracting officer representative at 451-4480/2411 with any contract support issues. The range contractor must be on the contracted range the entire time scheduled.

5. The using units that require a time extension on this range must request it at least four (4) hours in advance of their scheduled completion (COLD) time in order to allow for an alteration to the scheduled contractor support. The request for time extensions must be made through Range Scheduling during normal working hours. After hours call BLACKBURN.

6. The using units must occupy a contractor-supported range with a responsible unit or a training representative (not necessarily the Range OIC/RSO) within 1 hour of the scheduled “HOT” time or the range will be cancelled for that day.

7. The unit is responsible for becoming acquainted with the assigned training scenarios the contractor has prior to conducting any live fire training events.

8. Range contractors operate the RETs target computer system based on multiple preset electronic scenarios. This range can only be scheduled for **16 hours** per day and must be scheduled in RFMSS between 30 days to 90 days in advance.

**Special Instructions**

1. Be familiar with Chapter 5 of this SOP.

2. A copy of Appendix G, GSRA Complex of this SOP, a map overlay with the assigned range fan, current road guards placement, and a gate closures map will be provided at the time the range is signed for by the Range OIC.

3. POVs are not authorized down range on SR-7, the gravel tank trails, the TLZ, or the adjacent training areas. POVs are authorized to park next to the outdoor classroom but space is limited and must be controlled by the using unit.

4. Report all range maintenance problems to a range inspector or use ICE Comment. This range must be inspected and cleared by a range inspector prior to the Range OIC or RSO departing the range/training area. Range OIC or RSO will complete and submit a range report/ICE Report upon completion of training and turn-in of range.
5. Range OIC/RSO will conduct a complete range sweep to ensure the conflicting range and all required training areas are secured of all personnel and equipment. SR-7 must ensure the Range OIC/RSO for Range SR-6, if scheduled, understands that no personnel are permitted beyond the 2d turn around road when SR-7 is activated.

6. The Range OIC/RSO are responsible for ensuring all required gates are secured/locked and that the road guards are posted prior to going “HOT”. All road guards will have and maintain internal communication with the Range OIC/RSO while live fire training is being conducted. Road guards must be particularly vigilant for intruders circumventing their checkpoints/gates. Periodic gate checks are required to ensure security and safety of the range.

7. Range OIC/RSO will verify all weapons range safety cards and ensure all personnel are qualified with that weapon/weapon system/ammunition prior commencing any live fire and maneuver/movement exercise.

8. Red range flag will be flown at the entrance to the Range while in a “HOT” status.

9. A government safety vehicle and corpsman must be present on the range prior to commencing any live fire training. Corpsmen must accompany each maneuvering element downrange. Emergency vehicles will be staged at the tower. TLZ Snipe is for Helo MEDEVAC and is located at grid 723372 just north of the range and is connected to a gravel road.

10. All non-participating personnel will remain outside of the SR-7 range fan at all times.

11. All personnel must wear required helmets, flak jackets, hearing and eye protection while conducting all live fire training.

12. Range OIC/RSO will ensure adequate number of safety personnel are assigned to the fire teams/squads/vehicles conducting live fire and maneuvers/movement. The Range OIC or RSO will accompany each element down range. Range OIC or RSO will be equipped with appropriate communication and signaling devices while moving down range.

13. The using unit must conduct rehearsals under the same conditions (day and night) prior to going into a “HOT” status.
The Range OIC/RSO will ensure all personnel are familiar with all firing lanes, firing points, sectors of fire, limits of fire, and limits of advancement. The unit using machineguns as the base of fire or support by live fire must have clear, positive, and redundant signals for the shifting and/or cease-fire. All live fire and the effects of live fire must impact within the SR-7 approved SDZ at all times.

14. The using unit is responsible for a detailed police call of the entire range to include the entire down range area as listed, all facilities/buildings, bivouac site and parking/staging areas when live fire training is completed. The unit will ensure the removal of all ammunition type dunnage/trash like brass, links, from the range to include any tactical wire, wooden pallets, additional targets, and scrap metal that may have been used. All ammunition type debris like the plastic support devices for the 25mm, 40mm TP MK-19 debris and all others will be policed up from the firing berm, gravel roads, defilade firing positions, and other areas where the grass is maintained/cut. The using unit will be responsible for having cleaning gear for the heads, classrooms, and other facilities if used.

15. The scheduled using unit will not remove anything from the inside of buildings/structures like the chairs, tables, or the range mock-up outside.

16. This range contains an Emergency Range Shutdown System (ERSS). Should BLACKBURN activate this system, a siren, pre-recorded voice message, and flashing lights will be lit throughout the range. Upon ERSS activation, the range will immediately go into the required “CHECK FIRE” and all weapon will be made a Condition 4. The Range OIC/RSO will verify/check firing status and immediately notify BLACKBURN of being in a “CHECK FIRE”. BLACKBURN will notify the Range OIC/RSO once the range is safe to resume a live fire status.

17. Tactical vehicles are only authorized on the gravel tank trails and road network. No off road movement is authorized on this range at any time.

**Gate Check Requirements.** Prior to conducting any aerial live fire gunnery, the using aircraft/unit shall ensure a range sweep has been conducted. A separate handout listing all gates to be checked and locked will be issued in the range binder upon range checkout.
Rotary Wing Aerial Gunnery (SR-7 Air). *(Separate Air Brief/CD).*
SR-7 AIR is a multi-use range primarily designed for flat ground trajectory surface delivered fires. Its location, size and variety of targets make SR-7 particularly well suited for aerial weapons delivery training like aerial door gunnery. However, care must be taken to ensure flight paths avoid civilian built up areas at all times and that delivery profiles are adjusted to contain the effects of fires within the approved surface danger zone (SDZ) for that weapon system and ammunition, boundaries (LLL and RLL) of SR-7 and to avoid damage to target systems. In general, all lines of fire must be directed along the long axis of the range and at angles such that the target’s protective berm is between the firing platform and the permanent target components. In other words, the door gunner/gunner should only be able to see the sacrificial plywood or plastic portion of the target above the berm at weapons release/weapon firing. The intent of the procedures stipulated below is to provide flexibility to aircraft commanders in conducting training while maintaining a clear SDZ/WDZ and limiting costly damage to the range. Range Control will provide a separate brief and CD of all required procedures for SR-7 Air.

Air Space Coordination. All weapons delivery shall be conducted from within the battle position defined below. The aircraft firing and target fired upon shall be within the same firing lanes. **ABSOLUTELY NO CROSS LANE FIRING IS AUTHORIZED.**

Battle Position. BP Habu (SR-7 AIR) 18STD; 71643668, 70193642, 70173664, 71723704, surface to 500 ft AGL.

Firing Lanes. For aerial delivery, SR-7 AIR is divided into east and west firing lanes defined by an imaginary line running through the range tower on a 273 degrees magnetic heading.

Delivery Profiles. When firing, aircraft shall comply with the following maximum altitude vs. range to target matrix:

<table>
<thead>
<tr>
<th>Range to Target (m)</th>
<th>Max Altitude (ft AGL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 300</td>
<td>Not authorized</td>
</tr>
<tr>
<td>300-500</td>
<td>100</td>
</tr>
<tr>
<td>500-1000</td>
<td>200</td>
</tr>
<tr>
<td>&gt; 1000</td>
<td>500</td>
</tr>
</tbody>
</table>

Running Fire

1. Maximum pitch delivery angle for rockets is 0 degrees. Door guns may engage targets only within 10 degrees off aircraft
heading on run in and shall cease fire on pull off before the aircraft completes 90 degrees of turn or exits the BP/firing lane. The following restrictive final headings shall be observed.

2. Restrictive final heading: 268-278 degrees magnetic.

Flex Guns. Door guns or attack helicopter turret guns may be fired from a hover or takeoff/landing profile within the BP with the following restrictions:

1. All live fires or effects of live fires will be contained within the left and right lateral limit signs at all times.

2. Aircraft shall not pass directly over any targets on approach/departure nor hover within 100 meters of any target to avoid downwash damage to range equipment.

3. Targets within 300 meters of the aircraft shall not be engaged and minimum firing altitudes listed above shall be observed. No greater than a 45 degree angle of fire is authorized.

4. All live fire shall be directed along the long axis of the impact area away from the tower.

5. Targets may only be engaged if their protective berm is between the shooter and the target. No live fire above 45 degree angle.

6. Off axis turret gun (20mm TP) fire is not authorized.

7. All aircraft fire will be directed toward the stationary armor targets (SATS) only.

Range Officer In Charge/Range Safety Officer

1. A qualified/certified by the command Range Officer in Charge (ROIC) or Range Safety Officer (RSO) shall be present on the range with a Base RSO card for the duration of the live fire operation. The Range Officer in Charge or Range Safety Officer can be in the aircraft. The Range OIC or RSO shall position himself in the range tower, shall request to go “HOT” as per Chapter 3 of this SOP, and will maintain telephonic/radio communications with BLACKBURN at all times. The tower is equipped with a VHF/UHF capable radio for the purpose of
communication between the Range OIC/RSO and the aircraft. The
frequency for that radio is at the discretion of the using unit.

THE AIRCRAFT SHALL MAINTAIN COMMUNICATIONS WITH BLACKBURN ON
233.8 OR 34.70 THROUGHOUT THE ENTIRE TRAINING EVOLUTION.

2. The Range OIC/RSO responsibilities are listed in Chapter 2
of this SOP. Range specific responsibilities are:

   a. Schedule the range via RFMSS and per Chapter 3 of this
      SOP. The range must be schedule in RFMSS as SR-7 AIR.

   b. Conduct a face-to-face brief with Range Control
      Scheduling, BLACKBURN, and Range Inspector no later than 24
      hours preceding the live-fire event.

   c. Coordination with the Range Inspector shall include at a
      minimum; scheduled HOT times, anticipated COLD time, and time
      RSO (aircraft) is expected to arrive on the range. This will
      allow Range Inspectors (Air Events Only) to close the required
      gates and set-up appropriate road barriers prior to the
      scheduled live-fire time. Range Inspectors will meet with the
      Range OIC or RSO at the range to confirm gates have been
      closed/checked and barriers have been established.

   d. Contact and coordinate the use of the range with the
      range operator no later than 24 hours preceding the live-fire.

   e. Ensure all range requirements to include gate closures
      are completed prior to requesting to go “HOT” with BLACKBURN.

   f. Confirm the Range RSO has completed a gate check and
      have conducted a “COLD PASS” prior to allowing an aircraft to
      fire on the range. Only one (1) aircraft can fire at a time on
      this range.

   g. Report all ammunition by DODIC/NALC expended on the
      range. RSO will conduct a police call and remove all brass,
      links, sections of 2.75 rockets and other expended ammunition
      items from the gravel roads and all other areas listed above.

Aircraft Procedures

1. Aircraft scheduled to utilize SR-7 AIR shall maintain
   communications with BLACKBURN on 233.8 or 34.70.
2. Aircraft shall contact BLACKBURN at Air Control Point “H” and request SR-7 Air. BLACKBURN shall direct the aircraft to conduct a gate-check to insure all gates are secured and no personnel or vehicles are within the SR-7 AIR SDZ.

3. Upon completion of the down range sweep by the aircraft to ensure the range is clear, the aircraft conducting the live-fire event will then contact Range OIC/RSO and request “COLD PASS”.

4. After the “COLD PASS”, is conducted the aircraft shall coordinate with Range OIC/RSO to insure the range is prepared to commence live-fire.

5. When conducting door gunnery, Aircraft Commanders will insure weapons are in a Condition 4 prior to exiting the range complex.

6. Upon completion of training, the aircraft will check off the range with the Range OIC/RSO and contact BLACKBURN on 233.8 or 34.70 requesting Checkpoint H.
**RANGE NAME:** SR-8/SR-8A

**DESCRIPTION:** Multi-Purpose Machinegun Range (MPMG)

**PRIMARY RANGE USE:**
- SR-8 Machinegun Qualification Firing Range
- SR-8A Machinegun 10 Meter Zero/Qualification Firing Range

**ALTERNATE RANGE USES:**
1. Sniper Live Fire Range
2. Basic Techniques MG Gunnery
3. Vehicle Mounted Weapons Gunnery (Stationary, Moving)
4. M249 SAW/IAR M27 Transition Range
5. M240B/G MG Transition Range
6. Machinegun Table Firing Range
7. M16/M4 Rifle Range (Static Fire Only)

**LOCATION:**
- Grid Coordinate: Center Berm 69933214

**PRIMARY DIRECTION OF FIRE:** 325 degrees

**WEAPONS ACCOMMODATED:**
- M40/MK11/MK12/DMR/EMR Sniper Rifles
- M2 .50 Caliber Machinegun
- M82 .50 cal Sniper Rifle
- M249 Squad Automatic Weapon
- M27 Infantry Automatic Rifle
- M240B/G 7.62mm Machinegun (MK-43 USCG)
- M16/M4 Rifles (Static Fire Only)

**AMMUNITION AUTHORIZED:**
- 5.56mm: Linked, Ball, Tracer, Match
- 7.62mm: Linked, Ball, Tracer, Match
- .50 CAL Linked, Ball, Tracer, API/APIT
- .50 CAL Sniper Ammunition, Match

**NOTE:** DODIC A606 .50 cal Sniper Rifle is not authorized on this range.

**TARGETS/SIMULATORS/DEVICES**
- Firing Lanes: 10
- Stationary Infantry Targets (SITS): 179
- Moving Infantry Targets (MITS): 3 At 300, 450, and 650 meters

**FACILITIES (Number of each):**
- Range Towers: 1 (SSR-801)
- Ammunition Storage Area: 1 (SR-805)
Range Tables: Metal 2 long, 1 short  
Range Classrooms: 1 (Outside)  
Head Facilities: Port-a-Johns (6)  
Range Bleachers: 1 (SR-808)  
Bivouacking Area: Yes  
Contractor Storage Building: None  
POV Parking Area: Near the entrance of range  

UTILITIES AVAILABLE:  
Electricity: Yes  
Lights: Yes  
Water System: No  

INSTALLED COMMUNICATIONS:  
Telephone Number: 449-4786  
3 Phones: On the berm, at the foot of the tower, and in the tower.  

AREA SUITABILITY:  
Section/Platoon/Company  

Range Use Restrictions/Comments/Conflicts  

1. Conflicts with Training Areas; SB, SF, SH, SJ, SI training areas, and a small section of the SL training area and TLZ Pipit. Limit of advance for all moving vehicles firing crew-served mounted weapon systems is 400 meters traveling down range to the large turnaround area which is marked. All vehicles must stay on the down range gravel road network at all times. All forest/range fires must be reported immediately to BLACKBURN with the direction the smoke/fire may be drifting toward.  

2. A range contractor will set up the range and provide a qualified range operator for the RFMSS scheduled time period. Contact the contracting officer representative at 451-5749 with any contract support issues.  

3. Using units that require a time extension on this range must request it at least four (4) hours in advance of their scheduled completion (COLD) time in order to allow for an alteration to the scheduled contractor support. This request for time extension will be made through Range Scheduling during normal working hours. After hours call BLACKBURN. This range can be scheduled for a maximum of 16 hours per day.  

4. Units must occupy a contractor-supported range with a responsible unit training representative (not necessarily the Range OIC/RSO) within 1 hour of the “HOT” time or the range will be cancelled for that day.
5. This range is not authorized for civilian owned weapons.

6. This range is affected by the activation of New River Air Station’s Runway 1. Range Control (BLACKBURN) will notify the range Range OIC/RSO of the required procedures to be taken and when normal training can resume.

7. Must be scheduled in RFMSS 30 days prior to the actual first date of live fire training so NOTAMS can be posted as required.

8. Final range coordination brief will be conducted by a Range Inspector when the using unit occupies the range. Units occupying on weekends, holidays, and/or long weekends will ensure the final range coordination brief is received prior to Friday and/or no later than the last regular work day prior to the weekend/holiday/long weekend with a Range Inspector, located at building SR-46, in the GRSA on CC road across from SR-6. Briefs can take place on the weekends at the range if arranged by Range Control Scheduling or BLACKBURN with the duty Range Inspector prior to that Friday.

9. SR-8 Range has 179 RETS with 18 RETS in each firing lane along with 3 moving targets for sniper training only that are operated as approved scenarios that are preset electronically and operated by the Range Contractor. This range is not authorized for live fire without contractor support being present on the range the entire time.

10. No more than (2) two tactical wheeled vehicles may maneuver down range at a time, one vehicle per firing lane, and they must be on the down range gravel road at all times. Tactical wheeled vehicles are authorized down range up to 400 meters to the turnaround spot which will be marked with a limit of advance sign. No off road movement or cross range movement is authorized on SR-8. This range is not authorized for CMP/EMP (Rifle/Pistol/Foreign Weapons) type training events. Units are not authorized fire and movement/fire and maneuver training events on foot down range. Dismounted infantry type training events from vehicles is not authorized on this range. Vehicle speed limits will not exceed 10 MPH on the gravel roads down range. Units will be required to police the gravel roads used for vehicle live fire training. All crew served weapons mounted on wheeled vehicles must be checked/inspected/cleared down range by the unit Range OIC/RSO, pointing down range before returning to the firing berm/assemble area. Tracked vehicles are not authorized on SR-8.
11. Night use up to 2359 if properly scheduled in RFMSS. All night vision devices presently issued are authorized.

12. All classes of military issued LASERs (Class 1-4) are authorized on this range. Class 3b and Class 4 LASERs require a LASER Range Safety Officer (LRSO) to be present at all times.

13. Pyrotechnics are not authorized in the GSRA, except for emergency use of red star clusters and red smoke grenades.

14. SR-8 has several concrete machinegun fighting positions on the firing berm/line to support live fire such as roof top, doorway, window, sandbag wall, and wooden wall. Normal tripod or bipod live fire training can take place between the structures.

15. All live fire must be within assigned numbered lanes/firing positions; cross range firing is not authorized on SR-8. Firing from vehicle-mounted weapons (static or moving) is authorized. At no time will more then 10 machineguns fire from the dirt berm with the proper safety distance between each machinegun. The MK-19 40mm GL is not authorized on this range.

16. Vehicles conducting static live fire may fire from either the rear of the berm (on the gravel road) or forward of the berm (on the gravel road) or on top of the firing berm. Live fire is not authorized from the gravel road that is located on the side of the firing berm. No more than two wheeled vehicles (one in each lane) are authorized to fire simultaneously from these areas. All vehicles will be turned off, drivers out of the vehicle, chocked, with hand brake set and weapons mounted on T&E. A minimum of 6 meters separation will be maintained between vehicles during firing. Free guns are authorized to be fired if requested via a special range request.

17. Digging on this range is not authorized. Sandbags must be provided and filled by the unit prior to occupying this range to support ground mounted machineguns. Prior to departing the range, the unit will ensure all sandbags are removed and all holes are filled in and leveled out. Do not use the sandbags from the sandbag walls on the range.

18. Bivouacking is authorized on this range only in the designated area behind the outdoor classroom and the tower if requested.
19. The **50 meter line targets** are not authorized to be fired at with M240B/G 7.62mm and M-2 .50 cal machineguns that are ground/vehicle mounted. The 50 meter targets are only authorized for the M249 SAW ground mounted only/M27 IAR/M16A2/M-4 5.56mm required live fire training.

20. The **100 meter line targets** are not authorized to be fired at with the M-2 .50 cal machineguns that are ground or vehicle mounted. The 100 meter to 1200 meter targets are authorized for the M240B/G 7.62mm machinegun required live fire training. The .50 cal machinegun can fire at the 200 to 1200 meter targets but will not engage any group of targets closer then 150 meters while moving forward on wheeled vehicles. Special Instructions, Paragraph Number 22 will provide additional guidance on firing from wheeled vehicles that weapon system which is high off the ground such as the MRAP and 7 Ton Truck MTVR.

Other Considerations

1. The unit is responsible for becoming acquainted with training scenarios prior to training session. Should a unit request a different scenario, the unit will provide a written scheme of maneuver/scenario, safety plan, and operations risk assessment with each special range request. Special range requests to modify computerized target scenarios must be submitted through the using unit’s chain of command to MCB Range Control ten (10) working days in advance from the first day of training.

2. Unit requesting to use Class 3b and Class 4 LASERs must be scheduled in RFMSS as SR-8 LASER. To use Class 3b and Class 4 LASERs, the using unit must have a LASER Range Safety Officer (LRSO) on the range.

3. Under high wind conditions (35 knots or higher), the range will be shut down and the targets removed to prevent damage to the targets and target mechanisms.

4. Requests to modify the computerized target scenarios must be submitted through the unit’s chain of command to Range Control. The request must be submitted ten (10) working days in advance from the first day of training. The using unit will provide written scheme of maneuver/scenario, safety plan, and signed operations risk assessment worksheet with each special range request. Contact the contracting officer representative at 451-4480/2411 with any contract support issues. The range
contractor must be on the contracted range the entire time scheduled.

5. The using units that require a time extension on this range must request it at least four (4) hours in advance of their scheduled completion (COLD) time in order to allow for an alteration to the scheduled contractor support. The request for time extensions must be made through Range Scheduling during normal working hours. After hours contact BLACKBURN.

6. The using units must occupy a contractor-supported range with a responsible unit or a training representative (not necessarily the Range OIC/RSO) within 1 hour of the scheduled "HOT" time or the range will be cancelled for that day.

7. The unit is responsible for becoming acquainted with the assigned training scenarios the contractor has prior to conducting any live fire training events.

8. Range contractors operate the RETs target computer system based on multiple preset electronic scenarios. This range can only be scheduled for 16 hours per day and must be scheduled in RFMSS between 30 days and no more than 90 days in advance.

Special Instructions

1. Be familiar with Chapter 5 of this SOP and all references.

2. A copy of Appendix G, GSRA Complex of this SOP, with a map overlay of the range fan, road guard placements and gate closures will be provided when the range is signed out.

3. POVs are not authorized on this range, tank trails or adjacent training areas. POV parking is authorized next to the entrance to SR-8 on the left side of the gravel road but is limited.

4. Report all maintenance problems to a range inspector/range contractor. This range must be inspected and cleared by a range inspector prior to departing range/training area. Range OIC/RSO will complete and submit a range report and ICE report upon completion of training and turn-in of range.

5. Range OIC/RSO will conduct a range sweep to ensure the range fan is clear of all personnel, vehicles, and equipment.
6. The Range OIC/RSO are responsible for ensuring all gates are secured and the road guard at the entrance of SR-8 is posted prior to going “HOT”. The road guard will have and maintain internal communication with the Range OIC/RSO while training is being conducted. The road guard must be particularly vigilant for intruders circumventing the gated checkpoints. Periodic gate checks are required to ensure security and safety of the range.

7. Range OIC/RSO will verify all weapons range safety cards and ensure all personnel are qualified with the weapon/weapon system prior commencing exercise.

8. Base of fire for 5.56mm requires 50 meters clearance, 7.62mm requires 100 meters .50 caliber and above requires 200 meter clearance. Unit using a base of fire or support by fire must have clear, positive, and redundant signals for shift and cease-fire. All live fire will impact within the SR-8 SDZ/impact area at all time.

9. Red range flag will be flown at the entrance to this range on the provided range sign/flag pole.

10. A government safety vehicle and corpsman must be present on the range prior to commencing live fire training. Emergency vehicles will be staged at the range tower. If required LZ Kingfisher, will be used for Air MEDEVAC/CASEVAC, is located at grid 70803250. Extreme care must be taken when using red pyrotechnics for emergency/safety purposes. Red signaling smoke must be placed in clear area or metal can and the red star clusters must be fired over the center of the range area.

11. All non-participating or observing personnel will remain outside of the range fan at all times.

12. All personnel must wear helmets, flak jackets, hearing, and eye protection while training is being conducted on the firing berm and down range.

13. Range OIC/RSO will ensure an adequate number of safety personnel are assigned to control the moving vehicle live fire training. All safety personnel will be equipped with appropriate communication and signaling devices while down range.

14. Dry run maneuvers are restricted to the range gravel roads only leading down range. Wheeled vehicles are not authorized to
conduct maneuvers except on the SR-8 gravel road network running down range. The gravel roads that run across the range (Left to Right) are off limits to training units. Range OIC/RSO will ensure all personnel are familiar with the firing lanes, firing points, sectors of fire, and limits of fire.

15. Using unit is responsible for a detailed police call of the entire range complex, all facilities, port-a-johns, bivouac site, gravel road network down range to the limit of advance, and the parking/staging areas when training is completed. The unit will ensure the removal of all dunnage from the range to include tactical wire, wood, and scrap metal.

16. This range contains an Emergency Range Shutdown System (ERSS). When activated a siren will sound off throughout the range. Upon ERSS activation, the range will immediately go into a “CHECK FIRE” and ensure all weapons are in Condition 4. The Range OIC/RSO will verify check fire status and immediately notify BLACKBURN that the range is in a “CHECK FIRE”. BLACKBURN will notify the Range OIC/RSO when the range is safe to resume firing.

17. Using unit will be responsible for bringing cleaning gear to clean the port-a-johns, outdoor classroom, machinegun firing pits, and all other facilities on SR-8 used by the unit.

18. Using unit will not remove anything from any of the structures like chairs, bleachers, or desks.

19. When conducting sniper live fire from the tower or the firing berm all safety measures must be in place when removing the guard rail/hand rail sections to ensure nothing is dropped. The sections must be put back in place with the required safety pins and checked after the training event is completed.

20. Unit is not authorized to place additional targets down range on SR-8. Units are authorized to place BZO/Zero type targets on wooden stakes only on the SR-8A BZO/Zero Range only.

21. Units conducting live fire training are not authorized to fire at the white and black numbered lane markers down range.

22. Units conducting live fire training from large wheeled vehicles that are high off the ground such as 7 Ton Trucks (MTVR), MRAP are not authorized to engage any target closer the 200 meters with any weapon/ammunition due to the angle of fire and the possibility of damaging a target lifter/target system.
Gate Check Requirements. Prior to conducting any live fire on SR-8, the Range OIC/RSO will ensure that a detail range sweep is conducted and all gates listed below have been visually checked and closed/locked. Additional gate map will also be provided of the other GSRA gates that must be checked and locked before requesting to go into a “HOT” status.

SR-8 (Gate 1) 18S TD 70423252
Old CC/South Toms Road just down the road (east) from SR-6/SR-46.

SR-8 (Gate 2) 18S TD 69903187
Main entrance to the range (Road Guard Position when gate is open).

SR-8 (Gate 3) 18S TD 69963186
New CC Road/Moore, next to the entrance to SR-8.

SR-8 (Gate 4) 18S TD 68883222 Old CC Road.
RANGE NAME: SR-10

DESCRIPTION: Multi-Purpose Range Complex
4000 meters long, 4 lanes, 226 targets

PRIMARY RANGE USE: Tank Crew Qualification Firing Range
(Individual Tank/Tank Platoon Qualification through Gunnery Table 12)

ALTERNATE RANGE USES: 1. LAV/AAV Multi-Purpose Mechanized Assault Range
2. Basic Techniques of Gunnery
3. Moving Armor Target Range
4. Mechanized/Convoy Range
5. Mech Infantry Assault Range
6. Helicopter Aerial Gunnery
7. Sniper Live Fire Range

LOCATION: Grid Coordinate: 65702696

PRIMARY DIRECTION OF FIRE: 005 degrees

WEAPONS ACCOMMODATED: All Pistols (.45 Caliber or less)
12 Gauge Shotgun
M16/M4 Rifle
M40/MK11/MK12/EMR/DMR Sniper Rifle
M240B/G Machinegun
M249 Squad Automatic Weapon
M203 Grenade Launcher
MK19 Grenade Launcher Machinegun
M242 Chain Gun (25mm)
M2 .50 Caliber Machinegun
M82A3 (50cal) Sniper Rifle
30mm MK44 Main Gun EFV
120mm Main Gun M1A1 (TP Only)
TOW 2B (Inert Only)
M72A7 LAW (21mm Sub-Cal Only)
AT-4 (9mm Trainer only)
SMAW (9mm Spotter only)

WEAPONS ACCOMMODATED FOR HELICOPTER GUNNERY:
GAU-19 (.50cal)
GAU-17 (7.62mm)
M3/M2 (.50cal)
20mm Cannon
2.75 Rocket
TOW (Inert Only)
AMMUNITION AUTHORIZED:
All Military Pistol Ammunition
All 12 Gauge Ammunition
5.56mm: Ball, Tracer, Link, Blank
7.62mm: Ball, Tracer, Link, Blank
7.62mm Match for Sniper Rifles
120mm (Training Practice Rounds Only)
30mm MK239 EFV TP-T (TP Only)
25mm: TP-T, (TP Only)
.50 Cal Linked, Ball, Tracer, Match
API/APIT
40mm MK19: (TP Only); DODIC BA12
40mm M203: TP Only; DODIC B519
TOW (Inert Only)
M72A7 LAW, 21mm (Sub-Cal Only)
AT-4 9mm Spot Rd: 9mm TP-T DODIC A358
SMAW 9mm Spotting Round

AMMUNITION AUTHORIZED FOR HELICOPTER WEAPONS:
7.62mm Linked (GAU-17)
.50cal Linked (GAU-19)
.50cal Linked (M3/M2)
20mm Cannon (TP-T Only)
2.75 Rocket (TP; Inert Only)
TOW (Inert Only)

TARGETS/SIMULATORS/DEVICES:
Firing Lanes: 4
Defilade Battle Firing Position: 16
Stationary Infantry Target (SITS): 132
Stationary Armor Targets (SATS): 40
Moving Armor Targets (MATS): 8
Moving Infantry Targets (MITS): 30

FACILITIES (Number of each):
Range Tower: 1
Ammunition/Weapons Storage Building: 1
Range Tables: 6
Range Classrooms: 2, 1 Inside/1 Outside
Range Classroom Bleachers: 3
Head Facilities: 2 (1 Male/1 Female)
Contractor Maint/Storage Buildings: 2
Armored Moving Target Shelters: 8
Ammunition Storage Area: 1
Tank Maint/Storage Building: 1
POV Parking Area: Yes (Limited)
Bivouac Concrete Pads: 6
Tank Training Device Pad: 1
UTILITIES AVAILABLE:
Electricity: Yes
Lights: Yes
Water System: Yes (Non-Potable)

INSTALLED COMMUNICATIONS:
Telephone: Yes

AREA SUITABILITY:
Platoon/Company

Range Use Restrictions/Comments/Conflicts

1. SR-10 was designed primarily to support tracked and wheeled vehicle live fire training. It has 16 defilade firing positions (4 per firing lane) to support live fire from stationary firing positions for tracked and wheeled vehicle live fire. Vehicular movement down range is restricted to existing gravel roads only and no off road movement is authorized on SR-10. The speed limit on this range is 10 mph or less. Track vehicles must use the designated turn pads and stay on the gravel road only to reduce the damage of the range when turning. All forest/range fires must be reported immediately to BLACKBURN with the direction the smoke/fire may be drifting toward.

2. Vehicles may also conduct static live fire from the rear firing line (concrete pad). No more than 4 vehicles are authorized at one time to fire from this area. HMMWVs and all trucks/MRAPs will be chocked, hand brake set, and weapons T&E mounted. A minimum of 6 meters separation will be maintained between vehicles during firing. Military vehicles are not authorized on the dirt berms.

3. SR-10 is a contractor supported range and can only be scheduled up to 18 hours per day. Training areas SF, SG, SH, SI, SK, SL, SN, and SO are conflicts when SR-10 is scheduled. This range is very close to two major civilian highways (Highway 17/Highway 50) and all using units must be very careful not to start a range/forest fire. All forest fires must be reported immediately to BLACKBURN with the direction that the smoke/fire may be drifting toward.

4. This range is affected by the activation of New River Air Station’s Runway 1. Range Control will notify the Range OIC/RSO of the required procedures to be taken and when normal live fire training can resume.
5. Must be scheduled in RFMSS no later than one calendar month prior to the first date of usage due to the required NOTAM that has to be published/issued.

6. Final range coordination brief will be conducted by a Range Inspector when the using unit occupies the range. Units occupying on weekends, holidays, and/or long weekends will ensure the final range coordination brief is received prior to Friday and/or no later than the last regular work day prior to the weekend/holiday/long weekend with a Range Inspector, located at building SR-46, in the GRSA on CC road across from SR-6. Briefs can take place on the weekends at the range if arranged by Range Control Scheduling or BLACKBURN with the duty Range Inspector prior to that Friday.

7. This range has RETs type targets that are operated with approved scenarios that are preset electronically and operated by the range contractor.

8. Live fire and maneuver/movement with tactical vehicles is authorized on this range. SR-10 has eight (8) defilade firing positions to support the four (4) live fire firing lanes for all wheeled and tracked vehicles.

9. Night live fire (Non-Illumination Only) is authorized on this range if properly scheduled. Night vision devices are authorized on this range.

10. Class 3b and 4 LASERs are authorized on this range if properly scheduled in RFMSS as “SR-10 LASER” and the unit has the required LASER Range Safety Officer (LRSO).

11. No designated firing points are on this range other than the defilade firing positions. Cross range firing is not authorized on SR-10 and all live fire and the effects of live fire must be within the approved SDZ at all times.

12. Pyrotechnics and smoke grenades are not authorized on SR-10. Red smoke grenades are authorized for emergency use only and must be used on the gravel roads or in an ammunition can in order to avoid starting range fires.

13. Bivouacking on this range is authorized. The bivouac site is located across the street from the indoor and outdoor classroom and tents can installed over the concrete pads. Units must avoid the sewer septic areas just behind the indoor classroom.
14. Digging on this range is not authorized except when required for the proper deployment and safety of designated weapon systems. Sandbags must be provided and filled by the unit prior to occupying the range. Prior to departing the range, the unit will ensure all sandbags are removed and holes filled in and leveled out.

15. Range requires 1 road guard and numerous gate closures. A map of the required gate closures will be provided at the time the range is checked out/signed for by the Range OIC.

16. Firing from vehicle-mounted weapons systems is approved. Targets can be engaged by moving tactical vehicles if requested/scheduled. Vehicle movement is restricted to the existing gravel roads only. At no time will tactical vehicles be allowed off road or on the dirt berm on SR-10.

17. Targets will not be engaged closer than 100 meters for 5.56mm/7.62mm and 150 meters with .50 cal machineguns due to the ricochet hazards with the concrete bunkers.

18. Additional targets can only be authorized by special range request and the unit must provide them and must have a plan to remove them after the training event.

19. Free gun (machineguns) without T&E is authorized if requested/approved.

20. Aviation gunnery can be requested via special range request and will be conducted in accordance with the separate air gunnery brief and this SOP provided by Range Control.

21. SR-10 is authorized to go “HOT” before 1200 on Sundays with small arms, which is .50 cal and below. The tank main gun 120mm can not go “HOT” before 1200 on Sundays. This range must go “COLD” at 2359 every night with the 120mm tank main gun due to the MCB “QUIET HOUR” policy. Small arms would be authorized if properly scheduled in RFMSS to fire after 2359.

Other Considerations

1. Requests to conduct day/night live fire and maneuver /movement with vehicles must be properly scheduled in RFMSS through the unit’s chain of command to Range Control. Dismounted live fire infantry events from vehicles must be requested by special range request.
2. Requests to use Class 3b and Class 4 LASERs must be scheduled in RFMSS by scheduling as “SR-10 LASER”. To use Class 3b and Class 4 LASERs, the using unit must have a LASER Range Safety Officer (LRSO) on the range.

3. Under high wind conditions (35 knots or higher), the range will be shut down and the targets removed to prevent damage to the targets and target mechanisms.

4. Requests to modify the computerized target scenarios must be submitted through the unit’s chain of command to Range Control. The request must be submitted ten (10) working days in advance from the first day of training. Unit will provide written scheme of maneuver/scenario, safety plan, and signed operations risk assessment worksheet with each special range request. Contact the contracting officer representative at 451-4480/2411 with any contract support issues. The range contractor must be on the contracted range the entire time scheduled for live fire.

5. The using units that require a time extension on this range must request it at least four (4) hours in advance of their scheduled completion “COLD” time in order to allow for an alteration/change to the scheduled contractor support. The request for time extensions must be made through Range Scheduling during normal working hours. After hours contact BLACKBURN.

6. The using units must occupy a contractor supported range with a responsible unit or a training representative (not necessarily the Range OIC/RSO) within 1 hour of the scheduled “HOT” time or the range will be cancelled for that day.

7. The unit is responsible for becoming acquainted with the assigned training scenarios the contractor has prior to conducting any live fire training on this range.

8. Range contractors operate the RETS target computer system based on multiple preset electronic scenarios. This range can only be scheduled for up to 18 hours per day and must be scheduled in RFMSS a minimum of 30 days and no more then 90 days in advance.

Special Instructions

1. Be familiar with Chapter 5 of this SOP.
2. A copy of Appendix G, GSRA Complex of this SOP, a map overlay with the assigned range fan, current road guards placement and a gate closures map will be provided at the time the range is signed for by the Range OIC.

3. POVs are not authorized down range on SR-10. POVs are not authorized to park on any of the gravel tank trails or in the adjacent training areas. POVs are authorized to park next to the indoor classroom but space is limited and must be controlled by the using unit.

4. Report all range maintenance problems to a range inspector. This range must be inspected and cleared by a range inspector prior to the Range OIC or RSO departing the range/training area. Range OIC or RSO will complete and submit a range report/ICE Report upon completion of training and turn-in of range.

5. Range OIC/RSO will conduct a complete range sweep of all areas to ensure the required training areas and required gates are secured of all personnel and equipment.

6. The Range OIC/RSO is responsible for ensuring all required gates are secured/locked and that the road guard is posted prior to going “HOT”. The road guard will have and maintain internal communication with the Range OIC/RSO while live fire training is being conducted. The road guard must be particularly vigilant for intruders circumventing the checkpoint/gate. Periodic gate checks are required to ensure security and safety of the range over extended periods.

7. Range OIC/RSO will verify all weapons range safety cards and ensure all personnel are qualified with that weapon/weapon system prior commencing any live fire and maneuver/movement exercise.

8. Red range flag will be flown at the Highway 17 entrance to the range while in a “HOT” status.

9. A government safety vehicle and corpsman must be present on the range prior to commencing any live fire training. Corpsman must accompany each maneuvering element downrange. Emergency vehicles will be staged by the tower.

10. All non-participating personnel will remain outside of the SR-10 range fan by the tower at all times.
11. All personnel must wear required helmets, flak jackets, hearing and eye protection while conducting all live fire training.

12. Range OIC/RSO will ensure adequate number of safety personnel are assigned to the fire teams/squads/vehicles conducting live fire and maneuver/movement. The Range OIC or RSO will accompany each element down range. Range OIC or RSO will be equipped with appropriate communication and signaling devices while moving down range.

13. The using unit must conduct rehearsals under the same conditions (day and night) prior to going into a “HOT” status. The Range OIC/RSO will ensure all personnel are familiar with all firing lanes, firing points, sectors of fire, limits of fire and limit of advance. The unit using machineguns as the base of fire or support by fire must have clear, positive, and redundant signals for the shifting of fire and or cease-fire. All live fire and the effects of live fire must impact within the SR-10 SDZ at all times.

14. The using unit is responsible for a detailed police call of the entire range to include the entire down range area as listed, all facilities/buildings, and parking/staging areas when live fire training is completed. The unit will ensure the removal of all ammunition type dunnage, to include all brass and links, from the range, and also any tactical wire, wooden pallets, additional targets, and scrap metal that may have been used. All ammunition type debris like the plastic support devices for the 25mm, 40mm TP MK-19, 120mm metal sleeves and all others type items will be policed up from the firing berm, gravel roads, defilade firing positions, and other areas where the grass is maintained/cut. The using unit will be responsible for having cleaning gear for the heads, all classrooms and other facilities if used.

15. The scheduled using unit will not remove anything from the buildings/structures/tower like the chairs, tables, or range mock-up.

16. This range contains an Emergency Range Shutdown System (ERSS). Should BLACKBURN activate this system, a siren, pre-recorded voice message, and flashing lights will be lit throughout the range. Upon ERSS activation, the range will immediately go into the required “CHECK FIRE” and make Condition 4 weapons. The Range OIC/RSO will verify/check firing status and immediately notify BLACKBURN of being in a “CHECK FIRE".
BLACKBURN will notify the Range OIC/RSO once the range is safe to resume a live fire status.

17. Tactical vehicles are only authorized on the gravel tank trails and road network. No off road movement is authorized on this range.

Rotary Wing Aerial Gunnery (Sr-10 Air). (Separate Air Gunnery Brief/CD). SR-10 AIR is a multi-use range primarily designed for flat ground trajectory surface delivered fires. Its location, size, and variety of targets make SR-10 particularly well suited for aerial weapons delivery training like aerial door gunnery if the following procedures are followed. However, care must be taken to ensure flight paths avoid civilian built up areas at all times and that delivery profiles are adjusted to contain the effects of fires within the approved SDZ/WDZ, boundaries (LLL and RLL) of SR-10 Air and to avoid damage to the target systems. In general, all lines of fire must be directed along the long axis of the range and at angles such that the target’s protective berm is between the firing platform and the permanent target components. In other words, the shooter/door gunner should only be able to see the sacrificial plywood or plastic portion of the target above the berm at weapons release/weapon firing. The intent of the procedures stipulated below is to provide flexibility to aircraft commanders in conducting training while maintaining a clear SDZ/WDZ and limiting costly damage to the range. Range Control will provide a separate brief and CD of all required procedures for SR-10 Air.

Gate Check Requirements. Prior to conducting live fire, using aircraft shall ensure that a range sweep is conducted. A separate handout listing all gates that will be checked by the range inspectors (Air Event Only) and locked will be issued in the range binder upon range checkout.

Air Space Coordination. All weapons delivery shall be conducted from within the battle position defined below. The aircraft firing and target fired upon shall be within the same firing lanes. ABSOLUTELY NO CROSS LANE/RANGE FIRING IS AUTHORIZED.

Battle Position. BP Hog (SR-10 AIR) 18STD; 65442703, 65682954, 66112936, 65932699, surface to 500 ft AGL.

Firing Lanes. SR-10 AIR is divided into east and west firing lanes defined by an imaginary line running through the range tower on a 008 degrees magnetic heading.
Running Fire. Maximum pitch delivery angle for rockets is 0
degrees. Door guns may engage targets only within 10 degrees of
aircraft heading on run in and shall cease fire on pull off
before the aircraft completes 90 degrees of turn or exits the
BP/firing lane. The following restrictive final heading of 358-
018 degrees magnetic will be observed.

Delivery Profiles. When firing, the firing aircraft shall
comply with the following maximum altitude verses range to
target matrix:

<table>
<thead>
<tr>
<th>Range to Target</th>
<th>Max Altitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 300m</td>
<td>Not authorized</td>
</tr>
<tr>
<td>300-500m</td>
<td>100 ft AGL</td>
</tr>
<tr>
<td>500-1000m</td>
<td>200 ft AGL</td>
</tr>
<tr>
<td>&gt; 1000m</td>
<td>500 ft AGL</td>
</tr>
</tbody>
</table>

Flex Guns. Door guns or attack helicopter turret guns may be
fired from a hover or takeoff/landing profile within the BP with
the following restrictions:

1. All live fires or effects of live fire will be contained
within the left and right lateral limit signs of SR-10 at all
times.

2. Aircraft shall not pass directly over any targets on
approach/departure nor hover within 100 meters of any target to
avoid downwash damage to range equipment/concrete bunkers.

3. Targets within 300 meters of the aircraft shall not be
engaged and minimum firing altitudes listed above shall be
observed. No greater angle than 45 degrees of fire is
authorized.

4. All live fire shall be directed along the long axis of the
range within the SR-10 impact area away from the tower.

5. Targets may only be engaged if their protective berm is
between the shooter and the target. No live fire above 45
degree angle.

6. Off axis turret gun (20mm TP) fire is not authorized on this
range.

7. All aircraft live fire will be directed toward the
stationary armor targets (SATS) only.
Range Safety Officer

1. A qualified/certified by the command Range Safety Officer (RSO) shall be present on the range with a Base RSO card for the duration of the live fire operation. The Range Officer in Charge or the Range Safety Officer can be in the aircraft. The RSO shall position himself in the range tower, shall request to “GO HOT” as per Chapter 3 of this SOP, and will maintain telephonic/radio communications with BLACKBURN at all times. The tower is equipped with a VHF/UHF capable radio for the purpose of communication between the RSO and the aircraft. The frequency for that radio is at the discretion of the using unit. **THE AIRCRAFT SHALL MAINTAIN COMMUNICATIONS WITH BLACKBURN ON 233.8 OR 34.70 THROUGHOUT THE TRAINING EVOLUTION.**

2. The RSO responsibilities are listed in Chapter 2. Range specific responsibilities are:

   a. Schedule the range via RFMSS and per Chapter 3. The range requested is SR-10 AIR.

   b. Conduct a face-to-face brief with Range Control Scheduling, BLACKBURN, and Range Inspector no later than 24 hours preceding the live-fire event.

   c. Coordination with the Range Inspector shall include at a minimum scheduled HOT times, anticipated COLD time, and time Range OIC or RSO is expected to arrive on the range. This will allow Range Inspectors to close/check the required gates and set-up appropriate road barriers prior to the scheduled live-fire time. Range Inspectors will meet with the Range OIC or RSO at the range to confirm gates have been closed/check and barriers have been established.

   d. Contact and coordinate the use of the range with the range operator no later than 24 hours preceding the live-fire.

   e. Ensure all range requirements to include gate closures are completed prior to requesting to go HOT with BLACKBURN.

   f. Confirm the Range OIC or RSO completed a “COLD PASS” prior to allowing an aircraft to fire on the range. Only one (1) aircraft can fire at a time.

   g. Report all ammunition by DODIC/NALC expended by the aircraft on this range. Range OIC or RSO will conduct a police
call of the entire range and remove all brass, links, and expended ammunition items from the gravel roads and all other areas listed above.

Aircraft Procedures

1. Aircraft scheduled to utilize SR-10 AIR shall maintain communications with BLACKBURN on 233.8 or 34.70 at all times.

2. Aircraft shall contact BLACKBURN at Air Control Point “H” and request SR-10 Air. BLACKBURN shall direct the aircraft to conduct a range sweep to insure the range is secured and no personnel or vehicles are within the SR-10 AIR Surface Danger Zone (SDZ).

3. Upon completion of the range sweep, the aircraft conducting the live-fire will contact Range OIC or RSO and request “COLD PASS”.

4. After the “COLD PASS”, the aircraft shall coordinate with RSO to insure the range is prepared to commence live-fire.

5. When conducting door gunnery, Aircraft Commanders shall insure weapons are in Condition 4 prior to pull off or exiting the range.

6. Upon completion of training, the aircraft will check off the range with the Range OIC or RSO and contact BLACKBURN on 233.8 or 34.70 requesting Air Control Points H, R, S, or T.

7. Aircraft are only authorized to engage the stationary armor targets (SATS) and only with training practice ammunition. All other targets are not authorized for aircraft gunnery.
RANGE NAME: SR-11

DESCRIPTION: Baffled Pistol Range

PRIMARY RANGE USE: Pistol Qualification and Requalification Range

ALTERNATE RANGE USES: Pistol familiarization firing range

STATUS: Active

LOCATION: Grid Coordinate: 65622683

PRIMARY DIRECTION OF FIRE: 280 degrees

WEAPONS ACCOMMODATED: All military pistols (.45 cal, 40 cal, 9mm)

AMMUNITION AUTHORIZED: All military pistol ammunition
*NOTE: No armor piercing type ammunition

TARGETS/SIMULATORS/DEVICES: Pistol targets (PITs): 14

FACILITIES (Number of each): Head Facilities: 2 (SR-10)
Male: 1, Female: 1
Range Tables: 3
Parking Lot: 1
Contractor Target Storage Bldg: 1
POV Parking Area: None

UTILITIES AVAILABLE: Electricity: Yes
Lights: No
Water System: Yes (Non-Potable)

INSTALLED COMMUNICATIONS: Telephone: Yes

AREA SUITABILITY: Platoon/Squad

Range Use Restrictions/Comments/Conflicts
1. Firing Lines are located at 7, 15, and 25 meters.
2. Recreational shooting of civilian rifles, shotguns, and pistols are not authorized on this range. Military pistols will not exceed .45 caliber.

3. Maneuvers are not authorized on this range.

4. Night use is authorized on this range if properly scheduled in RFMSS.

5. Class 3b and 4 Larers are not authorized on SR-11.

6. Hearing and eye protection is required.

7. Personnel are not authorized behind the bullet trap system.

Other Considerations

1. This range must be scheduled in RFMSS and signed for at Range Control. This pistol range is normally scheduled along with SR-10 but special consideration may be given for its use if the unit does not have SR-10 scheduled in RFMSS.

2. A range contractor will set up the range and provide a qualified range operator. The operator will provide one E-type silhouette and two bull’s eye paper replacements per firing point, along with target pasties and a stapler. If the using unit requires additional targets/bull’s eyes, the unit must furnish them. Contact the contracting officer representative at 451-4480/2411 with any contract support issues. The range contractor must be on the contracted range the entire time scheduled.

3. Units must occupy a contractor supported range with a responsible unit training representative (not necessarily the Range OIC/RSO) within 1 hour of the “HOT” time or the range will be cancelled.

4. Using units must notify Range Scheduling during normal working hours at least (4) fours hours in advance if a time extension is required. After hours contact BLACKBURN. This pistol range can only be scheduled 12 hours per day.

5. A range contractor will set up the targets and run the range. The unit will contact the contractor if troubleshooting of targets is required.

Special Instructions
1. Be familiar with Chapter 5 of this SOP.

2. Bivouacking is authorized on this range in the approved areas.

3. POVs are not authorized behind the bullet trap on the side of SR-11. POVs are not authorized to park on any of the gravel tank trails or in the adjacent training areas. POVs are authorized to park next to the gravel parking area by the indoor classroom of SR-10 but space is limited and must be controlled by the using unit.

4. A government safety vehicle and corpsman must be present on the range prior to commencing any live fire training.

5. Red range flag will be flown at the entrance of this range.

6. A range guard will be posted near the firing line.

7. Using unit is responsible for a detailed police call of the entire range, bullet trap area, all facilities, dumpster area, and parking/staging areas when training is completed.

8. Range must be inspected and cleared by a range inspector prior to departing range/training area. Range OIC/RSO will complete and submit a range report/ICE Comment upon completion or training and turn-in of range. Report all range maintenance problems to a range inspector.

9. Final range coordination brief will be conducted by a Range Inspector when the using unit occupies the range. Units occupying on weekends, holidays, and/or long weekends will ensure the final range coordination brief is received prior to Friday and/or no later than the last regular work day prior to the weekend/holiday/long weekend with a Range Inspector, located at building SR-46, in the GRSA on CC road across from SR-6. Briefs can take place on the weekends at the range if arranged by Range Control Scheduling or BLACKBURN with the duty Range Inspector prior to that Friday.
<table>
<thead>
<tr>
<th><strong>RANGE NAME:</strong></th>
<th>Stone Bay Rifle Ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Alpha, Bravo, and Charlie Ranges</td>
</tr>
<tr>
<td><strong>DESCRIPTION:</strong></td>
<td>Known Distance Ranges</td>
</tr>
<tr>
<td></td>
<td>(25 yards–600 yards)</td>
</tr>
<tr>
<td><strong>PRIMARY RANGE USE:</strong></td>
<td>Rifle Marksmanship Training</td>
</tr>
<tr>
<td><strong>ALTERNATE RANGE USES:</strong></td>
<td>Unit Rifle Training</td>
</tr>
<tr>
<td></td>
<td>CMP Ranges</td>
</tr>
<tr>
<td><strong>STATUS:</strong></td>
<td>Active</td>
</tr>
<tr>
<td><strong>LOCATION:</strong></td>
<td>Grid Coordinates: (Alpha)75503070, (Bravo)75803070, (Charlie)76003070</td>
</tr>
<tr>
<td><strong>PRIMARY DIRECTION OF FIRE:</strong></td>
<td>South to North</td>
</tr>
<tr>
<td><strong>WEAPONS ACCOMMODATED:</strong></td>
<td>Rifles up to 7.62mm</td>
</tr>
<tr>
<td></td>
<td>(7.62mm Match Ammunition must use the ALD)</td>
</tr>
<tr>
<td></td>
<td>M203 Grenade Launcher</td>
</tr>
<tr>
<td><strong>AMMUNITION AUTHORIZED:</strong></td>
<td>9mm and .45 Cal</td>
</tr>
<tr>
<td></td>
<td>5.56mm/7.62mm</td>
</tr>
<tr>
<td></td>
<td>40mm (Illum Only)</td>
</tr>
<tr>
<td></td>
<td>Handheld Illumination</td>
</tr>
<tr>
<td><strong>TARGETS/SIMULATORS/DEVICES:</strong></td>
<td>Standard Rifle Range Carriages</td>
</tr>
<tr>
<td></td>
<td>Manual Movers</td>
</tr>
<tr>
<td><strong>FACILITIES (Number of each):</strong></td>
<td>Head Facility: 3</td>
</tr>
<tr>
<td></td>
<td>POV Parking: Shooter</td>
</tr>
<tr>
<td></td>
<td>Parking Lot only</td>
</tr>
<tr>
<td></td>
<td>(Range parking for authorized personnel only)</td>
</tr>
<tr>
<td><strong>UTILITIES AVAILABLE:</strong></td>
<td>Electricity: Yes</td>
</tr>
<tr>
<td></td>
<td>Lights: No</td>
</tr>
<tr>
<td></td>
<td>Water System: YES</td>
</tr>
<tr>
<td><strong>INSTALLED COMMUNICATIONS:</strong></td>
<td>1. Hard Phone line on every firing line.</td>
</tr>
<tr>
<td></td>
<td>2. Hardwired PA System</td>
</tr>
</tbody>
</table>
AREA SUITABILITY: Company Plus

Range Use Restriction/Comments/Conflicts

1. Tracer ammunition and illumination must be coordinated through the Weapons Training Bn (WTBn) S-3.

2. All units must provide their own WTBn and CLNC certified Range OIC/RSO for training other than annual sustainment training.

3. 9mm and .45 Cal pistol/carbine/rifle only.

4. 5.56mm linked ammunition for BZO of SAWs only.

5. 7.62mm all DODICS require angle limiting device (ALD) unless additional training areas are requested, gates are closed, and locked.

6. No automatic weapons over 5.56mm and if automatic live fire is to be conducted it must be coordinated through WTBn S-3.

7. See WTBn Order WTBNO 3000.3B for additional information on these ranges.

Other Considerations

1. All medical emergency requirements must be coordinated through WTBn S-3.

2. Corpsman support is the using unit’s responsibility.

Special Instructions

1. Units other than WTBn must coordinate with WTBn S-3 14 days prior to scheduling in RFMSS. Units should include a training area request (TAR) with a description of the type of training the unit desires to accomplish.

2. Ranges must be checked in with WTBn S-3 by the unit Range OIC/RSO prior to conducting any training.

3. Unit Range OIC/RSO must check out with WTBn S-3 upon completion of training and before departure Stone Bay.

4. Red range flags must be displayed and gates must be locked (if applicable) in accordance to Stone Bay WTBn SOP.
5. The proper staging, processing, and removal of all trash/waste material are the responsibility of the using unit.

RANGE NAME: Stone Bay Rifle Range  
Hathcock Range

DESCRIPTION: 50 thru 1000 yard Rifle/Sniper Range

PRIMARY RANGE USE: Sniper Live Fire Range

ALTERNATE RANGE USES: Unknown Distance Range  
Moving Target Range

STATUS: Active

LOCATION: Grid Coordinates: 76203070

PRIMARY DIRECTION OF FIRE: South to North

WEAPONS ACCOMMODATED: M16/M4 Rifle
M40/MK11/MK12/DMR/EMR Sniper Rifles
SCAR Rifle 5.56mm/7.62mm
7.62X54 Dragunov Sniper Rifle
M203 Grenade Launcher

AMMUNITION AUTHORIZED: 5.56mm/7.62mm
7.62mm Match Ammunition  
(Unit must use the ALD)
.338 LAPUA
7.62X54 Soviet Ammunition
40mm (Illum Only)
Handheld Illumination

TARGETS/SIMULATORS/DEVICES:
25 Standard Rifle Range Carriages
Portable steel targets

FACILITIES (Number of each):
POV Parking Area:
Shooter Parking Lot Only
(Range parking for authorized personnel only)

UTILITIES AVAILABLE:
Electricity: No
Lights: Yes
Water System: No

INSTALLED COMMUNICATIONS:
Hardline phone

AREA SUITABILITY:
Company/Platoon
A-304
Range Use Restriction/Comments/Conflicts

1. Tracer ammunition and illumination must be coordinated through the Weapons Training Bn (WTBn) S-3.

2. All units must provide their own WTBn and CLNC certified Range OIC/RSO.

3. All 7.62 DODICS require angle limiting device (ALD) unless additional training areas are requested and gates are secured and manned with road guards.

4. Automatic weapons/live fire is not authorized on this range.

5. Armor piercing ammunition is not authorized.

6. All steel targets being used for live fire training must be AR500 certified.

7. See WTBn Order WTBNO 3000.3B for additional information on this range.

Other Considerations

1. All medical emergency requirements must be coordinated through Stone Bay WTBn S-3.

2. Corpsman support is the using unit’s responsibility.

Special Instructions

1. Units other than WTBn must coordinate with WTBn S-3 14 days prior to scheduling in RFMSS. Units should include a training area request (TAR) with a description of the type of training the unit desires to accomplish.

2. Range must be checked out from WTBn S-3 by unit Range OIC/RSO prior to conducting any training.

3. Unit Range OIC/RSO must check out with WTBn S-3 upon completion of training and before departure from Stone Bay.

4. Red range flags must be displayed and gates must be locked (if applicable) in accordance to WTBn SOP.
5. The proper staging, processing and removal of all trash/waste material are the responsibility of the using unit.

**RANGE NAME:** Stone Bay Rifle Range  
Mechanical Pistol Range

**DESCRIPTION:** 50 meter, 50 firing point pistol range

**PRIMARY RANGE USE:** Pistol Marksmanship Range

**ALTERNATE RANGE USES:** Combat Pistol Range

**STATUS:** Active

**LOCATION:** Grid Coordinates: 75203080

**PRIMARY DIRECTION OF FIRE:** South to North

**WEAPONS ACCOMMODATED:** .22 cal through .45 cal pistol

**AMMUNITION AUTHORIZED:** .22 cal through .45 cal ammunition  
No armor piercing type ammunition

**TARGETS/SIMULATORS/DEVICES:** Automated turning targets at 25 and 50 meters.

**FACILITIES (Number of each):**  
Head Facility: 1  
POV Parking: Shooter Parking Lot  
(Range parking for authorized personnel only)

**UTILITIES AVAILABLE:** Electricity: Yes  
Lights: Yes  
Water System: Yes

**INSTALLED COMMUNICATIONS:** Hardline phone system  
Hardwire PA system

**AREA SUITABILITY:** Company/Platoon

Range Use Restriction/Comments/Conflicts

1. Tracer and armored piercing ammunition are not authorized.

2. All units must provide their own WTBn and CLNC certified Range OIC/RSO.
3. Units must have a certified range operator.

4. See WTBN Order WTBNO 3000.3B for additional information on this range.

Other Considerations

1. All medical emergency requirements must be coordinated through the WTBN S-3.

2. Corpsman support is the using unit’s responsibility.

Special Instructions

1. Units other than WTBN must coordinate with WTBN S-3 14 days prior to scheduling in RFMSS. Units should include a training area request (TAR) with a description of the type of training the unit desires to accomplish.

2. Range must be checked out from WTBN S-3 by unit Range OIC/RSO prior to conducting any training.

3. Unit Range OIC/RSO must check out with WTBN S-3 upon completion of training and before departure Stone Bay.

4. Red range flags must be displayed and gates must be locked (if applicable) in accordance to WTBN SOP.

5. The proper staging, processing and removal of all trash/waste material are the responsibility of the using unit.

| **RANGE NAME:** | Stone Bay Rifle Range  
| | Walk-Down Pistol Range  
| **DESCRIPTION:** | 50 mters, 50 firing point range  
| **PRIMARY RANGE USE:** | Pistol Marksmanship  
| **ALTERNATE RANGE USES:** | 1. Static small arms training  
| | 2. Combat Pistol Range  
| **STATUS:** | Active  
| **LOCATION:** | Grid Coordinates: 75303080  
| **PRIMARY DIRECTION OF FIRE:** | South to North  
| **WEAPONS ACCOMMODATED:** | .22 cal through .45 cal. pistols  
| | 5.56mm (rifle)  
| | .410 through 12 gauge shotgun  
| **AMMUNITION AUTHORIZED:** | .22 Cal thru .45 cal (pistol)  
| | 5.56mm, Ball/Frangible  
| | .410 thru 12 gauge  
| | (Chilled shot through slug)  
| | No armor piercing type ammunition  
| **TARGETS/SIMULATORS/DEVICES:** | Mechanical turning 25 and 50 meters.  
| | Bullet trap system  
| **FACILITIES (Number of each):** | Head Facility: 0  
| | POV Parking Area: Shooter Parking Lot. (range parking for authorized personnel only)  
| **UTILITIES AVAILABLE:** | Electricity: Yes  
| | Lights: No  
| | Water System: No  
| **INSTALLED COMMUNICATIONS:** | Hardline phone system  
| | Hard wire PA system  
| **AREA SUITABILITY:** | Company/Platoon  

A-309
Range Use Restriction/Comments/Conflicts

1. Tracer and armor piercing ammunition are not authorized.

2. All units must provide their own WTBn and CLNC certified Range OIC/RSO.

3. Units must have a certified range operator.

Other Considerations

1. All medical emergency requirements must be coordinated through WTBn S-3.

2. Corpsman support is the using unit’s responsibility.

Special Instructions

1. Units other than WTBn must coordinate with WTBn S-3 at least 14 days prior to scheduling in RFMSS. Units should include a training area request (TAR) with a description of the type of training the unit desires to accomplish.

2. Range must be checked out from WTBn S-3 by unit Range OIC/RSO prior to training.

3. Unit Range OIC/RSO must check out with WTBn S-3 upon completion of training and before departure Stone Bay.

4. Red range flags must be displayed and gates must be locked (if applicable) in accordance to WTBn SOP.

5. The proper staging, processing, and removal of all trash/waste material are the responsibility of the using unit.


7. See WTBn Order WTBNO 3000.3B for additional information on this range.
RANGE NAME: Stone Bay Rifle Range
Dodge City (Urban) Shooting Range

DESCRIPTION: 200 meter multiple supported and elevated shooting positions

PRIMARY RANGE USE: Urban Sniper Training

ALTERNATE RANGE USES: Special Operations Urban Training

STATUS: Active

LOCATION: Grid Coordinates: 75103080

PRIMARY DIRECTION OF FIRE: South to North

WEAPONS ACCOMMODATED: 9mm through .45 cal. pistols
M16/M4 rifles
M40/MK11/MK12/DMR/EMR sniper rifle
With Angle Limiting Device (ALD)
SCAR rifle 5.62/7.62mm
AK-47 7.62X39mm
Dragunov 7.62X54mm sniper rifle
M203 grenade launcher

AMMUNITION AUTHORIZED: .9mm through .45 Cal (pistols)
5.56mm
7.62mm
7.62mm match ammunition
(Unit must use the ALD)
40mm Illum/Handheld Illum
No Armor piercing ammunition

TARGETS/SIMULATORS/DEVICES: Stationary wood frame or
Portable steel targets
Hard wired stationary and moving Targets

FACILITIES (Number of each): Head Facility: 0
POV Parking Area: Shooter Parking
Lot only
(Range parking for authorized personnel only)

UTILITIES AVAILABLE: Electricity: Yes
Lights: Yes
Water System: No

A-311
**INSTALLED COMMUNICATIONS:** Hardline phone and PA System

**AREA SUITABILITY:** Squad/Team

**Range Use Restriction/Comments/Conflicts**

1. Tracer ammunition and illumination must be coordinated through Weapons Training Bn S-3 before being used.

2. All units must provide their own WTBn and CLNC certified Range OIC/RSO.

3. All 7.62mm DODICS require angle limiting device (ALD) unless additional training areas are requested and road guards and gates locked.

4. No automatic weapons or automatic firing is authorized.

5. Armor piercing ammunition is not authorized.

6. All steel targets being used must be AR500 certified.

7. Units must conduct a sweep of the Boat Landing and Stone Creek area prior to going HOT to ensure the SDZ is clear. Unit must ensure the lights and red range flags are displayed.

**Other Considerations**

1. All medical emergency requirements must be coordinated through WTBn S-3.

2. Corpsman support is the using unit’s responsibility.

**Special Instructions**

1. Units other than WTBn must coordinate with WTBn S-3 at least 14 days prior to scheduling in RFMSS. Units should include a training area request (TAR) with a description of the type of training the unit desires to accomplish.

2. Range must be checked out from WTBn S-3 by unit Range OIC/RSO prior to conducting any training.

3. Unit Range OIC/RSO must check out with WTBn S-3 upon completion of training and before departure Stone Bay.
4. Red range flags must be displayed and gates must be locked (if applicable) in accordance to WTBn SOP.

5. The proper staging, processing, and removal of all trash/waste material is the responsibility of the using unit.

6. Report all range maintenance problems to WTBn S-3.

7. See WTBn Order WTBNO 3000.3B for additional information on this range.

8. The moving infantry target on Dodge city may be removed in the future.
RANGE NAME: Stone Bay Rifle Range
Multi-Purpose Range

DESCRIPTION: 100 meter Small Arms Range

PRIMARY RANGE USE:
- Rifle Marksmanship Range
- CMP/CQB Range
- Pistol/Rifle Range
- Shotgun Range

ALTERNATE RANGE USES: Combat Live Fire Range

STATUS: Active

LOCATION: Grid Coordinates: 75103080

PRIMARY DIRECTION OF FIRE: South to North

WEAPONS ACCOMMODATED:
- Rifles up to 5.56mm
- Shotgun up to 12 gauge
- Pistols up to .45 cal.
- Foreign Weapon, 7.62x39mm (AK-47)

AMMUNITION AUTHORIZED:
- .22 Cal through .45 cal (pistols)
- 5.56mm
- 7.62x39mm only
- .410 thru 12 gauge
- (Chilled Shot thru Slug)
- No tracer or armored piercing ammunition

TARGETS/SIMULATORS/DEVICES: Small arms target system
- Stationary wood frame and portable steel targets/ballistic plates

FACILITIES (Number of each):
- Head Facility: 0
- POV Parking Area: Shooter Parking Lot (Range parking for authorized personnel only).

UTILITIES AVAILABLE:
- Electricity: Yes
- Lights: Yes
- Water System: No

INSTALLED COMMUNICATIONS:
- Hardline phone
- Portable PA system

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**AREA SUITABILITY:**

Platoon/Section/Squad

Range Use Restriction/Comments/Conflicts

1. Tracer and armored piercing ammunition are not authorized.

2. All units must provide their own WTBn and CLNC certified RSO.

3. Automatic live fire/weapons are not authorized.

4. The target system for this range must be coordinated through WTBn S-3 Stone Bay and II MEF SOTG.

5. All steel targets being used must be AR500 certified.

Other Considerations

1. All medical emergency requirements must be coordinated through WTBn S-3 Stone Bay.

2. Corpsman support is the using unit’s responsibility.

Special Instructions

1. Units other than WTBn must coordinate with WTBn S-3 at least 14 days prior to scheduling in RFMSS. Units should include a training area request (TAR) with a description of the type of training the unit desires to accomplish.

2. Range must be checked out from WTBn S-3 by unit Range OIC/RSO prior to conducting any training.

3. Unit RSO must check out with WTBn S-3 upon completion of training and before departure Stone Bay.

4. Red range flags must be displayed and gates must be locked (if applicable) in accordance to WTBn SOP.

5. The proper staging, processing, and removal of all trash/waste material are the responsibility of the using unit.


7. See WTBn Order WTBNO 3000.3B for additional information on this range.
RANGE NAME: SOTG Compound, Stone Bay Breacher Training Facility

DESCRIPTION: Breacher training buildings with crib wall (II MEF SOTG)

PRIMARY RANGE USE: Breaching: Explosive/ballistic thermal and mechanical

ALTERNATE RANGE USES: N/A

STATUS: Active

LOCATION: Grid Coordinates: 76053019

PRIMARY DIRECTION OF FIRE: N/A

WEAPONS ACCOMMODATED: 12 Gauge Shotgun
Explosive Breaching

AMMUNITION AUTHORIZED: Lock Busters, DODIC A024
Primer Shotgun, DODIC AX14
MK141-0 DODIC DWBS
Diversionary Device GG20
Electric Blasting Cap M130
Non-Electric BLST Cap M131
C-4 Satchel Charge M183
Trip Flare M49 L495
50 grain Det Cord(ft) M456
Time Fuse M700 M670
Charge Assemble M757
Data Sheet C2 M980
Data Sheet C3 M981
Data Sheet C4 M982
Shock Tube MM56
100 Grain Det Cord (ft) MU42
400 Grain Det Cord (ft) MU40
WG 20 Booster MM30
C 2-4 Sheet Expl MM27-MM29
Flex 40 Grain (ft) MM32
Flex 75 Grain (ft) MM34
Flex 125 Grain (ft) MM35
Flex 225 Grain (ft) MM38
WG 20 Booster MM30
300 Grain LHFLSC MM24
600 Grain LHFLSC MM51
1200 Grain LHFLSC MM52

A-316
TARGETS/SIMULATORS/DEVICES: Doors/Windows/Walls
(Using unit must provide targets)

FACILITIES (Number of each): Head Facility: 1 (RR-200)
POV Parking Area: SOTG parking lot

UTILITIES AVAILABLE: Electricity: No
Lights: No
Water System: Yes RR-200

INSTALLED COMMUNICATIONS: None

AREA SUITABILITY: Squad/Team/Section

Range Use Restriction/Comments/Conflicts

1. Maximum Breaching N.E.W. is 0.25 lbs. for this Bldg.

2. Bivouacking is not authorized on the inside of the range/facility. Alternate bivouac site must be coordinated through the II MEF SOTG S-3.

3. Range OIC or the RSO for this live fire range must be a certified and current breacher. The command certification letter must list them as current/certified breachers.

4. Range use conflicts with, but does not restrict, the use of the Breacher House, RR-249, RR-243, and TLZ Vulture. Range OICs/RSOs of the ranges must coordinate with SOTG S-3 prior to occupying the training area/range.

5. Signs and road guards must be posted before going “HOT”.

Other Considerations

1. Range requires a 15 day maintenance schedule before and after each MEU pre-deployment training. SOTG will maintain the crib wall.

2. This range requires a scheduled in RFMSS quarterly lead abatement and maintenance period.
Special Instructions

1. All units other than SOTG and MSOS MARSOC must coordinate with SOTG S-3 and MSOS S-3 prior to scheduling in RFMSS. All MARSOC units will report to MSOS S-3, all II MEF units will report SOTG S-3.

2. Using units must check in with SOTG S-3 or MSOS S-3 by 1200 the day prior to training.

3. Using units must check in with SOTG S-3 or MSOS S-3 prior to occupying the training facility.

4. Road guards, range flags, and signs must be placed in accordance with II MEF SOTG/MSOS MARSOC range regulations.

5. Safety vehicles and corpsman must be present on the range prior to commencing training.

6. Requesting units are responsible for providing and building targets/simulators/devices such as breaching targets (doors).

7. The live fire training conducted results in the generation of waste material. The proper staging, processing, and removal of all waste material will be the responsibility of the using unit.

8. Report all range maintenance problems/issues to SOTG S-3 or use ICE.
RANGE NAME: SOTG Compound, Stone Bay Breacher PIT

DESCRIPTION: Breacher Pit (II MEF SOTG)

PRIMARY RANGE USE: Explosive and Thermal Breaching

ALTERNATE RANGE USES: N/A

STATUS: Active

LOCATION: Grid Coordinates: 76153019

PRIMARY DIRECTION OF FIRE: N/A

WEAPONS ACCOMMODATED: Explosive Breaching

AMMUNITION AUTHORIZED:
- Lock Busters, DODIC A024
- Primer Shotg., DODIC AX14
- MK141-0 DODIC DWBS
- Diversionary Device GG20
- Electric Blasting Cap M130
- Non-Electric BLST Cap M131
- C-4 Satchel Charge M183
- Trip Flare M49 L495
- 50 grain Det Cord(ft) M456
- Time Fuse M700 M670
- Charge Assemble M757
- Data Sheet C2 M980
- Data Sheet C3 M981
- Data Sheet C4 M982
- Shock Tube MM56
- 100 Grain Det Cord (ft) MU42
- 400 Grain Det Cord (ft) MU40
- WG 20 Booster MM30
- C 2-4 Sheet Expl MM27-MM29
- Flex 40 Grain (ft) MM32
- Flex 75 Grain (ft) MM34
- Flex 125 Grain (ft) MM35
- Flex 225 Grain (ft) MM38
- WG 20 Booster MM30
- 300 Grain LHFLSC MM24
- 600 Grain LHFLSC MM51
- 1200 Grain LHFLSC MM52
- 5400 Grain LHFLSC MM54
- M81 Fuse Ingniter MN08
- Detonator Dual Non-Elec MN52
TARGETS/SIMULATORS/DEVICES: Concrete/brick walls and roof façade (coordinate with II MEF SOTG S-4/S-3)

FACILITIES (Number of each): Head Facility: 1 (RR-200)
POV Parking Area: Shooter Parking Lot (Passes available for access to SOTG Parking Lot)

UTILITIES AVAILABLE:
Electricity: No
Lights: No
Water System: YES (RR-200)

INSTALLED COMMUNICATIONS: None

AREA SUITABILITY: Team/Section

Range Use Restriction/Comments/Conflicts

1. Maximum Breaching N.E.W. is up to 5 lbs.

2. Bivouacking is not authorized on this range. Bivouacking must be coordinated through the II MEF SOTG S-3 on location.

3. Range OIC or the RSO for this live fire range must be a certified and current breacher. The command certification letter must list them as current/certified breachers.

4. Adjacent buildings such as RR-249, RR-243, Breacher Training Facility, and LZ Vulture are off limits without SOTG S-3 prior approval.

5. Range use conflicts with, but does not restrict, the use of the Breacher House, RR-249, RR-243 and TLZ Vulture. Range OICs/RSOs of the ranges must coordinate with SOTG S-3 prior to occupying training areas.

6. Signs and road guards must be posted before going “HOT”.

Other Considerations

1. Range requires a 15 day maintenance schedule before and after each MEU pre-deployment training. SOTG will maintain the crib wall.
2. Range requires a scheduled in RFMSS quarterly lead abatement and maintenance.

Special Instructions

1. All units other than SOTG and MSOS MARSOC must coordinate with SOTG S-3 and MSOS S-3 prior to scheduling in RFMSS. All MARSOC units will report to MSOS S-3, all II MEF units will report SOTG S-3 at phone number 440-2985.

2. Using units must check in with SOTG S-3 or MSOS S-3 by 1200 the day prior to training.

3. Using units must check in with SOTG S-3 or MSOS S-3 prior to occupying the training facility.

4. Road guards, range flags, and signs must be placed in accordance with II MEF SOTG/MSOS MARSOC range regulations.

5. Safety vehicles and corpsman must be present on the range prior to commencing training.

6. Requesting units are responsible for providing and building targets/simulators/devices such as breaching targets (doors).

7. The live fire training conducted results in the generation of trash/waste material. The proper staging, processing, and removal of all trash/waste material will be the responsibility of the using unit.

8. Report all range maintenance problems/issues to SOTG S-3 or use ICE.
RANGE NAME: SOTG Compound, Stone Bay Square Bay (SRR-227)

DESCRIPTION: Live Fire Pistol/Rifle range

PRIMARY RANGE USE: Live Fire Combat Drills with the Pistols/Rifles

ALTERNATE RANGE USES: CMP Range

STATUS: Active

LOCATION: Grid Coordinates: 76012991

PRIMARY DIRECTION OF FIRE: 140 degrees magnetic (Bullet Trap)

WEAPONS ACCOMMODATED: All Pistols (.45 cal. or less)
12 Gauge Military Shotgun
M16/M4
SCAR Rifle (Light/Heavy)

AMMUNITION AUTHORIZED: .45 cal Ball
9mm Ball
5.56/7.62mm Frangible/SRTA only
12 Gauge Shotgun Ammunition
No armored piercing ammunition

TARGETS/SIMULATORS/DEVICES: Using unit must provide targets

FACILITIES (Number of each): Head Facility: 1 (RR-200)
POV Parking Area: SOTG parking lot.

UTILITIES AVAILABLE: Electricity: No
Lights: No
Water System: No

INSTALLED COMMUNICATIONS: None

AREA SUITABILITY: Platoon/Section

Range Use Restriction/Comments/Conflicts

1. Range use conflicts with, but does not restrict, the use of TLZ Vulture. Range OICs/RSOs of this live fire range must
coordinate with II MEF SOTG S-3 prior to occupying this training facility or the TLZ.

2. Class 3b and 4 LASERs are not authorized on this range.

3. Armored piercing ammunition is not authorized.

**Special Instructions**

1. All units other than II MEF SOTG and MSOS MARSOC must coordinate with SOTG S-3 and MSOS S-3 prior to scheduling in RFMSS. All MARSOC units will report to MSOS S-3, and all II MEF units will report SOTG S-3 at phone number 440-2985.

2. Using units must check in with SOTG S-3 or MSOS S-3 by 1200 the day prior to training. Using units must check in with SOTG S-3 or MSOS S-3 prior to occupying the training facility.

4. Road guards, range flags, and signs must be placed in accordance with II MEF SOTG/MSOS MARSOC range regulations.

5. Safety vehicles and corpsman must be present on the range prior to commencing training.

6. Requesting units are responsible for providing and building targets/simulators/devices such as breaching targets (doors).

7. The live fire training conducted results in the generation of trash/waste material like brass. The proper staging, processing, and removal of all trash waste material will be the responsibility of the using unit.

8. Report all range maintenance problems/issues to SOTG S-3 or use ICE.
RANGE NAME: SOTG Compound, Stone Bay Indoor Shoothouse RR-249

DESCRIPTION: Single Story Building

PRIMARY RANGE USE: Close Quarters Battle (CQB) Facility

ALTERNATE RANGE USES: Explosive/Ballistic/Thermal Breaching

STATUS: Active

LOCATION: Grid Coordinates: 76093018

PRIMARY DIRECTION OF FIRE: N/A

WEAPONS ACCOMMODATED: All military pistols .45 caliber or less M16, M4, and SCAR Rifles Expl Breaching (Up to 0.25 NEW) 12 Gauge Shotgun

AMMUNITION AUTHORIZED: 5.56mm/7.62mm Frangible Only All Ball Pistol Ammunition (.45 or less) SESAMs DODIC AA12/AA21 All Blank Ammunition Lock Busters, DODIC A024 Primer Shotgun, DODIC AX14 MK141-0 DODIC DWBS Diversionary Device GG20 Electric Blasting Cap M130 Non-Electric BLST Cap M131 C-4 Satchel Charge M183 Trip Flare M49 L495 50 Grain Det Cord(ft) M456 Time Fuse M700 M670 Charge Assemble M757 Data Sheet C2 M980 Data Sheet C3 M981 Data Sheet C4 M982 Shock Tube MM56 100 Grain Det Cord (ft) MU42 400 Grain Det Cord (ft) MU40 WG 20 Booster MM30 C 2-4 Sheet Expl MM27-MM29
Flex 40 Grain (ft)      MM32
Flex 75 Grain (ft)      MM34
Flex 125 Grain (ft)     MM35
Flex 225 Grain (ft)     MM38
WG 20 Booster          MM30
300 Grain LHFLSC       MM24
600 Grain LHFLSC       MM51
1200 Grain LHFLSC      MM52
5400 Grain LHFLSC      MM54
M81 Fuse Ingniter      MN08
Detonator Dual Non-Elec MN52

**TARGETS/SIMULATORS/DEVICES:**
Using unit must provide targets

**FACILITIES (Number of each):**
Head Facility: 1 (RR-200)
POV Parking: SOTG parking lot

**UTILITIES AVAILABLE:**
Electricity: Yes
Lights: Yes
Water System: Yes (RR-200)

**INSTALLED COMMUNICATIONS:**
None

**AREA SUITABILITY:**
Platoon/Section/Team

**Range Use Restriction/Comments/Conflicts**

1. Maximum Breaching N.E.W. is up to .25 lbs per charge.

2. Bivouacking is not authorized on this range/facility. Bivouacking site must be coordinated through the II MEF SOTG S-3 on the location.

3. Range OIC or the RSO for this live fire must be a certified and current breacher. The command certification letter must list them as current/certified breakers.

4. Adjacent buildings/facility such as RR-243, Breacher Pit, Breacher Facility, and TLZ Vulture are off limits without SOTG S-3 prior approval.

5. Range use conflicts with, but does not restrict, the use of the Breacher Facility, Breacher Pit, TLZ Vulture, and RR-243. ROICs/RSOs of the ranges must coordinate with SOTG S-3 prior to occupying training areas.
6. RR-249 can support live fire Close Quarters Battle (CQB) training. To utilize RR-249 in a live fire capacity, units must demonstrate proficiency by passing an SOTG qualification course. Units other than SOTG requesting to use RR-249 in a live fire capacity need the approval of SOTG’s Officer-In-Charge. For more information concerning the qualification course contact SOTG S-3.

7. Class 3b and 4 LASERs are not authorized on this range.

Other Considerations

1. Range requires a 15 day maintenance schedule before and after each MEU pre-deployment training. SOTG will maintains the crib wall.

2. Range requires a scheduled in RFMSS quarterly lead abatement and maintenance period. SOTG is responsible for the maintenance to the crib wall.

Special Instructions

1. All units other than II MEF SOTG and MSOS MARSOC must coordinate with SOTG S-3 and MSOS S-3 prior to scheduling in RFMSS. All MARSOC units will report to MSOS S-3, and all II MEF units will report SOTG S-3 at phone number 440-2985.

2. Using units must check in with SOTG S-3 or MSOS S-3 by 1200 the day prior to training.

3. Using units must check in with SOTG S-3 or MSOS S-3 prior to occupying the training facility.

4. Road guards, range flags, and signs must be placed in accordance with II MEF SOTG/MSOS MARSOC range regulations.

5. Safety vehicles and corpsman must be present on the range prior to commencing training.

6. Requesting units are responsible for providing and building targets/simulators/devices such as breaching targets (doors).

7. The live fire training conducted results in the generation of trash/waste material. The proper staging, processing, and removal of all trash/waste material will be the responsibility of the using unit.
8. Report all range maintenance problems/issues to SOTG S-3 or use ICE.

9. The Range OIC/RSO will ensure the Breacher Pit and TLZ Vulture are clear and checked prior to going “HOT”.

10. The using unit is required to provide an Range OIC/RSO for all scheduled training events and SOTG S-3 will be required to supervise this range facility.
RANGE NAME: SOTG Compound, Stone Bay
Urban Training Facility/RR-243

DESCRIPTION: 3 Story Training Facility

PRIMARY RANGE USE: Close Quarters Battle

ALTERNATE RANGE USES: Explosive Breaching, Urban Climbing

STATUS: Active

LOCATION: Grid Coordinates: 76143026

PRIMARY DIRECTION OF FIRE: N/A

WEAPONS ACCOMMODATED:
- All Military Pistols
- .45 Cal or below
- M16/M4/SCAR
- Explosive Breaching
- (.25 or less N.E.W)
- 12 Gauge Shotgun

AMMUNITION AUTHORIZED:
- 5.56mm/7.62mm Frangible Only
- All Ball Pistol Ammunition
- (.45 or less)
- SESAMs DODIC AA12/AA21
- All Blank Ammunition
- Lock Busters, DODIC A024
- Primer Shotgun, DODIC AX14
- MK141-0 DODIC DWBS
- Diversionary Device GG20
- Electric Blasting Cap M130
- Non-Electric BLST Cap M131
- C-4 Satchel Charge M183
- Trip Flare M49 L495
- 50 Grain Det Cord(ft) M456
- Time Fuse M700 M670
- Charge Assemble M757
- Data Sheet C2 M980
- Data Sheet C3 M981
- Data Sheet C4 M982
- Shock Tube MM56
- 100 Grain Det Cord (ft) MU42
- 400 Grain Det Cord (ft) MU40
- WG 20 Booster MM30
- C 2-4 Sheet Expl MM27-MM29

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Range Use Restriction/Comments/Conflicts

1. Maximum Breaching N.E.W. is up to .25 lbs per charge.

2. Bivouacking is not authorized on this range. Bivouacking sites must be coordinated through the II MEF SOTG S-3 on locations.

3. Range OIC or the RSO for this live fire must be a certified and current breacher. The command certification letter must list them as current/certified breachers.

4. Adjacent buildings/facility such as RR-249, Breacher Pit, Breacher Facility, and TLZ Vulture are off limits without SOTG S-3 prior approval.

5. Range use conflicts with, but does not restrict, the use of the Breacher Facility, Breacher Pit, TLZ Vulture, and RR-249. Range OICs/RSOs of the ranges must coordinate with SOTG S-3 prior to occupying training areas.
6. RR-243 can support live fire Close Quarters Battle (CQB) training. To utilize RR-243 in a live fire capacity units must demonstrate proficiency by passing an SOTG qualification course. Units other than SOTG requesting to use RR-243 in a live fire capacity need the approval of SOTG’s Officer-In-Charge. For more information concerning the qualification course contact SOTG.

7. Class 3b and 4 LASERs are not authorized on this range.

Other Considerations

1. Range requires a 15 day maintenance schedule before and after each MEU pre-deployment training. SOTG will maintain the crib wall.

2. Range requires a scheduled in RFMSS quarterly lead abatement and maintenance period.

Special Instructions

1. All units other than II MEF SOTG and MSOS MARSOC must coordinate with SOTG S-3 and MSOS S-3 prior to scheduling in RFMSS. All MARSOC units will report to MSOS S-3, and all II MEF units will report SOTG S-3 at phone number 440-2985.

2. Using units must check in with SOTG S-3 or MSOS S-3 by 1200 the day prior to training.

3. Using units must check in with SOTG S-3 or MSOS S-3 prior to occupying the training facility.

4. Road guards, range flags, and signs must be placed in accordance with II MEF SOTG/MARSOC MSOS range regulations.

5. Safety vehicles and corpsman must be present on the range prior to commencing training.

5. Requesting units are responsible for building targets/simulators/devices such as breaching targets (doors). The training conducted results in the generation of trash/waste material. The proper staging, processing and removal of trash/waste material are the responsibility of the using unit.

7. Report all range maintenance problems to SOTG S-3/S-4 or use ICE.
8. Range OIC/RSO will ensure that Breacher Pit, Breacher Facility, and TLZ Vulture are clear prior and checked to going “HOT”.

9. Using unit is required to provide a Range OIC/RSO for all scheduled training events, for all live fire events a SOTG S-3 is required to supervise the range facility.

10. All training being conducted using ropes will be supervised by a unit certified and current HRST Master.

11. Buckets on top of drain pipes will not be used to support body weight.

12. Units are responsible for providing or coordinating portable bullet traps when conducting live fire training.
**RANGE NAME:**  SOTG Compound, Stone Bay
Non-Lethal Weapons Range 1 (NLW-1)

**DESCRIPTION:** Non Lethal Weapons (NLW) Range
(SOTG Only)
Small Caliber Weapons/Devices

**PRIMARY RANGE USE:** NLW Small Caliber Live Fire Range

**ALTERNATE RANGE USES:** None

**STATUS:** Active

**LOCATION:** Grid Coordinates: 76342860

**PRIMARY DIRECTION OF FIRE:** Approved SDZ (Range Limits)
133 degree magnetic

**WEAPONS ACCOMMODATED:** Small Caliber NLW Systems,
NL Grenades and NLW Devices

**AMMUNITION AUTHORIZED:** Small Caliber NLW Systems,
NL Grenades and NLW Devices

**TARGETS/SIMULATORS/DEVICES:** None/Unit discretion

**FACILITIES (Number of each):**
- Head Facility: 8 Port-a-Johns
- POV Parking: SOTG parking lot

**UTILITIES AVAILABLE:**
- Electricity: No
- Lights: No
- Water System: No

**INSTALLED COMMUNICATIONS:** None

**AREA SUITABILITY:** Company/Platoon

**Range Use Restriction/Comments/Conflicts**

Use of this range closes down the entire TLZ Vulture.

**Special Instructions**

1. All units other than II MEF SOTG and MSOS MARSOC must coordinate with SOTG S-3 and MSOS S-3 prior to scheduling in
RFMSS. All MARSOC units will report to MSOS S-3, and all II MEF units will report SOTG S-3 at phone number 440-2985.

2. Units must check in with SOTG S-3 by 1200 the day prior to training.

3. Units must check in with SOTG S-3 prior to occupying this NLW live fire training range.

4. Road guards, range flags, and signs must be placed in accordance with range regulations.

5. CS Type NL Devices are not authorized on this range.

6. NL Pepper Spray training devices are authorized on this range with all safety procedures are in place.

7. Bivouacking is not authorized on this range. Alternate bivouac site must be coordinated with SOTG S-3.

8. POVs are not authorized on this range.


10. Red range will be flown at the entrance of the range.

11. Safety vehicles and corpsman must be present on the range prior to commencing training.

12. Unit using is responsible for a detailed police call of the entire range, down range area, all facilities, dumpster areas, and parking/staging areas when training is completed.

13. Range must be inspected and cleared by SOTG S-3 personnel prior to departing range/training area or a Range Control Inspector.

14. Range OIC/RSO will complete and submit a range report with SOTG S-3 prior to the turn-in of the range.
RANGE NAME: SOTG Compound, Stone Bay Non-Lethal Weapons Range 2 (NLW-2)

DESCRIPTION: Non Lethal Weapons (NLW) Range (SOTG Only) Large Caliber Weapons/Devices

PRIMARY RANGE USE: NLW Large Caliber Live Fire Range

ALTERNATE RANGE USES: NLW Maneuver Range

STATUS: Active

LOCATION: Grid Coordinates: 76002987

PRIMARY DIRECTION OF FIRE: Approved SDZ (Range Limits) 104 degrees magnetic

WEAPONS ACCOMMODATED: Large Caliber NL Systems, NL Grenades and NL Devices 66mm Vehicle Mounted NL Devices 12 gauge shotgun devices

AMMUNITION AUTHORIZED: Large Caliber NL Systems, NL Grenades and NL Devices Rubber Ball Grenades for Shotgun Non-Lethal Grenade Launching Cup Stinger Ball Grenades 12 guage shotgun NL/Ammunition 66mm Mounted Stinger Ball Device Grenade Distractor DODIC FZ16 Grenade Blunt Truman DODIC FZ17

TARGETS/SIMULATORS/DEVICES: None/Unit Discretion

FACILITIES (Number Of Each): Head Facility: 8 Port-A-Johns POV Parking: SOTG Parking Lot

UTILITIES AVAILABLE: Electricity: No Lights: No Water System: No

INSTALLED COMMUNICATIONS: None

AREA SUITABILITY: Company/Platoon

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Range Use Restriction/Comments/Conflicts

Use of this range closes down the entire TLZ Vulture.

Special Instructions

1. All units other than II MEF SOTG and MSOS MARSOC must coordinate with SOTG S-3 and MSOS S-3 prior to scheduling in RFMSS. All MARSOC units will report to MSOS S-3, and all II MEF units will report SOTG S-3 at phone number 440-2985.

2. Units must check in with SOTG S-3 by 1200 the day prior to training.

3. Units must check in with SOTG S-3 prior to occupying this NLW live fire training range.

4. Road guards, range flags, and signs must be placed in accordance with range regulations.

5. CS Type NL Devices are not authorized on this range.

6. NL Pepper Spray training devices are authorized on this range with all safety procedures are in place.

7. Bivouacking is not authorized on this range. Alternate bivouac site must be coordinated with SOTG S-3.

8. POVs are not authorized on this range.


10. Red range will be flown at the entrance of the range.

11. Safety vehicles and corpsman must be present on the range prior to commencing training.

12. Unit using is responsible for a detailed police call of the entire range, down range area, all facilities, dumpster areas, and parking/staging areas when training is completed.

13. Range must be inspected and cleared by SOTG S-3 personnel prior to departing range/training area or a Range Control Inspector.
14. Range OIC/RSO will complete and submit a range report with SOTG S-3 prior to the turn-in of the range.
RANGE NAME: SOTG Compound, Stone Bay
SRR-230 (Murphy’s Mountain)

DESCRIPTION: Training Tower

PRIMARY RANGE USE: Climbing Techniques,
Mountain Rope Systems

ALTERNATE RANGE USES: Rappelling

STATUS: Active

LOCATION: Grid 76123037

PRIMARY DIRECTION OF FIRE: N/A

WEAPONS ACCOMMODATED: N/A

AMMUNITION AUTHORIZED: N/A

TARGETS/SIMULATORS/DEVICES: N/A

FACILITIES (Number of each): Head Facility: Port-a-John
POV Parking: SOTG Parking lot.
Range Towers: 1
Bleachers: 1

UTILITIES AVAILABLE: Electricity: Yes
Lights: Yes
Water: No

INSTALLED COMMUNICATIONS: N/A

AREA SUITABILITY: Platoon/Squad

Range Use Restriction/Comments/Conflicts

1. Maneuver is not authorized on this range/tower.

2. Class 3b and Class 4 LASERs are not authorized on this tower.

3. Checking out Murphy’s Mountain does not automatically
authorize the use of the fast roping, and rappelling sections of
Rollins Peak.

4. Helicopter mock-ups are off limits unless authorized by
II MEF SOTG S-3.

Other Considerations: The requesting unit must provide all training support materials and required safety personnel and equipment.

Special Instructions

1. All units other than II MEF SOTG and MSOS MARSOC must coordinate with SOTG S-3 and MSOS S-3 prior to scheduling in RFMSS. All MARSOC units will report to MSOS S-3, and all II MEF units will report SOTG S-3 at phone number 440-2985.

2. Units must check in with SOTG S-3 prior to occupying or using the training facility.

3. Range OIC/RSO/SIO must be a current Assault Climber, or a graduate of the Summer Mountain Leaders Course. The command certification letter must list them as current/certified Assault Climber.

4. Bivouac is not authorized on the range. Alternate bivouac site must be coordinated with SOTG S-3.

5. POVs are not authorized on this range.


7. Red range will be flown at the entrance of the range.

8. Safety vehicles and corpsman must be present on the range prior to commencing training.

9. Unit using is responsible for a detailed police call of the range, tower area, all facilities, dumpster areas, and parking/staging areas when training is completed.

10. Range must be inspected and cleared by SOTG S-3 personnel prior to departing range/training area or a Range Control Inspector.

11. Range OIC/RSO will complete and submit a range report turn-prior to the turn in of range.
**RANGE NAME:** SOTG Compound, Stone Bay  
**SRR-230 (Rollins Peak)**

**DESCRIPTION:** Training/Rappelling Tower

**PRIMARY RANGE USE:** Fast Roping and Rappelling

**ALTERNATE RANGE USES:** N/A

**STATUS:** Active

**LOCATION:** Grid 76123037

**PRIMARY DIRECTION OF FIRE:** N/A

**WEAPONS ACCOMMODATED:** N/A

**AMMUNITION AUTHORIZED:** N/A

**TARGETS/SIMULATORS/DEVICES:** N/A

**FACILITIES (Number of each):**
- Head Facility: Port-a-Johns
- POV Parking: SOTG parking lot
- Range Towers: 1
- Bleachers: 1

**UTILITIES AVAILABLE:**
- Electricity: Yes
- Lights: Yes
- Water: No

**INSTALLED COMMUNICATIONS:** N/A

**AREA SUITABILITY:** Platoon/Squad

Range Use Restriction/Comments/Conflicts

1. Maneuver is not authorized on this range.

2. Class 3B and Class 4 LASERs are not authorized on this range.

3. Rollins Peak does not authorize the use of climbing wall of Murphy’s Mountain.

4. The helicopter mock-ups are off limits unless authorized by II MEF SOTG S-3.
Other Considerations. The requesting unit must provide all training support materials and required safety personnel and equipment.

Special Instructions

1. All units other than II MEF SOTG and MSOS MARSOC must coordinate with SOTG S-3 and MSOS S-3 prior to scheduling in RFMSS. All MARSOC units will report to MSOS S-3, and all II MEF units will report SOTG S-3 at phone number 440-2985.

2. User units must check in with SOTG S-3 by 1200 the day prior to training.

3. Units must check in with SOTG S-3 prior to occupying or using this training facility.

4. Range OIC/RSO/SIO must be a current qualified HRST Masters/SOI (Safety Insert Officers) as per MCO 3500.42A. A Sgt (E-5) can be an RSO if he is HRST Master (Helicopter Rope Suspension Techniques Master) qualified and certified in writing by his commanding officer conducting the training. Range OIC/SIO must be a SSgt (E-6) or above and a current HRST Master and certified in writing by his commanding officer conducting the training. The command certification letter must list them as current/certified HRST Masters.

5. Bivouacking is not authorized on the range. Alternate bivouac site must be coordinated with SOTG S-3.

6. POVs are not authorized on the range.


8. Red range will be flown at the entrance of the range.

9. Safety vehicles and corpsman must be present on the range prior to commencing training.

10. Unit using is responsible for a detailed police call of the range, tower area, all facilities, dumpster areas, and parking/staging areas when training is completed.

11. Range must be inspected and cleared by SOTG S-3 personnel prior to departing range/training area or a Range Control Inspector.
12. Range OIC/RSO will submit a range report upon turn-in of range to SOTG S-3.
RANGE NAME: MOUT - Combat Town

DESCRIPTION: 62 Buildings
Combination of old wooden buildings and new metal shipping containers with compound walls/gates

PRIMARY RANGE USE: Combat in Built-up Area,
Military Operations in Urban Terrain (MOUT)

ALTERNATE RANGE USES: 1. Non-Combatant Evacuation Operations (NEO)
2. Embassy Reinforcement
3. Mechanized Raid
4. Helicopter Raid

LOCATION: Grid Coordinate: 88893227

WEAPONS ACCOMMODATED: All Military Issued Pistols
12 Gauge Shotgun
M16A2/M-4 Rifle
M203/M32
M40/MK11/MK12/EMR/DMR Sniper Rifles
M249 (SAW)
M240B/G Machingun
M-2 .50cal Machinegun

AMMUNITION AUTHORIZED: Non-Lethal Ammunition
Blank Ammunition Only
(5.56mm/7.62mm/.50 cal)
M203/M32 40mm TP Only
Practice Hand Grenades Only
Pyrotechnics, Smoke Grenades, Artillery Simulators/Pop-ups (Outside of the Bldgs/Containers only)
Simunitions/SESAMS:
DODICs AA21, AA12 Only
Live Fire Sniper: 7.62mm Match
Special Range Request with approved bullet traps only.

TARGETS/SIMULATORS/DEVICES: 14 older wooden buildings
48 metal shipping containers with compound walls and gates
No targets in this facility
UTILITIES AVAILABLE:
Electricity: No
Lights: No
Water System: No

INSTALLED COMMUNICATIONS:
None

AREA SUITABILITY
Company/Platoon

Range Use Restriction/Comments/Conflicts

1. To use Combat Town, this facility must be scheduled via RFMSS through the MOUT Complex Staff via E-TAR and signed for by the unit Range OIC at Range Control. The Range OIC must sign for two red range flags and a set of keys to unlock the three (3) gates that surround Combat Town. The using unit must fly a red range flag at all times at the entrances to Combat Town at the intersection of Combat Town Road and Sneads Ferry Road and Combat Town Road and Marines Road.

2. Combat Town includes maneuver area that extends 300 meters in all directions from the center of Combat Town Building 3 (Church). All other training areas outside of Combat Town must be scheduled separately in RFMSS (Example: HB, HE, HF training areas, LZ Hawk, HAWK FOB, LZ DODO, as examples must be scheduled in RFMSS separately).

3. All Range OICs/RSOs will conduct a leader’s recon/inventory of all the buildings and containers to determine the condition of the facilities for damage and police call. Alterations of Combat Town are not authorized. Units are not authorized to add firing points or spider/mouse holes to wooden buildings, metal shipping containers, compound walls in this complex. Units are not authorized to place sandbags on top of or in any container/building.

4. The Range OIC/RSO will conduct a general safety brief to all hands conducting training before using the entire Combat Town Complex and must ensure all hands are aware of the RCW issues surrounding Combat Town and all other topics of concern.

5. The using unit may occupy rooftops of containers equipped with safety guard rails, flooring, and entry points. All other roofs of containers are off limits. Marines will not hang on or climb over safety guard rails/compound walls. Grappling hooks and ladders are authorized at the designated
positions/locations. Rappelling from windows or from the top of buildings is not authorized.

6. Tracked vehicles (tanks and AAVs) used in support of the scheduled using unit will operate at a minimum distance of 25 feet and less then 10 mph from all buildings/containers and all other structures like the compound walls and palm trees. Speed limit for all tactical vehicles inside the Combat Town Complex is 10 mph or less. Track vehicle units will be responsible for grading or leveling out the dirt/gravel tank trails at the end of training.

7. Defenders will not barricade any of the doors or windows. At no time will a using unit cut locks, pry open secured windows/doors or enter a secured container.

8. Practice Hand Grenades with fuzes are authorized inside the containers/buildings. The use of white phosphorous, incendiaries, pyrotechnics, smoke, CS, trip flares, M203 rounds (TP, Smoke, Star Clusters, Star Parachutes and Illumination), and Arty Simulators is prohibited inside or around the buildings/containers/compound walls. Red Smoke/Red Star Cluster will only be used for emergencies at Camp Lejeune/Combat Town.

9. MILES 2000 equipment is authorized with proper LASER safety procedures in place, enforced, and supervised by the command. Safety equipment and rules of engagement must be in place and enforced. Call 451-9009 to schedule MILES Gear.

10. Class 3b and Class 4 LASERs are not authorized in Combat Town.

11. Safety vehicles and corpsman must be present on the range prior to commencing training.

12. Live fire and the use of explosives for breaching require approval via Special Range Request. All live fire events (II MEF SOTG and MARSOC MSOS only) must use approved bullet traps.

13. The unit will not remove any doors, windows, and shutters or any other wood from the Combat Town complex. Units are not authorized to place furniture in the buildings or containers.
14. Warming fires inside Combat Town requires explicit approval from the MCB Range Control Officer. Fires can never be set inside or around the wooden buildings or containers.

15. Eating, smoking, dipping, and chewing tobacco are not authorized inside the containers/structures of Combat Town. Bivouacking is not permitted inside the wooden buildings or containers of Combat Town unless explicitly approved by the MCB Range Control Officer.

16. Upon completion of your scheduled training, the Range OIC/RSO will call BLACKBURN for a Range Inspector/MOUT Staff to be properly inspected/cleared. The using unit will sweep out all buildings/containers and police up the surrounding training areas. The using unit must shut, lock, and secure all gates, doors, and windows before departing Combat Town complex. The Range OIC/RSO will report to Range Control to return the range flags, binder, Viper Card, and check in/out form of Combat Town.

17. Using units must report all damaged areas by building or container number so repairs can be reported and made.

18. Combat Town is not be authorized for command post exercises unless approved by the Range Control Officer.

19. Civilians are not authorized in Combat Town unless authorized by the Range Control Officer.

Other Considerations

1. Facility is scheduled for a minimum of 15 days of maintenance per year by contractor support.

2. Red Cockaded Woodpecker habitats are located in the training areas surrounding Combat Town and all Marines training must be aware of this restriction. No bivouacking or digging fighting positions within the RCW areas. No vehicular traffic (Wheeled or Tracked) in the surrounding RCW habitat marked areas.

3. Using units will avoid damaging the palm trees within Combat Town Complex and the surrounding training areas. At no time will the using units nail anything to or hang any type of wire on the palm trees.
4. Helicopters are not authorized to land or fast rope personnel onto buildings/containers at Combat Town.

5. Report all accidents/injuries to Range Control (BLACKBURN) as per the Range Control SOP.

6. Report all range maintenance issues to Range Control and the contractor support.

Special Instructions

1. Some of the wooden Combat Town wooden buildings are old and the time/material/resources/manpower expended to maintain this facility will have been wasted if the training unit’s leaders do not ensure the disciplined conduct of their Marines. Train hard but train smart and do not damage the buildings or containers.

2. POVs are not authorized in Combat Town or the surrounding training areas. Range Control will not issue Range Control POV Passes for Combat Town or Hawk FOB.

3. The use of communication wire or concertina wire inside the buildings as obstacles is not authorized. Engineer tape can be used but it must be removed by the using unit after the training event is completed and before the range inspection.

4. Units should contract for Port-a-Johns through the unit’s S-4 if conducting training for more than 24 hours. For planning purposes (1) one Port-a-John will support 25 Marines per 24 hour period.

5. When training with Special Effects Small Arms Marking System (SESAMS), such as DODIC AA12 and AA21, the unit must post road guards to prevent unauthorized personnel/vehicles from entering the surface danger zone of 150 meters for SESAMS. Road Guard locations; Marines Road and Combat Town Road, TLZ Hawk and Combat Town Road, and TLZ Dodo Road. The unit will have all live fire requirements in place, i.e. corpsman, safety vehicle, 30 minute radio checks with BLACKBURN, safety brief for all hands conducting training with SESAMS weapons and ammunition, proper SESAMS safety equipment, signed and reviewed ORM and a card carrying Range OIC and RSO. The unit must be in compliance with all of the SESAMS safety requirements in this SOP (Chapter 5) and the TECOM SOUM 2-10 dated 29 Sep 2010 on SESAMS. A copy of this
SOUM and all other TECOM SOUMs are available on the Range Control Web Page or RTAM Web Page.
**RANGE NAME:** Mobile MOUT Complex

**DESCRIPTION:** Mobile MOUT Facility with 71 total Buildings/Containers, 66 non-live fire and 5 live fire containers with roads, 11 tracked vehicle pads, courtyard walls, and tunnels and many more training enhancements.

**PRIMARY RANGE USE:** Military Operations in Urbanized Terrain

**ALTERNATE RANGE USES:**
1. Non-Combatant Evacuation Operations
2. Embassy Reinforcement
3. Mechanized Raid
4. Firm Base Operations
5. Urban Patrolling
6. COC Operations
7. Law Enforcement/Emergency Response
8. Civil Disturbance Operations

**LOCATION:** Grid Coordinate: 94403880

**WEAPONS ACCOMMODATED:**
- All Military Pistols
- 12 Gauge Shotgun
- M16/M4 Rifle
- M203/M32 Grenade Launcher
- M40/MK12/MK11/EMR/DMR Sniper Rifle (Blanks)
- M249 SAW (Blanks)
- M240B/G Machinegun (Blanks)
- M-2 50cal Machinegun (Blanks)

**AMMUNITION AUTHORIZED:**
- Non-Lethal Ammunition
- Small Arms Blank Ammunition
- Practice Hand Grenades with Fuzes
- Pyrotechnics (Restricted)
- Smoke Grenades (All) (Restricted)
- Artillery Simulators Flash (Restricted)
- SESAMS (DODICS AA21 and AA12)
- Diversionary/Flashbangs (Restricted)
- M203 Smoke/Signal/Illum (Restricted)
- TOW Blast Simulators
- ATWESS (MILES)
- Simulator Noise (SMAW)

**TARGETS/SIMULATORS/DEVICES:** Contractor run targets
**FACILITIES (Number of each):**
- Head Facilities: MOUT Complex
- Port-a-Johns: 7
- Bleachers: None
- Range Tables: None
- POV Parking Area: None
- Bivouac Site: MOUT Complex

**UTILITIES AVAILABLE:**
- Electricity: Limited (Generator)
- Lights: No
- Water System: No

**INSTALLED COMMUNICATIONS:**
- None

**AREA SUITABILITY:**
- Battalion/Company

Some of the containers have been assigned as Farm House, Drug Lab, Car Bomb Factory, Hospital, Radio Station, TV Station, Market Area, Police Station, and Mosque.

Mobile MOUT Containers/Buildings have the following

Internal and external stairways, external ladders, balconies, roof hatches/roof breach ports/trapdoors, spider holes, entrance doors and windows. Mock electricity lines with poles (not energized). The facility has 4 tunnel segments (total 380 feet), 60 inch diameter pipes with ventilation fan system and emergency escape trunks. Ditches and culverts handle surface water and the ditches empty into 3 holding ponds.

**Range Use Restriction/Comments/Conflicts**

1. Mobile MOUT must be scheduled via RFMSS and signed for at Range Control by the using unit Range OIC by 1200 the day prior to the training event.

2. Upon arrival at the Mobile MOUT Complex the Range OIC/RSO will receive a Mobile MOUT Brief/Safety Brief from the Mobile MOUT Staff and contractor support.

3. The Range OIC/RSO will conduct a pre-training inspection with the Mobile MOUT Staff/contractor support prior to use. Only the units that scheduled and signed for the training facility are authorized to use Mobile MOUT Complex.

4. The Live Fire (LF) Mobile MOUT containers must be requested and signed for separately. A special range request is required for the live fire (LF) Mobile MOUT containers.
5. The Range OIC/RSO will conduct a general safety brief for all hands before using the Mobile MOUT Complex and surrounding training area.

6. Range OIC/RSO will ensure the overall safe conduct of training and proper use of the Mobile MOUT Facility at all times.

7. A corpsman with a litter-capable safety vehicle must be present at the Mobile MOUT Facility during all training.

8. Some containers have mouse holes/roof hatches; these must be closed when not in use. Do not place anything in or on top of any mouse hole/roof hatch to block them. Units are not authorized to add firing points or mouse holes to this complex.

9. Mobile MOUT includes maneuver areas that extend 200 meters in all directions from the center of the facility. All other areas outside the Mobile MOUT Complex (Farm House, Forward Operating Base (FOB), MOUT Complex, FC Training Area) must be scheduled separately in RFMSS and signed for.

10. Live fire and explosives can only be authorized by Special Range Request (submitted at least 10 days before the scheduled event) and only for containers designed for live fire. See the Live Fire (LF) Mobile MOUT SOP Appendix.

11. Use of HC smoke, all other types of/color smoke, CS, white phosphorous (WP), incendiaries, pyrotechnics, trip flares and arty simulators inside the buildings is prohibited. 40mm M203 TP, 40mm Smoke, 40mm CS, 40mm Star Clusters, 40mm Star Parachutes and 40mm Illumination are not authorized inside the containers/buildings. Do not use smoke, pyrotechnics or illumination against the compound walls/container walls.

12. Practice Hand Grenades with the assigned fuze are authorized inside the containers/buildings. The using unit will be responsible for policing up all debris.

13. Bivouacking is not permitted within the Mobile MOUT Facility or any of the containers; units must schedule the FOB, or the training area or the MOUT Bivouac Site.

14. Warming fires are not authorized in the Mobile MOUT Complex.

15. Vehicle restrictions within the Mobile MOUT Complex:
a. All vehicles must stay on the approved tank trails/improved surfaces; no cross range traveling is authorized in the surrounding training areas.

b. Neutral steering is not authorized within Mobile MOUT.

c. All tracked vehicles must stay at least 10 feet from all structures, containers, courtyard walls and gates.

d. No tracked vehicles allowed in FOB, ECP, or the surrounding area.

e. Tracked vehicle maintenance must be conducted in an approved area outside the Mobile MOUT perimeter.

16. Red range flags must be flown during training; one between the two main entrances to the Mobile MOUT Complex (F-3 Road/LZ Lark Road) and the other at the back road leading to the MOUT Complex. Range OIC/RSO will sign for two red flags when checking out the Mobile MOUT Complex.

17. Class 3b and Class 4 LASERs are not authorized within Mobile MOUT Complex. Class 1, 2, and 3a LASERs are authorized for use if the required LASER safety precautions/LASER safety procedures are in place and enforced.

18. MILES 2000 equipment and SESAMS (Simunitions) are authorized as long as proper safety procedures, safety equipment and rules of engagement are in place and enforced by the command conducting the training. Call 451-9009 to schedule MILES Gear, SESAMS Kits and the related safety gear.

19. The using unit may occupy rooftops of containers equipped with safety guard rails, flooring and entry points only. Marines will not hang on or climb over safety rails. Grappling hooks and ladders are authorized at the designated positions/locations. Rappelling is not authorized in the Mobile MOUT.

20. Force on Force training is authorized. Aggressors will not barricade doors/windows. At no time will a using unit cut locks, pry open secured windows/doors, or enter a secured container. No physical contact with opposing forces (OPFOR/Role Players) will occur. No physical contact will take place between the offensive and defensive forces.
21. Furniture in the containers/buildings will not be moved, destroyed, or thrown out of windows/doors.

22. Upon the completion of training, the Range OIC/RSO will be cleared from the facility after the required inspection by the Mobile MOUT staff and the contractor support staff. Each level of each building must be inspected and cleared. All forced entry points/trap doors will be policed up and secured. Once the building is inspected, all windows, doors and roof hatches will be secured.

23. Once cleared, the Range OIC/RSO will report to Range Control to return all safety equipment/binder and check in the facility.

24. Speed limit for all tactical vehicles inside the Mobile MOUT Complex is 10 mph.

25. Eating, smoking, dipping, and chewing tobacco are not authorized inside the containers/structures.

26. The using unit of the Mobile MOUT Complex and surrounding training areas will maintain direct communication with BLACKBURN at all times.

Other Considerations

1. Be thoroughly familiar with the contents of this entire SOP.

2. Environmental Restrictions: Red-cockaded Woodpecker (RCW) habitats are located to the south and north of the Mobile MOUT Complex. Venus flytrap habitat is east of Mobile MOUT. See Chapter 6 of this SOP for all other environmental restrictions.

3. Trenches or fighting holes will not be dug inside the Mobile MOUT Complex. Fighting positions in the surrounding training areas are authorized; the using unit must fill in and level them out all fighting position after the training event.

4. Use of Red Smoke/Pyrotechnics ceases all training and will only be used for emergencies situations.

5. Rotary Wing aircraft are not authorized to land on the buildings/containers at Mobile MOUT. Nearest LZs for MEDEVAC purposes are TLZ Lark and TLZ Raven.
6. Using units will avoid damaging the palm trees within Mobile MOUT Complex and surrounding training areas. At no time will using units nail anything to or hang any type of wire on the palm trees.

7. Report all accidents/injuries to BLACKBURN.

8. Report all range maintenance issues to MOUT Staff/contract support.

9. Using unit must sign for the MOUT Head Facility via the MOUT Staff in order to use it. The using unit will be responsible for a complete field day; the facility will be inspected by the MOUT Staff or a Range Inspector prior to unit departure.

10. Avoid damage to the installed target systems and support equipment during training. All tracked vehicle must avoid the moving target track systems.

Special Instructions

1. Every effort must be made to prevent damage to or misuse of the Mobile MOUT structures/containers/compound walls and other facilities within this training complex. Do not deface any of the containers/buildings, walls or other structures within Mobile MOUT Complex. The unit will be held responsible for damage due to negligence or unauthorized actions. This is a great training facility “Take Care Of It”.

2. POVs are not authorized in the surrounding training areas or Mobile MOUT Complex. POV parking is very limited and is only authorized by the MOUT Staff at the MOUT Staff Office Building 20.

3. Use of SESAMS (Simunitions): The using unit must post road guards at each end of LZ Lark/F-3 Road and the road leading to the back of the MOUT Complex to prevent unauthorized personnel/vehicles from entering the surface danger zone of the SESAMS ammunition (150 meters). The using unit will have all other live fire safety requirements in place. Range OIC/RSO should be aware of; the safety requirements in accordance with Base Order P3570.1C Chapter 5, the TECOM SOUM for SESAMS, corpsman and safety vehicle requirements, 30 minute radio checks with BLACKBURN, safety brief for all hands conducting training, and SESAMS PPE.
4. All wire, obstacles, trip wires and simulators emplaced by the using unit will be removed prior to unit departure.

5. Civilians are not authorized in Mobile MOUT unless specifically authorized by the Range Control Officer.

6. Units must avoid the drainage ditches and storm water holding ponds. Do not remove rocks/stones within the drainage ditches, ponds or wells.

7. Junk vehicles in the Mobile MOUT will not be moved without approval of Range Control/MOUT Staff. They will not be dismantled, burned, run over or otherwise destroyed. Do not cut or flatten vehicle tires. Trash, brass/links will not be placed into any on-site vehicles (junk vehicles). Do not throw smoke/pyrotechnics inside any of the junk vehicles.

8. Do not remove or add any concrete "debris" to the debris piles.
MOBILE MOUT COMPLEX
Check-In Sheet

Unit/Command: ____________________________ Phone Number: __________

Range Officer in Charge: ____________________________________________

Range Safety Officer: ______________________________________________

Training Dates : __________ Training Times: Start: __________ Finish: ________

Number of Personnel Being Trained : ______________________________________

Type of Tactical Vehicles being used: ______________________________________

Bivouac Site Needed: Yes/No: ____________________________________________

Helo Assets being used, Yes/No, Type of Helo Date _______ Time ________

Live Fire: Yes/No: Type ________ Date: Start ______ End ________

What type of Live Fire: ___________________________ Explosives ______________

Special Range Request: Yes/No _________ Copy: Yes/No

BREACHING BEING CONDUCTED: YES/NO _________ TYPE ______________

TYPE OF AMMO/PYRO: __________________________________________________

Brief POV Parking Situation:

MOUT CHECK IN INSPECTION RESULTS:

________________________________________________________________________

I ____________________________ HAVE READ AND UNDERSTAND THE MOUT
SOP AND HAVE RECEIVED A SAFETY BRIEF FROM THE MOUT STAFF. I AM
SATISFIED WITH THE CHECK IN INSPECTION RESULTS AND ASSUME
RESPONSIBILITY FOR THE MOUT FACILITY.

SIGNATURE_____________________________ DATE____________________

MOUT STAFF SIGNATURE_________________________ DATE__________________
The following checklist will assist the using unit in their checkout process for the Mobile MOUT Complex. Ensure that you provide yourself approximately 2 hours and working party for the checkout inspections.

**Post training inspections will be done with the Range OIC/RSO only and the MOUT Staff.**

**Using unit must have a working party standing by for all discrepancies/problems that need to be resolved.**

1. All personnel and equipment/vehicles must be outside of the Mobile MOUT Complex before the inspection can take place.
2. Using unit will ensure that all trash, spent brass, links, SESAMS rounds, expended smoke grenades and any other ammunition dunnage are policed up and removed from the Mobile MOUT Complex.
3. If concertina wire or communication wire was utilized/used it must be policed up and removed by the using unit.
4. Mock-up or junk vehicles will be free of all trash/brass/links. Each container will be swept out by the using unit.
5. Only approved trash in the dumpsters. Wood/metal/ammunition/card board dunnage will not be placed in the dumpsters.
6. Doors and windows in the buildings/containers will be shut/secured.
7. The using unit will be held responsible for the required repairs.
8. Turn in all brooms, tools, cleaning gear, and equipment to the Mobile MOUT Staff.
9. Turn in all Simunition/SESAMS safety equipment to the Mobile MOUT Staff as required. All Simunition/SESAMS Kits for M-16/9mm pistols will be checked to ensure that the bolt extractor pin was not misplaced. Unit must be prepared to provide weapon cleaning working party to clean SESAMS equipment not up to standard.
10. Turn in all live fire signs to Mobile MOUT Staff if used.
11. All Port-a-Johns behind buildings/containers ____ and buildings/containers ____ will be checked for damage and trash.
12. The bivouac site, if used, will be policed up and will be inspected by the Mobile MOUT Staff/Contractor Support.
13. Material added to the Mobile MOUT, such as sandbags, concertina wire, trip wires, and other barriers, will be removed by the unit.
14. Smoke/Pyrotechnics will not be used inside any of the Mobile MOUT structures/containers but are authorized outside.
15. All tank pads and containers will be swept out and off by the using unit.
16. Any additional comments/recommendations.
RANGE NAME: Live Fire Mobile MOUT

DESCRIPTION: Five (5) separate live fire houses within the Mobile MOUT Complex

PRIMARY RANGE USE: Small Arms Live Fire Training
                    Dynamic Entry Drills
                    Live Fire Room Clearing
                    Combat in Built-up Area

ALTERNATE RANGE USES: Raid Operations

LOCATION: Grid Coordinate: 94403880

PRIMARY DIRECTION OF FIRE: 360 degrees inside Live Fire Bldgs.

WEAPONS ACCOMMODATED: .45 cal Pistol
                        9mm Pistol
                        M16 Rifle
                        M4 Rifle
                        Shotgun
                        SCAR (5.56mm/7.62mm)

AMMUNITION AUTHORIZED: TRACER AMMUNITION IS NOT AUTHORIZED.
                        Shotgun 12 Gauge (Lockbuster Only)
                        9mm Ball (DODIC A360/A363)
                        .45 cal/40 cal Ball
                        5.56mm Ball (DODICs AO59/AA45)
                        5.56mm Frangible (DODIC AA40)
                        5.56mm (SRTA) Short Range Training Ammunition (DODIC A065)
                        (By Special Range Request Only)
                        7.62mm (DODIC A130)
                        (By Special Range Request Only)
                        Practice Hand Grenades with fuze, DODICs G811, G878
                        Pyrotechnics/Smoke (Outside the Bldgs only)
                        Explosives (By Special Range Request)
                        (All explosives must be .10 NEW or less)
                        -- Charge Demo Expl Sheet DODIC MM27
                        -- Charge Demo DODIC MM28
                        -- Det Percussion DODIC MM56
                        -- Det Cord DODIC M456, MU40, MU42
                        -- Cap, Blast Electric DODIC M130
                        -- Charge Demo DODICs M757 & MM30
                        -- Charge Sheet DODIC MM29

A-358
-- Charge Shape DODICs MM34 & MM35
Charge Shaped Flex Linear DODIC MM38

Buildings:
Building Number AR1 (2)
Building Number AW3 (24)
Building Number AW2 (36)
Building Number AW4 (40)
Building Number AW3 (67)
9 Bullet Traps (3 mobile, 6 stationary) in each 1 story house, 18 (6/12) in the 3 story house

FACILITIES(Number of each):
Head Facilities: MOUT Bivouac Site
Port-a-Johns       Yes
POV Parking Area: None

UTILITIES AVAILABLE:
Electricity: Yes
Lights: Yes
Water System: No

INSTALLED COMMUNICATIONS:
Telephone at MOUT Office

AREA SUITABILITY: Platoon

Range Use Restriction/Comments/Conflicts

1. Live Fire Mobile MOUT requires a written Special Range Request (SRR) at least 10 working days before the scheduled live fire event. The Special Range Request will include a written concept of operations, a scheme of maneuver, overlays, a signed and reviewed ORM worksheet, target placement plan, all unit control measures, unit rehearsal plan and a break down of activity dates and times as per Appendix J of SOP. A site survey must be conducted, accompanied by the Mobile MOUT Staff/Range Safety, before the scheduled live fire event.

2. Live Fire Mobile MOUT must be scheduled via RFMSS and signed for at Range Control by the using unit Range OIC. Live Fire containers can be scheduled for up to 8 consecutive hours within a 24 hour period.

3. If a unit is using multiple shoothouses at the same time, each Live Fire Container must have a separate Range OIC and a separate RSO with communication with BLACKBURN and corpsman with a government safety vehicle at each live fire site/container. Each live fire container is a separate live fire event in RFMSS and with BLACKBURN.
4. Upon arrival at the Mobile MOUT Complex, the Range OIC/RSO will receive a Live Fire Mobile MOUT Brief and general safety brief from the MOUT Complex Staff.

5. After the briefs the Range OIC/RSO will conduct a pre-training inspection of the Live Fire Mobile MOUT containers with the Mobile MOUT Staff. Prior to going “HOT” the Range OIC/RSO must ensure that all doors and window ballistic covers are closed, in the proper location except the designated entry point.

6. “Piggybacking”, the use of a live fire shoot house by multiple units, is not authorized.

7. The Range OIC/RSO will conduct a live fire safety brief for all hands prior to using the Live Fire Mobile MOUT containers and will ensure the overall safe conduct of the live fire training event and the proper use of the facilities at all times.

8. The Range OIC/RSO/corpsman/government safety vehicle with driver (strip map in vehicle) must be physically present at the shoot house at all times.

9. The using unit will assign Assistant Range Safety Officers (ARSOs) as required to support this event. At a minimum, each Fire Team sized unit will have an ARSO assigned. ARSOs will be non-participants and have direct communications with each other.

10. The Live Fire Mobile MOUT shoothouse includes only the live fire building(s) within the Mobile MOUT facility that are scheduled and signed for and the surrounding containers that act as a buffer zone. All other areas outside Live Fire Mobile MOUT buildings must be scheduled separately in RFMSS and signed for.

11. Range warning signs will be displayed as required at each of the live fire containers being used. The unit is required to fly red flags during training at the 3 entrances to the Mobile MOUT Complex on F-3 Road and LZ Lark Road if conducting live fire. The Range OIC/RSO will sign for three red range flags at the time he checks out the range complex. During live fire the red flashing lights (located on containers) must also be on and checked to ensure they are working.

12. All Marines conducting live fire training will have muzzle, finger, trigger, and selector switch discipline at all times. Before moving inside the metal container, each weapon will be
placed on safe and pointed towards the deck. Marines will be in a Condition 1 weapon, safety on, at the entrance door. All weapons will be cleared properly (Condition 4) under the supervision of a SNCO or above before moving to any other non-live fire training events within the Mobile MOUT Complex.

13. All live fire will be directed toward the assigned bullet traps/targets only. Using units cannot attach or bring in any additional targets to the inside walls of the live fire containers.

14. Tracer ammunition, white phosphorous, incendiaries, CS, HC smoke, illumination or other types of colored smoke, pyrotechnics, trip flares and arty simulators are NOT authorized inside the buildings/containers.

15. Practice hand grenades are authorized inside the live fire buildings. No other such training devices (e.g. non-lethal hand grenades, DWBS, and stun/stringer ball Grenades) will be used inside the live fire containers.

16. The M249 5.56mm linked SAW/M27 Infantry Automatic Rifle is not authorized to be fired inside the Live Fire Mobile MOUT containers. Automatic/burst live fire is not authorized inside the live fire containers.

17. Breaching operations are only authorized on outside doors. Explosive breaching is not authorized at the Farm House. The 12 Gauge Shotgun is authorized for door breaching only using the Lock Buster Round. At no time will the 12 Gauge Shotguns be used inside the live fire containers firing live ammunition.

18. Explosive breaching must be observed and supervised by a qualified and certified in writing Breacher (CO Certification Letter). Breaching Blankets will be used when conducting explosive breaching operations. The appropriate stand off distances, as required/outlined in MCO 3570.1B/DA PAM 385-63 are mandatory. Breaching plan must be spelled out in the Special Range Request and ORM.

19. Units must conduct a dry run/rehearsal under the same conditions (Day/Night/Night Vision Devices) of the training scenario before going “Hot” with live ammunition.

20. Class 3b and Class 4 LASERs are not authorized in the Mobile MOUT Live Fire containers. Class 1, 2 and 3a LASERs are
authorized with the proper LASER safety procedures and supervision in place and enforced.

21. Simunitions and MILES 2000 equipment will not be used in the live fire containers. The Mobile MOUT has 52 other buildings that support these types of training devices.

22. Upon the completion of training, the Range OIC/RSO will be cleared from the facility after inspection by the Mobile MOUT staff. Each building (and each level of the container) must be inspected and cleared. All forced entry points/trap doors will be policed up and secured. All lights and fans must be turned off.

23. Upon the completion of training, the using unit will report the number of rounds expended per Live Fire Mobile MOUT container to BLACBURN by DODIC.

Special Instructions

1. Do not deface any containers/buildings, walls, other structures, or targets within Mobile MOUT Complex. The Range OIC/RSO must report all damaged areas and other maintenance issues/problems so repairs can be scheduled as required. The unit may be responsible for repairing any areas damaged due to negligence or unauthorized actions during its training event. Unit leaders must ensure disciplined training and must properly supervise the police of the buildings and surrounding areas in order to provide an excellent training site for the next unit.

2. Once the live fire training event is completed each shooter will have his weapon and magazines checked for live ammunition by the Range OIC or RSO before departing the live fire container area. Shooters will clear their weapons using the clearing barrels that are provided, supervised by the command/unit. Each member of that unit must be asked if he has any live ammunition or brass before moving outside of the live fire container area.

3. POVs are not authorized in the surrounding training areas or Mobile MOUT Complex. Limited and controlled by the unit, POVs parking at the MOUT Complex parking lot. Contact the MOUT Staff on detail instructions and approved locations.

4. All wire, obstacles, trip wires, and training simulators emplaced by the using unit shall be removed prior to departure from Mobile MOUT Complex.
5. Civilians are not authorized in Mobile MOUT unless specifically authorized by the MCB Range Control Officer.

6. Top-down attack is authorized for those buildings with rooftop access points. Rotary wing aircraft are not authorized to land on any containers at Mobile MOUT Complex. Fast roping/rappelling to the roof from rotary wing aircraft is authorized if properly supervised by the unit HRST Master, signed for properly, and all safety requirements in place.

7. Using units will ensure all safety procedures are in place and supervised on external and internal ladder wells, balconies, and roof top entry points.

8. At no time will live ammunition and blank ammunition be mixed together. The using unit must check, recheck, enforce, and supervise this rule at all times. Using unit must also check all weapon magazines and other ammunition sources.

Other Considerations

1. Be thoroughly familiar with the contents of this SOP and all other range safety references as required.

2. Environmental Restrictions: Red-cockaded Woodpecker (RCW) habitats are south and north of the Mobile MOUT Complex. Venus flytrap habitats are east of Mobile MOUT. See Chapter 6 of this SOP for details regarding RCW and Venus Flytrap restrictions.

3. Fighting positions/fox holes are not authorized inside the Mobile MOUT Complex.

4. All doors and windows will be shut and secured before the unit departs the Mobile MOUT Complex.

5. Red smoke/red pyrotechnics will only be used for emergencies situations only. Report all accidents/injuries to Range Control (BLACKBURN).

6. Using unit will avoid damaging the palm trees. At no time will a using unit climb, hang wire, or cut down any of the palm trees within the Mobile MOUT Complex.

7. Helmets, flak jackets, hearing protection and eye protection are required with no exceptions.
8. Bivouacking is not permitted in the Mobile MOUT containers/complex.

9. Units are not authorized to add firing points or spider/mouse holes to this complex.

10. Once cleared, the Range OIC/RSO will report to Range Control and return safety equipment/binder and check in the facility.
Mobile MOUT Check-in Sheet

Unit/Command: ___________________________ Phone: _______________________

Range Officer in Charge: __________________________

Range Safety Officer: __________________________

Training Dates: ___________ Training Times: Start: _____ Finish: ___________

Number of Personnel Being Trained: __________________________

Type of Vehicles being used: __________________________

Classroom Requested: Yes/No: __________________________

Bivouac Site Needed: Yes/No: __________________________

Helo Assets being used, Yes / No, Date _______ Time __________

Live Fire: Yes/No: Date: Start _______ End ______

Special Range Request: Yes/No _______ Type __________________________

BREACHING BEING CONDUCTED: YES/NO _______ TYPE __________

TYPE OF AMMO/PYRO: __________________________

TYPE OF WEAPONS: __________________________

MOBILE MOUT CHECK IN INSPECTION RESULTS:

I ______________________________ HAVE READ AND UNDERSTAND THE MOUT SOP AND HAVE RECEIVED A SAFETY BRIEF FROM THE MOBILE MOUT STAFF. I AM SATISFIED WITH THE CHECK IN INSPECTION RESULTS AND ASSUME RESPONSIBILITY FOR THE MOBILE MOUT FACILITY.

SIGNATURE ___________________________ DATE ______________________

MOBILE MOUT STAFF SIGNATURE ___________________________ DATE ____________
LIVE FIRE MOBILE MOUT
UNIT TRAINING CHECKING OUT PROCEDURES
CHECKLIST

CHECKOUT DATE: _______ TIME: _______ UNIT: ______

The following checklist will assist the using unit in their checkout process from the Live Fire Mobile MOUT Complex. Ensure that you provide yourself approximately 1 hour for the checklist inspections.

Post training inspections will only be done with the Range OIC/RSO and working party of the using unit only.

When ready to be inspected ensure the following occurs:

1. All personnel and equipment must be outside of the Live Fire Mobile MOUT Complex or in the vicinity of the MOUT Parking Lot or MOUT bivouac site before the inspection can take place.

2. The using unit will provide a working party which will accompany the Mobile MOUT Staff in the walk-through inspection to resolve all minor issues.

3. Ensure that all trash, spent brass, links, SESAMS rounds, expended smoke grenades, and any other ammunition dunnage are policed up and removed from the Mobile MOUT Complex.

4. Each container and each floor/level/roof will be swept off by the using unit.

5. If concertina wire and communication wire was utilized it must be policed up and removed by the using unit from the training site.

6. Furniture will not be added to any of the Live Fire Mobile MOUT containers.

7. Mock-up/junk vehicles will be free of all trash.
Trash only in the trash dumpsters. Wood/Metal will not be placed in trash dumpsters. Doors and windows in the building/containers will be checked to ensure they are secure.

8. No graffiti on the exterior or interior walls. The using unit will be held responsible for the required repairs. Turn in all live fire signs to Mobile MOUT Staff if used.

9. Turn in all brooms, cleaning gear, and equipment to the Mobile MOUT Staff.

10. Turn in all Simunition/SESAMS safety equipment to the Mobile MOUT Staff as required.

11. Turn in all Simunition/SESAMS Kits, upper receivers and 9mm Pistol conversion kits that are cleaned and lubricated to the Mobile MOUT Staff.

12. All Simunition/SESAMS Kits for M-16/M4s will be checked to ensure that the bolt extractor was not misplaced.

13. Ensure that any and all tools, cleaning supplies borrowed are turned back into the Mobile MOUT Staff.

14. All Port-a-Johns behind building/container ____ and building/container ____ will be checked to ensure they are free of trash/ammunition dunnage.

15. Bivouac site if used must be policed up and will be inspected by the Mobile MOUT Staff also.

16. Light Fixtures in the container/structures will be inspected to ensure they work and have not been destroyed.

17. All material added to the Mobile MOUT will be removed by the using unit like sandbags, concertina wire, and barriers.

18. Smoke/Pyrotechnics will not be used inside any of the Mobile MOUT structures/containers but are authorized on the outside. Any smoke marks on the side of the containers/structures/compound walls will be removed by the using unit.
RANGE NAME: MOUT Urban Training Facility (UTF)
Building Number SCR 138

DESCRIPTION: MOUT Complex, Shoothouse, 2 Story Urban Training Facility with moveable walls/doors, elevator shaft, internal/external ladder wells.

PRIMARY RANGE USE: Military Operations in Urbanized Terrain

ALTERNATE RANGE USES:
1. Room Clearing Operations
2. Non-Combatant Evacuation Operations
3. Embassy Reinforcement
4. Firm Base Operations
5. Law Enforcement/Emergency Response
6. MOUT Raid Operations
7. MOUT Force on Force Events

LOCATION: Grid Coordinate: 94213838

WEAPONS ACCOMMODATED:
All Military Pistols
12 Gauge Shotgun (Restricted)
M16/M4 Rifle (Blanks/SESAMS)
M40/MK11/MK12/EMR/DMR Sniper Rifle (Blanks Only)
M249 SAW (Blanks)
M240B/G Machinegun (Blanks)

AMMUNITION AUTHORIZED:
Non-Lethal Ammunition
SESAMS (DODICs AA21 and AA12)
Small Arms Blank Ammunition
Practice Hand Grenades with Fuze Pyrotechnics (Restricted)
Smoke Grenades (All) (Restricted)
Artillery Simulators Flash (Restricted)
Demo Charges (.10 NEW or less) (SRR Only)
12 Gauge Shotgun Lock Buster
5.56mm Short Range Training Ammunition (Special Range Request Only)

TARGETS/SIMULATORS/DEVICES: None

FACILITIES (Number of each):
Head Facilities: MOUT Complex
Port-a-Johns: None
Bleachers: None
Range Tables: None
POV Parking Area: MOUT Office
Bivouac Site: MOUT Complex
Electricity: Yes (Inside/Outside to include outlets)
Lights: Yes (Inside/Outside)
Water System: No
Internal Building Exhaust Fan: Yes

INSTALLED COMMUNICATIONS: None

AREA SUITABILITY: Company/Platoon

Range Use Restriction/Comments/Conflicts

1. The MOUT 2 story shoothouse must be scheduled via RFMSS and signed for at Range Control by the using unit’s Range OIC at least by 1200 the day before or up to 5 days in advance.

2. The 2 story shoothouse must have a separate Range OIC & RSO with communication with BLACKBURN and a corpsman with a safety vehicle at all times. A sweep of the surrounding training areas must be completed.

3. Upon arrival at the 2 story shoothouse the Range OIC/RSO will receive a range brief and general safety brief from the MOUT Complex staff/Range Control on this facility.

4. After the briefs the Range OIC/RSO will conduct a pre-training inspection of the 2 story Shoothouse with the MOUT Complex Staff/Range Control. Prior to going “HOT”, Range OIC/RSO must ensure that all doors and wooden window covers are closed except the designated entry point or points. The unit must turn on the ventilation system/fans for at least 30 minutes before going into a “HOT” status.

5. Only those units who schedule in RFMSS and check out/sign for the MOUT shoothouse, MOUT Complex are authorized to conduct training inside the facility. “Piggybacking” is not authorized in the 2 story Shoothouse unless prearranged with Range Control and the MOUT Complex staff.

6. SESAMS and MILES 2000 equipment are authorized within the 2 story MOUT shoothouse with the proper safety equipment in place and scheduled as such in RFMSS. The Range OIC/RSO will conduct a SESAMS live fire safety brief to all hands using the 2 story MOUT shoothouse and will ensure the overall safe conduct of the SESAMS live fire training and proper use of the MOUT shoothouse,
MOUT Complex. The using unit must fly a red flag during training at the entrance to the 2 story shoothouse on F-3/TLZ Lark Road. A road guard will be placed on the F-3 /TLZ Lark Road when firing SESAMS in the 2 story MOUT shoothouse. Road Guard must be in the required protective gear for SESAMS live fire.

7. The Range OIC/RSO/Corpsman/safety vehicle with driver (strip map in vehicle) must be physically present at the 2 story MOUT shoothouse at all times while conducting training. The using unit will assign Assistant Range Safety Officers (ARSOs) as required.

8. 2 story MOUT shoothouse will include the building and the surrounding training area that are within the SDZ of SESAMS (150 meters) surrounding the building. All other areas or structures outside the 2 story MOUT shoothouse must be scheduled separately in RFMSS and signed for.

9. All Marines conducting SESAMS live fire training will have proper muzzle awareness, finger/trigger control and selector switch discipline at all times. Before moving inside the two story structure and while moving between floors each weapon will be placed on safe.

10. All SESAMS live fire will be directed toward the assigned targets (Locations TBD). Excessive damage to the doors, walls, or windows may result in the using unit being held financially liable for repairs and cost.

11. CS, HC smoke, or any other types of colored smoke, pyrotechnics, trip flares, illumination, and arty simulators /hand grenade diversionary are not authorized inside the 2 story MOUT shoothouse.

12. Practice Hand Grenades with the authorized fuze are authorized inside the building. All other type training devices (e.g. Non-Lethal Hand Grenades, Arty Sims, M203/M32 40mm rounds) will not be used inside the building.

13. 5.56 mm Short Range Training Ammunition (SRTA) will only be approved with a Special Range Request and the using unit must provide the required bullet trap devices. Units must conduct a dry run/rehearsal under the same conditions (Day/Night, Night Vision Devices, Flashlights, and LASERs) of the training scenario before going “HOT” with SRTA ammunition. Unit rehearsals must emphasize that positive target identification is
required to engage. The using unit must fly a red flag during training at the entrance to the 2 story Shoothouse on F-3/TLZ Lark Road. A road guard in the required protective gear will be placed on the F-3/LZ Lark Road.

14. Breaching Operations are only authorized on the outside doors leading into the building. The unit must submit a Special Range Request (SRR) 10 working days before the scheduled event. The existing metal doors will not be breached with explosives; using units must provide solid core wood doors and the associated hardware (deadbolts, hinges, doorknobs). Unit must provide the doors and hardware to install doors. 12 gauge shotgun is only authorized for door breaching, using the Lock Buster Round. No other 12 gauge shotgun ammunition DODICs are authorized inside the 2 story shoothouse.

15. Explosive breaching must be rehearsed and must be observed and supervised by a qualified and command certified breacher (CO Certification Letter). Breaching blankets will be used when conducting explosive breaching as required. The appropriate stand off distances, as outlined in MCO 3570.1B/DA PAM 385-63 are mandatory. A breaching plan with a signed and reviewed ORM must be spelled out in the Special Range Request. The using unit must have a plan to repair or replace any and all doors used for breaching. The using unit must properly dispose of all wooden doors that have been breached and all repairs made/completed. At no time will dunnage/breached doors be left on the range or in the building.

16. Class 3b and Class 4 LASERs are not authorized within the 2 story shoothouse. Class 1, 2, 3A LASERs are authorized with the proper safety and supervision procedures in place.

17. Upon the completion of the training, the unit Range OIC/RSO will be cleared from the 2 story shoothouse after inspection by the MOUT Complex staff. Each floor/room/roof must be inspected and cleared. All forced entry points/trap doors will be policed up and secured. All wooden windows will be shut, all roof hatches shut and secured, lights and exhaust fans turned off and doors locked/secured. All outside gates will be shut and secured.

18. Once cleared, the Range OIC/RSO will report to Range Control and return safety equipment/binder and check in the facility.
19. Report all 2 story shoothouse maintenance issues to the MOUT Complex staff, Range Control, or use ICE.

Special Instructions

1. Do not deface the building, rooms, walls or any other structures within 2 story shoothouse. The Range OIC/RSO must report all damage so repairs can be scheduled as required. Unit will be responsible for repairing any areas damaged due to negligence or unauthorized actions during its training event. Unit leaders must ensure disciplined training and must properly supervise the police of the building/rooms and surrounding areas in order to provide an excellent training site for the next unit.

2. Once the SESAMS live fire training event is completed, each shooter will have his weapon/magazines checked by the Range OIC/RSO before departing the 2 story Shoothouse. Marines will clear their weapons using the proper procedures and supervised by the unit Range OIC/RSO. Each member will be screened for SESAMS ammunition before moving outside the structure.

3. POVs are not authorized in the training areas or 2 story Shoothouse. POVs can only be parked at the MOUT Office building 20 with permission from MOUT Staff.

4. All wire, obstacles, trip wires, and simulators emplaced by the using unit shall be retrieved and removed prior to departure from 2 story shoothouse.

5. Civilians are not authorized in 2 story shoothouse unless specifically authorized by the MCB Range Control Officer.

6. Rappelling/fast roping is authorized from the roof/elevator shaft using the required anchor points as set forth in MCRP 3-11.4A, TC 21-24, and MCO 3500.42A. The using unit must have a certified and current HRST Master (CO Certification Letter) on site if rappelling/fast roping training is being conducted. The using unit is responsible for providing all HRST equipment and gear and this gear/equipment must be inspected as required. Rappelling from the windows is not authorized. Grappling hooks and ladders are authorized at the designated positions within the 2 story shoothouse.

7. Using units will ensure all general safety procedures are in place and supervised on all external and internal ladder wells, and roof top entry points at all times.
8. Trenches or fighting holes will not be dug outside or in the surrounding training areas of the 2 story shoothouse.

9. At no time will live SESAMS ammunition, live ammunition, and blank ammunition be mixed together. The using unit must enforce and supervise this safety requirement at all time. Unit must check all weapons and magazines to ensure no live ammunition is present.

10. Using rain gutters for urban climbing is authorized if climber is attached to a safety rope belayed from the roof.

11. When conducting Blanks/SESAMS/Live Fire/breaching training the exhaust fan must be on and operating at all times. Fan must be turned on at least 30 minutes before and after training starts and finishes.

12. Vehicles are not authorized inside the 2 story Shoothouse compound. All POVs must park in the authorized POV parking area only.

Other Considerations

1. Be thoroughly familiar with the contents of this Range Control SOP and all other required references.

2. Environmental Restrictions: Red-cockaded Woodpecker (RCW) habitats are south and north of the 2 story Shoothouse. Venus flytrap habitat is east of Mobile MOUT. See Chapter 6 of this SOP for details regarding RCW and Venus Flytrap restrictions.

3. All metal doors and windows will be shut and secured before the unit departs the 2 story shoothouse.

5. Red smoke/red pyrotechnics will only be used for emergencies situations. Report all accidents and injuries to Range Control (BLACKBURN) and your command as required/directed.

6. Rotary wing aircraft are not authorized to land on the 2 story Shoothouse. Fast roping/rappelling to the roof from rotary wing aircraft is authorized if properly supervised by the unit HRST Master, signed for properly, and all safety requirements in place.

7. Helmets, flak jackets, hearing and eye protection as well as all other SESAMS protective gear are required and mandatory with
no exceptions when firing SESAMS as per Chapter 5 of this SOP and TECOM Safety of Use MEMORANDUM 1-02, 9mm Cartridge Special Effects Small Arms Marking System (SESAMS).

8. Tracked vehicles are not authorized at the 2 story Shoothouse and must stay on the primary road network (F-3/LZ Lark Road).

9. Bivouacking is not permitted in 2 story shoothouse. Using unit must schedule the surrounding training areas or the MOUT bivouac site with MOUT Complex staff.

10. Warming fires are not authorized within the 2 story shoothouse compound.

11. Using units are not authorized to add firing points or spider/mouse holes to this complex.
2 STORY SHOOTHOUSE, MOUT COMPLEX
Check-in Sheet

Unit/Command: ___________________________ Phone: __________________

Range Officer in Charge (ROIC): ____________________________

Range Safety Officer (RSO): ____________________________

Training Dates: ___________ Training Times: Start: _______ Finish: ____________

Number of Personnel Being Trained: ____________________________

Type of Vehicles being used: ____________________________

Classroom Requested: Yes/No: ____________________________

Bivouac Site Needed: Yes/No: ____________________________

Helo Assets being used, Yes / No, Date_________ Time________________

Live Fire: Yes/No: Date: Start ______ End ______

Special Range Request: Yes/No _________ Type __________________

BREACHING BEING CONDUCTED: SRR, YES/NO ___________ TYPE ___________

TYPE OF AMMO : ____________________________

TYPE OF WEAPONS: ____________________________

2- STORY SHOOTHOUSE, MOUT COMPLEX CHECK IN INSPECTION RESULTS:

I ______________________________ HAVE READ AND UNDERSTAND THE
SHOOTHOUSE SOP AND HAVE RECEIVED A SAFETY BRIEF FROM THE
MOUT STAFF. I AM SATISFIED WITH THE CHECK IN INSPECTION RESULTS
AND ASSUME RESPONSIBILITY FOR THE SHOOTHOUSE, MOUT
COMPLEX FACILITY.

SIGNATURE_____________________________________DATE_______________

MOUT STAFF SIGNATURE________________________________DATE______________
Shoothouse, MOUT Complex
UNIT TRAINING CHECKING OUT PROCEDURES
CHECKLIST

CHECKOUT DATE: ________    TIME: ________    UNIT: ________

The following checklist will assist the using unit in their checkout process from the Shoothouse, MOUT Complex. Ensure that you provide yourself approximately 30 minutes for the checklist inspections.

Post training inspections will only be done with the Range OIC/RSO of the using unit.

When ready to be inspected ensure the following occurs:

1. All personnel and equipment must be outside of the Shoothouse, MOUT Complex or in the vicinity of the MOUT Parking Lot or MOUT bivouac site before the inspection can take place.

2. The using unit will provide a working party which will accompany the MOUT Complex staff in the walk-through inspection.

3. Ensure that all trash, spent brass, links, SESAMS rounds, expended smoke grenades and any other ammunition dunnage are policed up and removed from the Shoothouse MOUT Complex.

4. Each container and each room/floor/roof will be swept by the using unit.

5. If concertina wire and or communication wire was utilized it must be policed up and removed by the using unit.

6. Furniture will not be added to the Shoothouse MOUT Complex.

7. Trash will only be placed in the trash dumpsters. Wood and metal will not be placed in trash dumpsters.

8. Metal doors and wooden windows in the building will be checked to ensure they are secure.
9. No graffiti on the exterior or interior walls of this structure. The using unit will be held responsible for the required repairs.

10. Turn in all brooms, cleaning gear, and equipment to the MOUT Complex staff.

11. Turn in all Simunition/SESAMS safety equipment to the MOUT Complex staff if used.

12. Turn in all Simunition/SESAMS Kits, upper receivers and 9mm Pistol conversion kits that are cleaned and lubricated to the MOUT Complex staff.

13. All Simunition/SESAMS Kits for M-16/M-4 will be checked to ensure that the bolt extractor was not misplaced.

14. Ensure any and all tools and cleaning supplies borrowed are turned back into the Mobile MOUT Staff.

15. Bivouac site if used, must be policed up and will be inspected by the MOUT Staff.

16. Light fixtures in the container/structures will be inspected to ensure they work and have not been destroyed. Light switches must be turned off after training is completed.

17. All material added to the Shoothouse, MOUT Complex will be removed by the using unit like sandbags, concertina wire, barriers, and anything else used.

18. Smoke/Pyrotechnics/M203 and M32 40mm ammunition will not be used inside the Shoothouse, MOUT Complex structures but are authorized on the outside. Any smoke marks on the side of the structure/breaching walls will be removed by the using unit.
RANGE NAME: Camp Davis, Airfield Seizure Facilities

DESCRIPTION: Mock Airfield Structures for Joint/Combined Training/Exercises

PRIMARY RANGE USE: Tactical Airfield Assault and Seizure

ALTERNATE RANGE USES: 1. Multi-Purpose Maneuver Area
2. Infantry Dismounted Training
3. Helicopter Assault/Seizure
4. Mechanized Assault/Seizure

LOCATION: SV Training Area
Camp Davis North/South Runways
Mock Tower Grid 662226
Mock Hangar 1 Grid 661222
Mock Hangar 2 Grid 660222
Mock Maint Grid 664228
Mock Terminal Grid 665232

WEAPONS ACCOMMODATED: All Infantry Weapons (Non-Live Fire Training Only)

AMMUNITION AUTHORIZED: Blanks, (.50 cal and below)
SESAMS
MILES 2000

FACILITIES: Mock Tower Bldg SR-25
Mock Hangar 1 Bldg SR-26
Mock Hangar 2 Bldg SR-27
Mock Maint Bldg SR-28
Mock Terminal Bldg SR-29

UTILITIES AVAILABLE: Electricity: No
Lights: No
Water System: No

INSTALLED COMMUNICATIONS: None

AREA SUITABILITY: Company/Platoon
Range Use Restriction/Comments/Conflicts

1. Five cinder block structures in/around Camp Davis North and South Runways: two mock hangars with dummy aircraft, a mock control tower, a mock terminal building and a mock maintenance building, evenly distributed along the two airfields. The cinder block structures are building shells (no equipment or offices). Buildings are sited as realistically as possible including appropriate airfield safety setbacks so they will not represent a hazard to air traffic at Camp Davis. The two mock hangars are along the northeastern parking aprons of the east-west airstrip. The mock maintenance building is along the western side of the north-south airstrip, about a third of the way from the end of the runway. The mock terminal is along the northwestern edge of the southern end where a small access road joins the two airstrips. The mock tower is sited in the vertex of the imaginary extended angle formed by the two airstrips coming together.

2. Conflicts with DZ Pheasant, TLZ Duck, TLZ Swallow, and Camp Davis North and South Runways.

3. Must be scheduled in RFMSS, signed for at Range Control and inspected by a Range Inspector upon completion of scheduled training. Scheduling of the Airfield Seizure Facilities does not constitute approval for use of the Camp Davis North/South Runways, the surrounding training areas, or landing zones. All areas must be scheduled separately in RFMSS.

4. MAG-26 and MAG-29, 2d MAW have scheduling priority use of the Camp Davis North/South Runways with the exception of Joint/Combined Exercises.

5. Blank firing/MILES devices will not be fired within a 300 meter buffer zone of any residential structure not part of the GRSA Complex. Firing blanks from vehicle-mounted weapons is authorized. All brass, links, ammunition dunnage, etc. must be policed up upon training completion due to possible FOD hazard to aircraft.

6. Vehicular movement is restricted to airfield taxiways and existing roads network only. Vehicles (tracked and wheeled) are not authorized on the runways.

7. Fighting holes are authorized within the scheduled training areas only and must be filled/leveled out prior to departure. All engineered structures erected for training require prior approval from Base EMD and MCB Range Control.
8. Pyrotechnics (all) are not authorized in the GSRA Complex. Red star clusters and red smoke grenades are authorized outside of structures for emergency/safety purposes only if placed in a container or an area that will not catch on fire.

9. Final range coordination brief will be conducted with Range Control and the Range Inspectors at Building SR-46 prior to occupying and conducting any training in the Camp Davis, Airfield Seizure Facilities.

10. Night use is authorized; night vision devices are authorized.

11. Class 3b and Class 4 LASERs are not authorized at the Camp Davis, Airfield Seizure Facilities, taxiways, or the runways.

12. Bivouacking is authorized in the scheduled training areas only. Bivouacking in the buildings/structures is not authorized.

13. Unit using SESAMs must have all the live fire requirements in place, enforced, and supervised; MCB Range Safety Card carried by Range OIC/RSO, corpsman, government safety vehicle, 30 minute radio checks, safety brief for all hands conducting the training with SESAMS weapons and ammunition, proper SESAMS safety equipment being used. Units must be well versed in all of the safety requirements and rules of engagement for SESAMS. Using unit will place road guards to secure the 150 meter SDZ for SESAMS.

14. Units are not authorized to modify any buildings or add firing points or spider/mouse holes.

15. The using unit will remove all communication wire, concertina wire, and other obstacles added to this area/complex.

**Other Considerations**

1. Request for Camp Davis, Airfield Seizure Facilities must be scheduled through RFMSS ten (10) working days prior to the first day of training. Only those units who schedule and check out the facility are authorized to use the Camp Davis, Airfield Seizure Facility.
2. A request to conduct day/night blank fire and maneuver exercise must be scheduled through Range Control ten (10) working days prior to the first day of training.

3. Requests to use eye safe LASERs (Class 1, 2, 3B) must be at Range Control ten (10) working days prior to the first day of training.

4. A request for runway or surrounding training areas must be in RFMSS ten (10) working days prior to the first day of training. Units must with MAG-26 and MAG-29 for runway use followed by an email deconflicting use from each MAG to Range Scheduling.

5. Warming fires, if authorized by the MCB Range Control Officer, will not be set within the buildings or within 50 meters of the buildings/structures.

6. Civilians are not authorized in the Camp Davis, Airfield Seizure Complex unless authorized by the Range Control Officer.

7. Rappelling from windows of the buildings/structures is not authorized.

Special Instructions

1. Be familiar with Chapter 5, Appendix C and Appendix H of this SOP.

2. A GSRA Complex, Appendix from this RCD SOP, a map overlay indicating the training areas and the current road guard placements and gate closures will be provided during the final coordination brief at Range Control.

3. POVs are not authorized in Camp Davis area or the adjacent tank trails. The designated POV parking area is located at Camp Davis South Runway on the parking ramp area only near the entrance road.

4. During night training exercises, blackout-driving procedures will be in effect for all vehicles operating within the Camp Davis, Airfield Seizure Facilities, taxiways, and runways.

5. Range OIC/RSO will be responsible for any required gate closures or any required road guard placements. All road guards will have and maintain internal communication with the Range OIC/RSO while training is being conducted. Due to the size of
the training areas where encroachment could occur the road guards must be particularly vigilant for intruders circumventing their checkpoints.

6. Safety vehicle and corpsman must be present prior to commencing any training.

7. All non-participating or observing personnel will remain outside of the training facility.

8. The using unit is responsible for a detailed police call of all facilities when training is completed. The unit will ensure the removal of all brass, links, ammunition dunnage, tactical wire, wood, and scrap metal from the training area. Brass, links, ammunition dunnage etc must be policed up due to FOD concerns; the using unit must conduct a FOD walk down during daylight hours on all runways, taxiways, and landing zones used during the training exercise.

9. Camp Davis, Airfield Seizure Facilities and the scheduled training areas must be inspected and cleared by a Range Inspector prior to departing. Range OIC/RSO will complete and submit a range report upon completion of training and turn-in of facility. Report all maintenance problems to Range Control, a range inspector, via an ICE comment.
RANGE NAME: Area 5 Training Tank

DESCRIPTION: Indoor Training Tank
124 feet long and 61 wide.
Pool depth, 4 feet to 11 feet.
Three platforms: Two (2) are 8 feet tall and one (1) is 15 feet tall.

PRIMARY RANGE USE: Swim Qualification
MCWST Qualification/Re-qualification
Combat Water Survival Training

ALTERNATE RANGE USES:
1. Navy/USMC PRT
2. Water Rescue Drills
3. Red Cross Certificate Training
4. MCWIS Screening
5. Pre-MCWIS Training
6. Dive Equipment Operational Testing
7. Unit’s Indoctrination
8. Unit’s Pre-Scuba
9. Unit’s Pre-Screening
10. Unit’s Para-Training (Water Phase)
11. MCCS Recreational Swimming
12. Swim Teams

LOCATION: Area 5 Training Tank:
J. C. Smith Blvd, Bldg 540
(Grid 853368)

PRIMARY DIRECTION OF FIRE: N/A

WEAPONS ACCOMMODATED: Rubber Rifles
(Unit must provide them)

AMMUNITION AUTHORIZED: N/A

FACILITIES:
2 Heads (Male and Female)
2 Locker Rooms (Male and Female)
Outside Covered Bleachers/Classroom
(Available through S-3 10th Marines)
POV Parking: 10th Marines parking lot. No parking on grass.

UTILITIES AVAILABLE: Electricity/Lights: Yes
Water System: Yes

**INSTALLED COMMUNICATIONS:**
Area 5 Training Tank: 451-2027
Area 5 Training Tank has a “Red Phone” in a box near the pool itself which is connected directly to 911 for emergency use.

**AREA SUITABILITY**
Company/Platoon

Range Use Restriction/Comments/Conflicts

**NOTE:** Person in Charge/RSO and Corpsman must be present at the training tank at all times during training and at no time will they participate in the training event.

1. The Area 5 Training Tank normal hours of operations are 0730-1630 Monday through Friday. The Area 5 Training Tank will be closed for maintenance the 2d Tuesday of each month. Area 5 Training Tank is normally used after working hours for the Camp Lejeune Swim Team and the local High School Swim Teams when in season and requested through MCB S-3. Training outside the normal operating hours will be considered by submission of an e-mail Special Range Request to Range Control Operations Officer. Special Range Request must be submitted at least 10 working days in advance.

2. Area 5 Training Tank must be scheduled via RFMSS and signed for by the unit’s certified and current (CO Certification Letter) Person in Charge/RSO (E-6 or above) that is swim qualified and the unit MCIWS/MCITWS (E-4 or above) at MCB Range Control no later than 1200 the day before the event or up to five (5) days in advance. Person in Charge/RSO may only be changed out by having the new person sign the contract at Range Control during normal working hours or the unit submission of a list designating multiple Persons in Charge/RSOs for multiple days of training.

3. Each unit will ensure that there is a corpsman that is CPR qualified, first aid kit and must have oral resuscitator, neck brace, spine board, and blanket. In case of emergency call BLACKBURN at 451-3064 of 451-4449 and BLACKBURN will call 911 for an ambulance and medical assistance or use the red phone fist and then BLACKBURN. Using unit will provide name of patient, type of injury, location of patient, patient age, sex, and blood type, and rank.
4. Each unit is required to have a government safety vehicle and corpsman on station during all training with all of the necessary safety equipment required by the current MCO 1500.52 and all other required directives.

5. All units will ensure that there is the required number of MCIWS/MCITWS on hand per the current edition of MCO 1500.52 to conduct the necessary training.

6. Person in Charge/RSO/MCIWS/MCITWS will fill-in the Training Tank Log Book with the following, (1) Times Open/Closed. (2) Unit: Arrives and Departs. (3) Number of Personnel Trained. (4) Any and all unusual circumstances that occurred during training tank use. (5) Unit Point of Contact, Name and Phone Number. Person in Charge/RSO will call BLACKBURN when occupying the training tank.

7. Once training is completed the Person in Charge/RSO/Senior Person will contact BLACKBURN via phone (451-3064) and report number of personnel trained.


9. Units conducting training in the Area 5 Training Tank will conduct a police call of the entire training tank deck/area and remove all trash to include a police call of the parking lot and around the building. The facility operator will provide trash bags as required.

10. The Area 5 Training Tank will be inspected by the facility staff prior to the unit departing with a signature on the check-out sheet which will be returned to Range Control as proof that the training tank has been inspected and cleared. If after working hours the Person in Charge/RSO must return the key, to be properly cleared from the facility and receive a signature from the facility staff on the check-out sheet the next working day which will be returned to Range Control as proof that the training tank has been inspected and cleared.

11. During Thunderstorm Conditions, the using unit will be allowed to remain in the training tank unless lightning is seen or thunder is heard (Thunderstorm Condition I). If that occurs,
the unit will be required to get out of the water and depart the training tank for 30 minutes or longer.

Other Considerations

1. There will be no eating, drinking, smoking, chewing, dipping, or spitting in the training tank area. Unit leaders must enforce this policy during the scheduled training.

2. Anyone caught expectorating, urinating, or contaminating the training tank or the deck will cause that individual and his/her unit to be removed from the training facility and all training will be secured.

3. Using unit should screen Health Records before coming to the training tank. Personnel with any of the following problems will not be allowed in the training tank.

   a. Fever.

   b. Inflamed eyes, nasal, or ear discharge.

   c. Any communicable diseases, open lesion, or open wound/cuts.

   d. Evidence of a skin disease or anyone wearing a bandage of any kind.

   e. Personnel with smallpox vaccinations cannot enter the pool until the scab has naturally fallen off.

4. All vehicles are required to park in the 10th Marines Parking Lot. Using units will not park any vehicle on the grass or along the J.C. Smith Blvd.

5. The outdoor classroom next to the Area 5 Training Tank belongs to the 10th Marines and must be scheduled accordingly with them. Police of this area is the using unit responsibility.

Special Instructions

1. Area 5 Training Tank is scheduled and used 1700 to 2000 daily for swim team and MCCS swimming. Military units have priority if their training requires them to schedule the training tank during Swim Team or MCCS recreational swimming time. Unit must submit e-mail Special Range Request at least 10
working days in advance and have approval from Range Control prior to conducting training to ensure proper deconfliction.

2. When unit training requires swimming in combat boots and/or 782 gear, the unit will ensure such items are clean of mud and dirt before entering the training tank. All personnel wearing the required gear and equipment must shower with the gear and equipment on prior to entering the training tank. Unit must ensure each individual has removed all items from uniform pockets prior to entering the training tank.

3. Prior to entering or re-entering the training tank, all personnel will take a shower.

4. There will be no diving from the platforms/tower. No rigging of ropes or rope bridges in the training tank area is authorized.

5. All non-swimmers will remain in the shallow end of the training tank with the required safety personnel (MCIWS/MCITWS).

6. No more than 100 individuals (total) are allowed in the training tank area at any one time.

7. There will be no playing, no horse playing, and no running in the training tank area. Unit MCIWS/MCITWS is responsible for the conduct of their Marines/Sailors. Anyone violating training tank rules will cause their unit to be removed from the training tank.

8. Dive casualties and injuries will be referred to the Naval Hospital, Camp Lejeune by contacting 911 to request an ambulance. While waiting for the EMT response, the senior diving EMT will identify and evaluate the patient for turnover to the Base EMT.

9. All complaints relating to the training tank or facility operators should be brought the attention of Operation Chief of Range Control at 451-5803 or BLACKBURN at 451-3064/4449.

10. Smoking is authorized only in the designated areas.

11. The Area 5 Training Tank will not be scheduled for unit PT events.
RANGE NAME: Courthouse Bay Training Tank

DESCRIPTION: Indoor Training Tank
109 feet long and 45 feet wide.
5 feet to 13.6 feet deep.
3 platforms at 10, 13 and 16 feet.

PRIMARY RANGE USE: Swim Qualification
MCWST Qualification/Re-qualification
Combat Water Survival Training

ALTERNATE RANGE USES:
1. Navy/USMC PRT
2. Water Rescue Drills
3. Red Cross Certificate Training
4. MCWIS Screening
5. Pre-MCWIS Training
6. Dive Equipment Operational Testing
7. Unit’s Indoctrination
8. Unit’s Pre-Scuba
9. Unit’s Pre-Screening
10. Unit’s Para-Training (Water Phase)
11. MCCS Recreational Swimming

LOCATION: Building Number BB-330 on Poe Street, Courthouse Bay. Grid, 833295

WEAPONS ACCOMMODATED: Rubber Rifles & Pistols
(Unit Must Provided)

ammunition authorized: N/A

facilities: Heads (1 Male and 1 Female)
Lockers Room (1 Male and 1 Female)
POV Parking: Lot next to Training Tank

utilities available: Electricity: Yes
Lights: Yes
Water System: Yes

installed communications: Yes. Phone Number: 440-6005/6006
Red Phone: Direct Line 911

area suitability: Company/Platoon
Range Use Restriction/Comments/Conflicts

NOTE: Person in Charge/RSO and Corpsman must be present at the training tank at all times during training and at no time will they participate in the training event.

1. The Courthouse Bay Training Tank normal hours of operation are 0730-1630 Monday through Friday. The Courthouse Training Tank will be closed in RFMSS for maintenance as required. Training outside the normal operating hours will be considered by submission of an e-mail Special Range Request to Range Control Operations Officer. Special Range Request must be submitted at least 10 working days in advance. Recreational swimming (MCCS Controlled) is available Mondays and Wednesday from 1130-1300 and Monday through Friday from 1700-2000.

2. Courthouse Bay Training Tank must be scheduled via RFMSS and signed for by the unit’s certified and current (CO Certification Letter) Person in Charge/RSO (E-6 or above) that is swim qualified and the unit MCIWS/MCITWS (E-4 or above) at MCB Range Control no later than 1200 the day before the event or up to five (5) days in advance. Person in Charge/RSO may only be changed out by having the new person sign the contract at MCB Range Control during normal working hours or the unit submission of a list designating multiple Persons in Charge/RSOs for multiple days of training.

3. Each unit will ensure that there is a corpsman that is CPR qualified, first aid kit, and must have oral resuscitator, neck brace, spine board, and blanket. In case of emergency call BLACKBURN at 451-3064 or 451-4449 and BLACKBURN will call 911 for an ambulance and medical assistance or use the red phone and then BLACKBURN. Using unit will provide name of patient, type of injury, location of patient, patient age, sex, and blood type, and rank.

4. Each unit is required to have a government safety vehicle and corpsman on station during all training with all of the necessary safety equipment required by the current edition of MCO 1500.52 and all other required directives.

5. All units will ensure that there is the required number of unit MCIWS/MCITWS on hand per the current edition of MCO 1500.52 to conduct the necessary scheduled and signed for training.

6. Person in Charge/RSO/MCIWS/MCITWS will fill-in the Training Tank Log Book with the following, (1) Times Open/Closed, (2) Unit: Arrives and Departs, (3) Number of Personnel Trained, (4)
Any and all unusual circumstances that occurred during training tank use, (5) Unit Point of Contact, Name and Phone Number. Person in Charge/RSO will call BLACKBURN when occupying the training tank.

7. Once training is completed the Person in Charge/RSO/Senior Person will contact BLACKBURN via phone (451-3064) and report number of personnel trained.


9. Units conducting training in the Courthouse Bay Training Tank will conduct a police call of the entire training tank deck/area and remove all trash to include a police call of the parking lot and around the building. The facility staff will provide trash bags as required.

10. The Courthouse Bay Training Tank will be inspected by a facility staff prior to the unit departing with a signature on the check-out sheet which will be returned to Range Control as proof that the training tank has been inspected and cleared. If after working hours the Person in Charge/RSO must return the key, to be properly cleared from the facility and receive a signature from the facility staff on the check-out sheet the next working day which will be returned to MCB Range Control as proof that the training tank has been inspected and cleared.

11. During Thunderstorm Conditions, the using unit will be allowed to remain in the training tank unless lightning is seen or thunder is heard (Thunderstorm Condition I). If that occurs, the unit will be required to get out of the water and depart the training tank for at least 30 minutes or as directed.

Other Considerations

1. There will be no eating, drinking, smoking, chewing, dipping, or spitting in the training tank area. Unit leaders must enforce this policy during the scheduled training.

2. Anyone caught expectorating, urinating or contaminating the training tank or the deck will cause that individual and his/her unit to be removed from the training facility and all training will be secured.
3. Using unit should screen Health Records before coming to the training tank. Personnel with any of the following problems will not be allowed in the training tank.

   a. Fever.

   b. Inflamed eyes, nasal or ear discharge.

   c. Any communicable diseases, open lesion or open wound/cuts.

   d. Evidence of a skin disease or anyone wearing a bandage of any kind.

   e. Personnel with smallpox vaccinations cannot enter the pool until the scab has naturally fallen off.

4. All vehicles are required to park in the Courthouse Training Tank facility parking lot only. Using units will not park any vehicles on the grass or other unit parking lots.

5. The outdoor recreation area next to the Courthouse Bay Training Tank belongs to the facility manager/staff and must be scheduled accordingly and signed for. Police of this area is the using unit’s responsibility and must be inspected after being used.

Special Instructions

1. Courthouse Bay Training Tank is scheduled and used 1700 to 2000 daily by MCCS for recreational swimming. Military Units have priority if their training requires them to schedule the training tank during MCCS recreational swimming time. Using units must submit e-mail Special Range Request at least 10 working days in advance and have approval from MCB Range Control prior to conducting training to ensure proper deconfliction.

2. When unit training requires swimming in combat boots and/or 782 gear, the unit will ensure that such items are clean of mud and dirt before entering the training tank. All personnel wearing the required gear and equipment must shower with gear and equipment on prior to entering the training tank. Unit must ensure each individual has removed all items from uniform pockets prior to entering the training tank.
3. Prior to entering or re-entering the training tank, all personnel will take a shower as required/directed.

4. There will be no diving from the platforms/tower. No rigging of ropes or rope bridges in the training tank area is authorized.

5. All non-swimmers will remain in the shallow end of the training tank with the required safety personnel (MCIWS/MCITWS).

6. No more than 100 individuals (total) are allowed in the training tank area at any one time.

7. There will be no playing, no horse playing, and no running in the training tank area. Unit MCIWS/MCITWS is responsible for the conduct of their Marines/Sailors. Anyone violating training tank rules will cause their unit to be removed from the training tank.

8. Dive casualties and injuries will be referred to the Naval Hospital, Camp Lejeune by contacting 911 to request an ambulance. While waiting for the EMT response, the senior diving EMT will identify and evaluate the patient for turnover to the Base EMT.

9. All complaints relating to the training tank or facility operators should be brought the attention of Range Control Operations Chief of Range Control at 451-5803 or BLACKBURN at 451-3064.

10. Smoking is authorized only in the designated areas as directed by the training tank staff.

11. The Courthouse Bay Training Tank will not be scheduled for unit PT events.
RANGE NAME: EOD-1

DESCRIPTION: Explosive Ordnance Disposal Range (G-10 Impact Area)

PRIMARY RANGE USE: EOD Range

STATUS: Active

LOCATION: G-10 Impact Area (Grid 934337)

PRIMARY DIRECTION OF FIRE: N/A

WEAPONS ACCOMMODATED: None

AMMUNITION AUTHORIZED: Dynamite
C-4 Demolition Charge
TNT Demolition Charge
Detonation Cord
Data Sheet
Electrical Impulse Cart .50cal (blank)
Cartridge 12 gauge Lock Buster
Cartridge 12 gauge 00 Buck
15 lb Shape Charge
40 lb Cratering Charge
Flex Linear Shape Charge 30 grain per foot up to 600 grain per foot
EOD device EXROD Mk 23 and Mk 24

FACILITIES:
Head Facilities: None
POV Parking: None
Range House: None
Range Table: None
Down Range Bunker: 1

UTILITIES AVAILABLE:
Electricity: No
Lights: No
Water System: No

INSTALLED COMMUNICATIONS: None

AREA SUITABILITY: Explosive Ordnance Disposal Platoon
Range Use Restriction/Comments

1. Demolition charges will not be more then Net Explosive Weight (NEW) of 50 pounds for a single charge on EOD Site 1.

2. EOD operations will cover a variety of U.S. and foreign munitions as scheduled or as required.

3. Operations will include but are not limited to rendering ordnance safe, training with live ordnance items, destruction of small arms ammunition (.50 cal and smaller), inerting and/or disassembly of ordnance items and demolition of Class V material/ammunition.

4. Maneuver is not authorized on this range.

5. Night use is authorized.

6. LASERs devices are not authorized.

7. Access roads will be barricaded or road guard will be placed out.

Special Instructions

1. Fly a red range flag and maintain barricades on all road access points while this range is being used.

2. The Marine Corps Base EOD Officer controls access to and operations of the range and must approve all other users/units.

3. Authorized EOD personnel may destroy hazardous/unsafe ordnance items from 0600-2400 daily as directed. EOD must coordinate with BLACKBURN prior to destroying items.

4. Be familiar with the contents of this entire Range Control SOP.
RANGE NAME: EOD-2

DESCRIPTION: Explosive Ordnance Disposal Range (Verona Loop Area)

PRIMARY RANGE USE: EOD Range

STATUS: Active

LOCATION: Verona Loop Area (Grid 817366) Training Area KD

PRIMARY DIRECTION OF FIRE: N/A

WEAPONS ACCOMMODATED: None

AMMUNITION AUTHORIZED: Dynamite
C-4 Demolition Charge
TNT Demolition Charge
Detonation Cord
Data Sheet
Electrical Impulse Cart .50cal (blank)
Cartridge 12 gauge Lock Buster
Cartridge 12 gauge 00 Buck
15 lb Shape Charge
40 lb Cratering Charge
Flex Linear Shape Charge 30 grain per foot up to 600 grain per foot
EOD device EXROD Mk 23 and Mk 24

FACILITIES:
Head Facilities: Portajohn
Down Range Bunker: Yes
POV Parking: None
Range Table: 2
Range Shed: 1

UTILITIES AVAILABLE:
Electricity: Yes
Lights: Yes
Water System: Yes (Non-potable)

INSTALLED COMMUNICATIONS:
Telephone: No
Range Use Restriction/Comments

1. Demolition charges will not be more then Net Explosive Weight (NEW) of 20 pounds for a single charge on EOD Site 2.

2. EOD operations will cover a variety of U.S. and foreign munitions as scheduled or required.

3. Operations will include but are not limited to rendering ordnance safe, training with live ordnance items, destruction of small arms ammunition (.50 cal and smaller), inerting and/or disassembly of ordnance items and demolition of Class V material/ammunition.

4. Maneuver are not authorized on this range.

5. Night use is authorized.

6. LASERs devices are not authorized.

7. Access roads will be barricaded or road guard are placed out.

Special Instructions

1. Fly a red range flag and maintain barricades on all road access points while range is being used.

2. The Marine Corps Base EOD Officer controls access to and operations of the range and must approve all other users/units.

3. Authorized EOD personnel may destroy hazardous/unsafe ordnance items from 0600-2400 daily as scheduled or directed. EOD must coordinate with BLACKBURN prior to destroying items.

4. Be familiar with the contents of this entire Range Control SOP.
RANGE NAME: CS CHAMBER/CBRN Obstacle Course

DESCRIPTION: M40 Series Field Protective Mask Qualification Area

PRIMARY RANGE USE:
1. M40 Series FPM Qualification
2. CBRN Defense Refresher Classes

ALTERNATE RANGE USES:
1. Decontamination Training Area
2. CBRN Confidence Course
3. CBRN Annual Training

STATUS: Active

LOCATION:
Grid Coordinate: 87653879
Bldgs 934 and 935 on Sneads Ferry Road.

PRIMARY DIRECTION OF FIRE: N/A

WEAPONS ACCOMMODATED: N/A

AMMUNITION AUTHORIZED:
CS Riot Control Capsules K765
CS Riot Control Grenades G963
CS Riot Control Canister G924

TARGETS/SIMULATORS/ DEVICES: N/A

FACILITIES (Number of each):
Head Facilities: 5 Port-a-ohns
Range Office: 1
Classrooms: 2
CS Chambers: 2
POV Parking: None

UTILITIES AVAILABLE:
Electricity: Yes
Lights: Yes
Water System: Yes

INSTALLED COMMUNICATIONS:
Telephone: (451-3518)

AREA SUITABILITY
2 Company Size Units at a time
Range Use Restrictions/Comments/Conflicts

General: The information below is summarized from the Standard Operating Procedures for MCB Camp Lejeune’s CS Chamber and CBRN Confidence Course, along with the current edition of MCO 3400.3F. Questions or problems should be referred directly to MCB CS Chamber personnel, 451-3518. The CBRN section of each unit requesting training will conduct all range scheduling. Unit CBRN personnel will contact the CS Chamber Staff directly for availability dates and times. If the range is available, a Training Area Request (TAR) is filled out and submitted directly to the CS Chamber within 48 hours of the desired training day. CS Chamber personnel will enter the TAR into RFMSS. To cancel, contact the CS Chamber and or Range Control within 2 working days prior to training.

CS Chamber Safety

1. A Range OIC/RSO, MOS 5711/5702, E-5 or higher, must be provided from the training unit. The ROIC/RSO and CS Chamber NCOIC will be responsible for the safe conduct of the CS Chamber and CBRN Trail operations at all times. The ROIC/RSO will ensure a thorough police call is held after completion of training. CS Chamber personnel will inspect the training area prior to clearing the unit.

2. The using unit will provide a safety vehicle and corpsman. Corpsman must have a resuscitator. The corpsman will be responsible for all medical questions and emergencies pertaining to training. The corpsman will also make the final determination for medical qualification of personnel to take part in the CS Chamber training.

3. Weather. Mission Oriented Protective Posture (MOPP) training and Confidence Course training can be compromised by WBGT readings of 90 degrees or higher. The decision to use/not use MOPP gear will rest with the unit’s Range OIC/RSO/Commander. CS Chamber operations can continue without MOPP gear if required.

4. Privately Owned Vehicles (POVs) are not authorized at the Camp Lejeune’s CS Chamber other than the unit CBRN members. The only appropriate means to and from the Gas Chamber are government tactical/commercial vehicles or the unit will hike to the CS Chamber. Operators of the transportation vehicles are not authorized to participate in CS Chamber training. Personnel are
not authorized to drive for one hour after CS chamber training or exposure to CS.

Range Personnel

1. The CS Chamber SNCOIC and the CS Chamber assistant are responsible for the safe operation of the CS Chamber at all times. They report directly to MCB Range Control Officer. Proper procedures will be followed and applied equally at all times to all units conducting training with no waivers/deviations. **Hazing in any form WILL NOT BE TOLERATED.** The CS Chamber SNCOIC and the CS Chamber assistant will ensure the following has been accomplished prior to any training being conducted.

2. The RSO has read and is in compliance with the SOP for use of the CS Chamber and CBRN Confidence Course.

3. The CS Chamber is charged 15 minutes prior to the scheduled use. It is charged with 7 CS capsules and will be recharged with 1 CS capsule per 10 personnel in order to maintain the appropriate training concentration. Maximum number of personnel authorized in the CS Chamber at one time is 40.

4. Each unit has received the safety brief covering the procedures for training and each Marine/Sailor is medically screened prior to participation. Disqualifying medical conditions are per MCO 3400.3F. Contact lenses **must** be removed prior to entry to the CS Chamber.

5. All personnel training in the CS Chamber will have a serviceable gas mask prior to entering the chamber. Units training at the CS Chamber must provide their own equipment.

6. **Full mask removal** while in the CS Chamber is at the discretion of the 5702 CBRN Officer/5711 CBRN Specialist of the training unit.

NBC Confidence Course

1. The Confidence Course is located directly behind the CS Chamber and it is approximately 2 km long. The course is designed to provide challenging ITS related tasks to Marines while under the physical and mental stress of MOPP gear. The course has 8 different obstacles and includes an infiltration section. Units are allowed to use CS Canisters/Grenades during this training. Use of machinegun/artillery simulators requires
separate correspondence via a special range request. Pyrotechnics such as smoke, flash-bangs, and trip flares are permitted. The unit CBRN personnel and safety NCOs will be required to do a walk through of the course with CS Chamber personnel on the working day prior to the training date. During this walk through, all safety and ORM requirements will be covered.

2. Logistics. To support this evolution the unit must supply the following items at a minimum.

   a. Three Safety Corpsmen with the capabilities to treat at least 3 casualties each:

   b. Two safety vehicles with drivers.

   c. Six, full, 5 gal water jugs.

   d. Hand held radios; one for RSO, one for each corpsman, one for the CS Chamber Admin office, and one for each Safety NCO/Team in training.

Special Instructions

1. Be familiar with Chapter 5 of this SOP, current editions of MCO 3400.3F, and MCO 1510.17B (ITS).

2. Bivouacking is not authorized on this range.

3. Digging is not authorized on this range.

4. No open warming fires are authorized on this range.

5. Range OIC/RSO will complete and submit a range report/ICE Comments upon completion of training and turn-in of range. Range must be inspected and cleared by CS Chamber prior to departing the range/training area. Report all maintenance problems to CS Chamber personnel or via ICE.

6. The government safety vehicle and corpsman with the required medical equipment must be present on the range prior to commencing any training.

7. The using unit is responsible for a detailed police call of the entire range complex, all facilities, and surrounding the training areas when training is completed and the CS Chamber Staff will inspect. The unit will ensure the removal of all
ammunition dunnage/trash from the range like the empty CS/smoke canisters and all other items.
RANGE NAME: G-10 Live Fire Convoy Range

DESCRIPTION: G-10 Convoy Operations Course

PRIMARY RANGE USE: Live Fire/Non-Live Fire Convoy Range

ALTERNATE RANGE USES:
1. Convoy Battle Drill Range
2. Convoy Quick Reaction Range
3. Convoy Counter Ambush Range
4. Convoy IED Reaction Course
5. Damaged Vehicle Recovery Operations
6. Vehicle Check Point Operations
7. Vehicle Escorting Operations
8. Blocked/Unblocked Convoy Ambush

STATUS: Active

LOCATION:
Site 3: OP-2        Grid 91653745
Site 4: OP-3        Grid 92803709

PRIMARY DIRECTION OF FIRE:
Site 3: Live Fire: (Completed)
        RLL 173 Mag, LLL 125 Mag
Site 4: Live Fire (Completed)
        RLL 198 Mag, LLL 175 Mag

WEAPONS ACCOMMODATED:
All Pistols .45 cal/9mm.
M16/M4 Rifle
M249 Squad Automatic Weapon
M203/M32 Grenade Launcher (TP Only)
M240B/G Machinegun
M2 .50 cal Machinegun
MK-19 Grenade Launcher (TP Only)
AT-4 M136 Trainer (9mm Only)
SMAW MK-153 (9mm/TP Rocket Only)
AAV .50 cal/40mm MK-19 Machinegun
M1-A1 Tank (.50 cal and 7.62mm Only)

AMMUNITION AUTHORIZED:
5.56 mm (ball/linked/tracers/blanks)
7.62 mm (ball/linked/tracers/blanks)
.50 cal (ball/linked/tracers/blanks)
40mm MK-19 (TP Only)
AT4  (9mm Only)
SMAW Rocket (9mm/TP Rocket Only)
Simulators, Arty
Smoke, Signaling Devices
Pyrotechnics

A-402
TARGETS/SIMULATORS/DEVICES
Target Description/Quantity:

Site 3: Far Ambush Site (Complete)
10 PITS Targets,
12 Building Fronts
Site 4: Near Ambush Site (Complete)
10 PITS Targets,
4 Building Fronts

FACILITIES (Number of each):
Head Facilities: None
POV Parking Area: None
Range Tower: None
Range Tables: None

UTILITIES AVAILABLE:
Electricity: No
Lights: No
Water System: No

INSTALLED COMMUNICATIONS: None

AREA SUITABILITY:
6 to 8 Vehicles per convoy.
2 to 3 Firing Vehicles per convoy.

Range Use Restrictions/Comments/Conflicts

Site 3: Live Fire, (OP-2) Highway 172 must be closed and road guards must be posted at 4 sites. The following training areas and ranges are closed: G-3 TOW, G-5, G-6 CBC, G-7, OP-2, OP-2 LASER, MP-3, MP-4, MP-8, ETA-4, EOD-1, GP-8, GP-10, GP-11, Freeman Creek Landing, TLZ Goose, Training Areas: GB, GC, GD, GE, GI, GH.

Site 4: Live Fire, (OP-3) Highway 172 must be closed and road guards must be posted at 4 sites. The following training areas and ranges are closed: G-3 TOW, G-5, G-6 CBC, G-7, OP-3, OP-3 LASER, MP-3, MP-4, MP-8, ETA-4, EOD-1, GP-8, GP-10, GP-11, Freeman Creek Landing, TLZ Goose, Training Areas: GB, GC, GD, GE, GI, GH.

1. G-10 Live Fire Convoy Addendum is published under separate correspondence; all using units will coordinate with Range Control to obtain a copy and must carry out, supervise, and enforce all other requirements listed in the Live Fire Convoy Addendum and this Appendix of this SOP.
2. All firing will impact within the G-10 Live Fire Convoy approved SDZs and G-10 impact area.

3. The AT-4 9mm or SMAW 9mm spotting rounds/SMAW Inert Practice Rocket are authorized. At no time will HEAT/HEDP live missiles be fired. Using unit will ensure back blast area is clear for all training rounds and rockets.

4. Live Fire and Maneuver is authorized at Site 3 and Site 4 only, limited down range movement within the buffer zone of the G-10 impact area is authorized. The limit of advance is no father then the first set of building fronts.

5. Using units will submit a Special Range Request to Range Control in accordance with Appendix J of this SOP at least 10 working days in advance before the scheduled convoy event. All units requesting a terrain drive/walk through for the G-10 Convoy Live Fire Range shall contact the Range Safety Specialist, Range Control Division at 451-1240 at least 5 working days in advance. Units conducting Live Fire Convoy Operations are required to submit a signed and reviewed ORM Worksheet with the required Special Range Request.

6. A drive/walk through and 2 dry fire rehearsals will be conducted for all live fire convoy operations and live fire maneuver (day and night). Rehearsals must be conducted under like conditions.

7. Night operations are permitted on this range. Night driving and night vision devices are authorized as long as they are in accordance with all required orders, references, and unit safety SOPs for nighttime driving.

8. Bivouacking is not authorized anywhere on this range complex. Unit must schedule a training area for bivouacking.

9. When conducting Live Fire Convoy Operations, the using unit must ensure the direction of fire is maintained within the approved SDZ for each of the live fire convoy sites.

10. Using units will schedule an additional half day for detailed police call of the sites, TLZs used, the gravel tank trails, range inspection, and environmental survey. All using units will police along the assigned tank trails used for both live fire and non-live fire training.
11. Range OIC/RSO will have red smoke and red pyrotechnic on this range/convoy course for emergency use to signal for all operations to cease.

12. All wheeled and tracked vehicle must stay on the tank trail; no off road vehicle movement is authorized.

13. All mortars will be registered before the scheduled live fire and movement event. Mortar live fire is only authorized from the scheduled/approved mortar positions. Mortars must fire at targets within the G-10 Impact Area and must not be used over the heads of the convoy force. **At no time will ground weapons be fired at the UCAS facility.**

14. No movement outside the assigned movement box is authorized.

15. No digging is authorized on the convoy course.

16. Only Practice (Blue) Hand Grenades are authorized on this range.

17. Each live fire convoy site will have its own approved LLL/RLL Signs and all live fire and effects of live fire must stay within the approved SDZ for that site. Overhead machinegun fire is not authorized. Each live fire convoy site will have a 4 by 4 wooden pole (Black and White) which will designate the start and stop firing lines.

18. Maximum speed on the Live Fire Convoy Range is 25 mph or as road and weather conditions will permit.

19. Range OIC/RSO will conduct a pre-fire weapons check before requesting to go “HOT”.

20. All tarps or overhead material on vehicles that could restrict visibility or firing from vehicles must be removed before running the range.

21. Live explosives or demolitions are not authorized for Improvised Explosive Devices (IED) on the convoy course unless a Special Range Request is submitted. IED training devices are authorized if requested.

22. All personnel will wear helmets, flak jackets, hearing and eye protection and other safety equipment as required.
23. MK-19 40mm machinegun crews are required to wear the ballistic goggles and meet all other safety requirements.

24. Range OIC/RSO will complete and submit a range report/ICE Comments upon completion of training and turn-in of the range and equipment.

25. Range OIC/RSO will ensure adequate numbers of safety personnel are assigned to each vehicle and maneuver element to control the exercise.

26. All non-participating or observing personnel will remain outside the range fan, on the north side of the tank trail, and at a minimum safe distance from the live fire training event.

27. Using unit will deconflict with all other units on road guard placement and assigned training areas.

28. The using unit is responsible for scheduling all of the surrounding training areas, landing zones, and live fire ranges as required to conduct convoy training.

29. Using units should avoid direct firing machineguns and MK-19 at the building facades/fronts to reduce the amount of damage to the structures. Tracer ammunition cannot be fired at the building facades due to the fire hazards.

Special Instructions

1. A red range flag will be flown at the entrance of the, OP-2 for Site 3, and OP-3 for Site 4.

2. Be familiar with the contents of Chapter 5 of this SOP, Appendix A, and the G-10 Live Fire Convoy Addendum.

3. It is the responsibility of the Range OIC/RSO to ensure all designated gates and barricades are secured, road guards are posted, flashing lights are turned on, and Highway 172 is secured. Road guards must be equipped with a radio operating on a unit frequency other than that of BLACKBURN’s 34.70 FM.

4. The using unit shall ensure that a search is made of the G-10 Live Fire Convoy Course areas, surrounding training areas, the and approved surface danger zones prior to commencing any live fire. Gates that are found to be unsecured must have verification that all persons and vehicles are cleared prior to
any live fire. Using units must be alert to POVs parked in unauthorized areas.

5. Communication between the Range OIC/RSO and designated PSOs must be maintained at all times.

6. Dud producing ordnance is not authorized on this range complex.

7. Vehicle mounted weapons systems are authorized. Free guns are not authorized unless listed in the SRR; otherwise all guns must be attached to the T&E mechanism.

8. If the using unit will be crossing Highway 172 in tactical formations, Base DPS will install a caution sign to slow down the traffic on request from the unit. All safety procedures for crossing paved roads during day and night must be carried out, enforced, and supervised by the unit.

   a. Road Crossing Guards must be posted at 50 meters during daylight hours, 100 meters at night from the crossing point in both directions. Road Crossing Guards must have a reflective vest on and a lighting system such as flashlight, strobe light, or chemical light.

   b. Vehicles must come to a complete stop, go admin from the tactical training event, and turn on all lights before crossing any paved road.

   c. If night vision devices are being used, they must be removed, all vehicle lights turned on, and the Driver/A Driver must look both ways to ensure the paved road is clear. All previously mentioned road crossing procedures apply.

9. The using unit will be responsible for Port-a-Johns if required or needed.

10. Range Control will provide a map with road guard positions to the using unit once the range is signed for.

11. Freeman’s Creek Landing gate must be secured. The road guard at this position must also be on the lookout for any and all vehicles that could be on or using Highway 172 and departing from the Freeman Creek and TLZ Goose areas.

12. Using units will ensure that all vehicle-mounted weapons are SL-3 complete. Units must supervise and enforce the (3)
THREE pins requirement for securing the weapon system and ammunition to the traversing device and with the ring mount.

13. Targets will not be relocated without MCB Range Control’s approval. Units are authorized to add additional targets as long as the location allows firing from all angles and all live fire and the effects of live fire remain within the SDZ of this range.

14. Range OIC/RSO must ensure all drivers are properly licensed to drive assigned vehicles.

15. All personnel will be trained and competent with the weapon, weapons system, ammunition, and vehicle they are employing/operating before conducting any live fire convoy operations.

16. After the Road Guards are posted the RSO will conduct an area sweep/search before requesting to go in a “HOT” status.

17. Firing from a moving vehicle is authorized on this range. Firing from the inside of wheeled and tracked vehicle is authorized as long as each firing vehicle has a Position Safety Officer (PSO) with communications to the Range OIC/RSO. Only (2) two vehicles with Marines firing from the vehicles are authorized at a time. The firing vehicles must be within the maneuver box and the vehicles must each have a position safety officer and communication with the Range OIC/RSO.

18. Report all range maintenance issues to Range Control, a Range Inspector, or via an ICE Comment.

19. Class 1, 2, and 3A LASERs are authorized on this range. Class 3B and 4 LASERs are not authorized on this range.
RANGE NAME: INTERMEDIATE SEARCH/TACTICAL SITE EXPLOITATION (ISTSE) FACILITY
(Search Houses)

Building Numbers CR-142/CR-143/CR-144


PRIMARY RANGE USE: Intermediate Search/Tactical Site Exploitation (ISTSE) Training

ALTERNATE RANGE USES: None

LOCATION: Grid Coordinate: 94103820

WEAPONS ACCOMMODATED: None

AMMUNITION AUTHORIZED: None

TARGETS/SIMULATORS/DEVICES: None

FACILITIES (Number of each): Head Facilities: MOUT Complex
Port-a-Johns: None
Bleachers: None
Range Tables: None
POV Parking Area: MOUT Office (Limited)
Military Vehicles: MOUT Complex
Bivouac Site: MOUT Complex

UTILITIES AVAILABLE: Electricity: Yes (Inside Only)
Lights: Yes (Inside Only)
Water System: No

INSTALLED COMMUNICATIONS: None

AREA SUITABILITY: Platoon/Squad
Range Use Restriction/Comments/Conflicts

NOTE(s):

This facility is for company/platoon/squad level leaders to become proficient in planning and conducting Intermediate Search/Tactical Site Exploitation (ISTSE) Operations in tasks to include search, evidence handling, and detainee operations at the initial point of capture (IPOC) and tactical questioning.

The (3) three 2-story ISTSE Search Houses conflict with G-3 TOW and can not be occupied during TOW Missile training.

The contractor for this training facility will provide (30) Thirty, (1) week courses. To schedule this facility all units will contact the contractor direct. POC for this training facility is a ISTSE Staff at 910-709-9674 during normal work days/hours.

1. The (3) three 2 story ISTSE Houses are located close to the MOUT Complex just off F-3/LZ Lark Road. It must be scheduled via RFMSS and signed for at Range Control by the ISTSE Staff at least by 1200 the day before or up to 5 days in advance of the scheduled training.

2. Upon arrival at the ISTSE Search House Facility, the unit will receive a general usage brief and safety brief to all hands conducting training from the ISTSE Staff. The brief will include the entire training facility and on all other rules and policies for this training facility set by ISTSE Staff.

3. After the initial briefs the Unit Leadership and the Staff will conduct a complete pre-training inspection of all three (3) ISTSE Search Houses.

5. Only those units scheduled by ISTSE Staff in RFMSS and checked out/signed for the ISTSE Search Houses, are authorized to conduct training inside this facility/Compound. “Piggybacking” is not authorized in the Search Houses unless prearranged with Range Control and the ISTSE Staff.

6. SESAMS and MILES 2000 equipment are not authorized within the ISTSE Search Houses/compound.

7. Unit leadership/non-participating corpsman/government safety vehicle with non-participating driver (strip map in vehicle)
must be physically present at the ISTSE Search Houses compound at all times while conducting training.

8. ISTSE Search Houses will only include the buildings in the fenced in compound and the designated search area outside the fence line.

9. CS, HC smoke, or any other types of colored smoke, pyrotechnics, trip flares, illumination and arty simulators /hand grenade diversionary/practice hand grenades/non-lethal ammunition are not authorized inside the ISTSE Search Houses or the compound.

10. Breaching Operations are not authorized on the doors and windows of the ISTSE Search Houses.

11. LASERs devices (all) are not authorized within the Search Houses.

12. Upon the completion of the training, the unit leadership will be cleared from the ISTSE Search Houses after inspection by the ISTSE Staff only. Each floor/room/roof must be inspected and cleared. All windows will be shut, all roof hatches shut and secured, lights and fans turned off and doors locked /secured. All outside gates will be shut and secured.

13. Report all maintenance issues to the ISTSE Staff and MCB Range Control as required.

14. The bathrooms and kitchens in the ISTSE Search Houses are not operational (non-usable) in this facility.

15. The ISTSE Staff and the using unit must have positive communications with BLACKBURN at all times during training.

**Special Instructions**

1. Do not deface the buildings, rooms, walls, furniture, rugs or any other structures/items within the ISTSE. The Unit Leadership and ISTSE Staff must report all damage so repairs can be scheduled as required. Using unit will be responsible for repairing any areas damaged due to negligence or unauthorized actions during the training event. Unit leaders must ensure disciplined training and must properly supervise the police of the buildings, all rooms and the surrounding areas in order to provide an excellent training site for the next unit.
2. POVs are not authorized in the fenced in area of ISTSE Search Houses unless approved by the ISTSE Search Houses Staff. POVs can only be parked (Limited Parking) at the MOUT Office after coordinating with the MOUT Complex Staff. Military vehicles are authorized to park over in the sandy area of the MOUT Complex only.

3. Civilians (Except authorized Role Players/contractors) are not authorized in ISTSE Search Houses unless specifically authorized by the MCB Range Control Officer and the ISTSE Staff.

4. Trenches or fighting holes will not be dug outside or in the surrounding training areas of the ISTSE Search Houses.

Other Considerations

1. Be thoroughly familiar with the contents of this Appendix, SOP, and all other required references.

2. Environmental Restrictions: Red-cockaded Woodpecker (RCW) habitat is south and north of the ISTSE Search Houses. Venus flytrap habitat is east of Mobile MOUT. See Chapter 6 of the Range Control SOP for details regarding RCW and Venus Flytrap restrictions.

3. All metal doors, windows, and gates will be shut and secured before the unit departs the ISTSE Search Houses.

4. Report all accidents and injuries to BLACKBURN ASAP.

5. Rotary wing aircraft are not authorized to land on the ISTSE Search Houses. Fast roping/rappelling to the roof from rotary wing aircraft is authorized if properly supervised by the unit HRST Master, signed for properly, and all safety requirements in place.

6. Tracked vehicles are not authorized in the fenced in compound of the ISTSE Search Houses and must stay on the primary road network (F-3/LZ Lark Road).

7. Bivouacking is not permitted in ISTSE Search Houses. Using unit must schedule the surrounding training areas or the MOUT bivouac site by coordinating with MOUT Complex Staff.

8. Warming fires are not authorized within the Search Houses compound.
9. Using units are not authorized to add firing points or spider/mouse holes to this Seach House complex.
RANGE NAME: G-10 URBAN CLOSE AIR SUPPORT FACILITY (UCAS) LEGO CITY

DESCRIPTION: G-10 Urban CAS Training Facility (UCAS)

PRIMARY RANGE USE: Urban Close Air Support FAC/JTAC Training

ALTERNATE RANGE USES: 1. Air to Ground Weapons
                          2. Rotary Wing Door Gunnery Range
                          3. Aerial Sniper Range (SRR Only)

STATUS: Active

LOCATION: G-10 Impact Area

PRIMARY DIRECTION OF FIRE: None

WEAPONS ACCOMMODATED: Fixed Wing Weapon Systems
                        Helicopter Weapon Systems
                        GAL 17/GAL 19
                        5.56mm/7.62mm Sniper Rifles

AMMUNITION AUTHORIZED: 7.62mm Machinegun Ammunition
                        .50 cal Machinegun Ammunition
                        5.56mm/7.62mm Sniper Ammunition
                        20mm (TP/TPT Only)
                        25mm (TP/TPT Only)
                        30mm (TP/TPT Only)
                        2.75 Rockets (TP Only)
                        MK76 Practice Bombs
                        BDU 33 (TP)
                        LASER Guided Training Round (LGTR)
                        (sub-cal)
                        Aircraft Illumination

TARGETS/SIMULATORS/DEVICES: Commercial Vehicles, Civilian Type Vehicles
                             Total Number of containers - 113
                             Numerous Man Size Targets

FACILITIES: None

UTILITIES AVAILABLE: Electricity: No
                      Lights: No
                      Water System: No
INSTALLED COMMUNICATIONS: None

AREA SUITABILITY

TACP/FAC/JTAC Training

The UCAS is defined by the following coordinates: 91143590, 91213593, 91533593, 91533574, 91363564, 91283564, and 91143569. The UCAS is defined as a No Fire Area for dud producing ordnance. Units will refrain from shooting dud producing ordnance within 150 meters from its boundaries.

Range Use Restrictions/Comments. The UCAS is a separate training facility within the G-10 Impact Area/R5306D Restricted Airspace and must be scheduled separately in RFMSS. Usage data must be reported separately from what was expended in the G-10.

1. HE filled fixed wing or rotary wing delivered ammunition is not authorized on this training facility. (Inert/Training Practice Ordnance Only).

2. OP’s 2, 3, and, 5 will serve the G-10 Impact Area/UCAS.

3. Maneuvers down range are not authorized into the G-10 Impact Area.

4. Night use is authorized if properly scheduled in RFMSS.

5. LASERs are authorized in accordance with Chapter 9 of this SOP and the LASER Range Certification/Survey.

6. LASER guided and unguided training practice bombs are authorized (Inert/Training Practice Sub-Caliber Only).

7. Only Type 1 CAS events are authorized in this facility.

8. This training facility is not equipped with a scoring system (WISS, NDBS, VIT, etc.).

9. The BDU 45 (TP) and larger MK-80 series TP Bombs are not authorized in the UCAS.

Other Considerations: Conflicts

1. Using G-10 UCAS will conflict with all active gun positions and mortar positions conducting live fire.

3. G-6 CBC, ETA-4, G-8, EOD-1

4. OP-2, OP-3, OP-5 LASER events

5. All F Ranges Live fire events (F-2, F-4, F-5, F-18, F-18 .50cal, F-25T

6. LZ Falcon Parachute Ops, Lyman Road Exercises

7. TLZ Tern, TLZ Penguin, TLZ Raven, TLZ Pigeon, TLZ Swan, TLZ Woodpecker.

Special Instructions

1. **Rotary Wing Aircraft.** Use the procedures for Holding Area Nancy and Battle Position Newt as listed in paragraph 5, G-10 Impact Area, Appendix B of this SOP.

2. **Fixed Wing Aircraft**

   a. Fixed Wing Aircraft must use IPs and run-in headings as contained in Chapter 8 of this SOP.

   b. Authorized ammunition is MK76, BDU-33, and MK-80 series inert bombs, LASER Guided Training Round (sub-cal), 2.75 inch rockets, 20mm (TP/TPT), 25mm (TP/TPT), 30mm (TP/TPT) delivered at 20 degrees or greater dive angle.

   c. The minimum altitude from the Initial Point (IP) to the Pop-Up-Point (PUP) is 1000 feet AGL outside the base boundary and 700 feet AGL within the boundary.

   d. AC-130 aircraft are not authorized to fire the 105mm cannon or any live ammunition at the Urban CAS Facility. AC-130 aircraft just fire outside of the UCAS No Fire Area (NFA) in the G-10 Impact Area.
APPENDIX B

IMPACT AREAS

1. General. There are three main impact areas aboard Camp Lejeune: N-1/BT-3, G-10, and K-2. G-10 and K-2 are the only impact areas designated where dud-producing ordnance and training practice ordnance can be fired. N-1/BT-3 is restricted to only non-dud producing ordnance. No personnel will enter a designated impact area aboard MCB Camp Lejeune without approval from the RCO and an Base EOD support to escort them. For the purpose of constructing an SDZ/WDZ, all buffer, and ricochet areas, will be contained within the impact area. Impact area and range boundaries are marked with red warning signs: Danger Impact Area Keep Out. BLACKBURN controls all live fire into all impact areas aboard MC Base Camp Lejeune.

2. Unserviceable Ammunition and Explosives Disposal Training Areas. The G-10A and K-2A unserviceable ammunition and explosives disposal training areas within the G-10 and K-2 impact areas are authorized for use to support established training in the disposal of unserviceable ammunition and explosives. Chapter 3 of this SOP provides scheduling procedures.

3. Impact Areas

<table>
<thead>
<tr>
<th>IMPACT AREAS</th>
<th>LOCATION:</th>
<th>PRIMARY USE OR DESCRIPTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-1/BT3</td>
<td>Southeast Corner of MCB Camp Lejeune, Live Fire Riverine Training</td>
<td>B-1</td>
<td></td>
</tr>
<tr>
<td>G-10</td>
<td>Center of MCB Camp Lejeune East of the New River Training Range</td>
<td>B-9</td>
<td></td>
</tr>
<tr>
<td>K-2</td>
<td>Center of MCB Camp Lejeune West of the New River Training Range</td>
<td>B-25</td>
<td></td>
</tr>
</tbody>
</table>

4. N1/BT-3 Impact Area

<table>
<thead>
<tr>
<th>IMPACT AREA:</th>
<th>N-1/BT-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>DESCRIPTION:</td>
<td>Bomb and Target Range (AKA Brown’s Island)</td>
</tr>
</tbody>
</table>
**PRIMARY RANGE USE:** Live Fire Riverine Familiarization Range

**ALTERNATE RANGE USES:**
1. Air to Ground Weapon (TP)
2. Field Artillery Direct Fire Range (G-7)
3. Helicopter and tiltrotor Gunnery Range
4. Machinegun Mounted on Boats Familiarization Range

**STATUS:** Active

**LOCATION:** South-East Corner of MCB Camp Lejeune

**PRIMARY DIRECTION OF FIRE:** 168 degrees magnetic

**WEAPONS ACCOMMODATED:**
- All Pistol
- All Shotguns
- All Rifles
- All Machineguns
- MK19 40mm
- LAR Chain Gun
- Helicopter and tiltrotor Weapons
- Aircraft Bombs
- M777A1/A2 (G-7 Only)

**AMMUNITION AUTHORIZED:**
- All Pistol
- All Shotguns
- All Rifles
- All Machineguns
- 20mm (T)
- 25mm (TP-T and APDS-T)
- 30mm (TP-T)
- 40mm (TP)
- 2.75 inch Rocket (TP/Illum)
- MK76 Practice Bomb
- MK80 Series Bombs (Inert)
- M781 Practice Round or M576
- 155mm HE (G-7 Only)

**TARGETS/SIMULATORS/DEVICES:** Hard Targets

**FACILITIES (Number of each):** None

**UTILITIES AVAILABLE:**
- Electricity: No
INSTALLED COMMUNICATIONS: None

AREA SUITABILITY: Company

a. Range Use Restrictions/Comments/Conflicts

   (1) Projectiles will not be fired to impact within 200 meters of the AIWW.

   (2) HE aircraft bombs/rockets are not authorized.

   (3) Observation Posts, Bear Tower and Onslow North Tower, serve N-1/BT-3.

   (4) No class 3B and 4 Lasers are authorized.

   (5) Safety Restrictions: AIWW must be closed during firing.

   (6) Bear Tower and Onslow Beach North Tower must be scheduled in RFMSS, signed for and manned prior to firing.

   (7) An aerial sweep of this area must include a sweep for people, small water craft, and marine mammals in the AIWW. It must be conducted before live firing.

   (8) Chapter 6 discusses the rules for avoiding marine mammals in a water impact area.

   (9) Maneuver Area Restrictions: No maneuvers authorized in this impact area due to the fact that this is an old duded range. Units that require target emplacement to conduct training/live-fire on this range must request EOD support.

   (10) Night use is authorized if properly scheduled.

   (11) Navy Guard Boats will be provided by RCD upon approval of scheduled event in RFMSS.

b. Other Considerations: None

c. Special Instructions:
(1) Firing into the N-1/BT-3 Impact Area must be scheduled through RCD scheduling 1 calendar month in advance of the first day of firing to allow for publication of a Notice to Mariners and request for air sweeps. Requests received less than 1 calendar month in advance will not be approved. See Appendix A for E-1, H-1, G-5, G-7.

(2) Be familiar with the contents of Chapter 5 of this SOP and this Appendix.

(3) Display warning signals from the Onslow Beach North and Bear range tower flag poles before firing and until the range is cleared cold. Red Range Flags will be flown during daylight and flashing red lights will be used from sunset to sunrise.

(4) Position range guards with radio and binoculars (NVGs for night firing) at least one half hour prior to the aerial search to serve as air/water sentries in Bear Creek and Onslow Beach North Tower. Guards are to promptly notify the ROIC or FAC before a vessel or aircraft not engaged in the exercise penetrates the surface danger zone. Sectors of observation are: Bear Creek Tower 58 degrees to 223 degrees magnetic and Onslow Beach North Tower 35 degrees to 235 degrees magnetic.

(5) Firing will cease if Range Flags or flashing lights are lowered or extinguished for any reason.

(6) Projectiles will not be fired to impact within 200 meters of the AIWW.

(7) The using unit will ensure that a visual search has been made of the target complex, AIWW, inlets, marshes, dunes and that the guard boats are in position half an hour prior to firing to ensure that the area is safe. The FAC may use his aircraft as appropriate in conducting the aerial search immediately prior to aircraft firing exercises.

(8) The RSO is required to have positive and continuous communications with tower guards, the ROIC, guard boats and the BLACKBURN.

(9) **Air Operations**

(a) Fixed wing aircraft must use control points/IP’s and run in headings as contained in Chapter 8 of this SOP.
Authorized ammunition is MK76 and MK80 series inert bombs and 2.75-inch rockets TP, 20mm TP, 25mm TP, 30mm TP delivered at 20 degrees or greater dive angle.

(b) Helicopter and tiltrotor aircraft headings are 170 to 190 degrees magnetic. Unless specifically authorized by the ROIC, the ordnance release point will be south of the AIWW. Authorized ammunition is 2.75 inch TP rockets, 7.62 mm, .50 caliber, and aerial gunnery with 20mm TP, 25mm TP, and 30mm TP.

(c) A line 800 meters from the seaward shore south of the AIWW is designated as a permanent bomb line, beyond which aircraft ordnance may not be impacted.

(d) Close air support operations will be under the positive control of a FAC or the Air Control Agency. The FAC/Air Control Agency must inform aircraft performing missions of gun positions, ranges, and training areas adjacent to N-1/BT-3 that are occupied.

(e) During nighttime close air support operations (helicopters, tiltrotors, and fixed wing), when weather conditions are below a 2000 foot ceiling and five miles visibility (3000 feet and 5 miles for fixed wing with ordnance), or when range guards cannot visually observe waterborne traffic in the AIWW or seaward for 1000 meters, aircraft firing or bombing exercises will not be permitted without continuous lighting by flares (or other measures approved by the BRCO) to ensure no vessels enter the surface danger zone.

(10) Forward Air Controller (FAC)/Joint Terminal Attack Controller (JTAC)

(a) Any air operation involving aircraft live firing or bombing close air support or combined air/ground exercises requires positive control of aircraft by a FAC/JTAC. The FAC/JTAC may be on the ground or a FAC airborne FAC(A). The term FAC (ground or airborne) is used synonymously with the terms JTAC and ROIC of firing regarding these safety regulations for the rest of this publication.

(b) FAC, air control agency, artillery RSO and FO are required to report to the BLACKBURN for the range face-to-face checkout briefing.
(c) The FAC will notify BLACKBURN immediately after the last aircraft has cleared the area so the temporary fire suspension may be lifted for ground units, if in effect.

(d) The FAC (if employed on the ground), will be positioned in Bear tower with artillery RSO and FO.

(11) Range Control air requirements for FAC(A)

(a) These procedures are only for squadron specific CAS and FAC(A) training when no ground units are involved. Working CAS or SIMCAS with ground units will require standard ROIC, RSO, FAC, JTAC, DASC, G-10 Helo, G-10 Fixed, and G-10 Helo/Fixed procedures through the ground unit.

(b) Scheduling. Squadrons submit request for the range airspace (N-1/BT-3, G-10 Helo, G-10 Fixed, G-10 Helo/Fixed, G-10 LASER) and an OP in RFMSS up to 90 days prior but NLT 48 hours prior to the event. Training areas must be scheduled and approved in RFMSS before submitting a Special Range Request (SRR).

(c) Submit SRR (Appendix J of this SOP) email to Range Safety Specialist.

(d) Lead IP (FAC and RSO qualified) for flight will be ROIC. RSO (RSO qualified) can be a squadron pilot, FAC qualified is desired but not required. RSO can be E-6 or above if JTAC qualified. RSO will be on the ground in an OP and have communications with BLACKBURN and the flight. RSO maintains target clearance. If LASERS are used, LRSO qualified person can be on the ground, in the air, and be ROIC or RSO.

(e) ROIC, RSO, and LRSO if required, must attend BLACKBURN face-to-face brief the day prior at Range Control. ROIC will give a copy of the SPINS to BLACKBURN/Range Control. SPINS must have ordnance type/DODIC/NALC.

(f) Issues with SRR

1. Authorized ammo versus ordnance delivered.

2. Dive angle and airspeed.

3. HA used/BP to be used: Each BP has a set of restrictions based on ammo, SDZs, hover, running, and diving fires. See appendix B.
4. Altitude used.

5. Weather conditions/Low ceiling.

6. Go-No-Go requirements.

7. LASERs – Certified LASER Range Safety Officer.


(g) Training. Squadrons send personnel (pilots, FACs, LRSOs, and JTACs E-6 and above) to Range Control Safety Officers Course. Completion of the TECOM Range Safety online course via MarineNet is required prior to Range Control Safety Officers course. Personnel are required to bring TECOM course completion diploma to RSO course.

(h) Commanding Officer’s Certification Letter to Range Control. Letter needs to be signed by Squadron CO or “By direction” certifying ROICs and RSOs for their qualifications in the enclosure to the letter. Enclosure is also signed by CO or “By direction.” The letter with enclosure must be updated quarterly. Names and certifications are entered into the RFMSS data base at Range Control.

(i) Execution. RSO signs for ranges/OP between 5 days prior to 1200 the day prior (1200 Thursday or Friday for weekend/holiday shoot, following Monday shoot, and 96 weekends when shoot is Tuesday or Wednesday). RSO checks in from OP with BLACKBURN via normal procedures and receives a HOT range brief. Flight checks in with BLACKBURN and receives a HOT range brief and confirms number of aircraft and ordnance. RSO has communications with BLACKBURN and the flight (Squadron Common). Flight conducts range sweep (over flight) of target area and BPs being used. RSO and ROIC receive clearance from BLACKBURN to go HOT. Flight conducts training on squadron common tactical frequency and monitors BLACKBURN throughout training in the event of check fire, emergency, etc..

(j) Flight lead Instructor Pilot (IP) (ROIC) and RSO are responsible for the safe conduct of fires on range, adherence to range fans, SDZs, Range Control SOP Chapter 8, and the Appendix.
(k) Upon completion of the training event, the flight will check out with BLACKBURN. ROIC or RSO will report ordnance expended by DODIC/NALC, type and number of aircraft, number of personnel trained, and request to go COLD. RSO will coordinate with BLACKBURN for a range inspection of the OP.

(12) Artillery. An RSO and FO will be in Bear Tower during live-fire. Unexploded rounds (duds) landing in the AIWW will immediately be reported to BLACKBURN to include grid coordinates. A CEASE FIRE will be called until resolution of the danger to boating caused by the dud.

(13) The N-1/BT-3 Impact Area accommodates firing from E-1, H-1, G-5, and G-7 ranges as well as the Browns Island target area. The grid coordinates delineated below are only for the land mass danger areas. The range extends approximately 11,000 meters seaward from Browns Island target area as depicted by the Fleet Operating Area Cherry Point, Cape Hatteras to Cape Fear chart number 11525.

<table>
<thead>
<tr>
<th>The N-1/BT-3 SDA</th>
<th>PIA</th>
<th>155 PDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>18S TD 93402959</td>
<td>18S TD 93382886</td>
<td>18S TD 94552919</td>
</tr>
<tr>
<td>18S TD 94113031</td>
<td>18S TD 94352961</td>
<td>18S TD 94943093</td>
</tr>
<tr>
<td>18S TD 94323126</td>
<td>18S TD 94503100</td>
<td>18S TD 96093211</td>
</tr>
<tr>
<td>18S TD 95333231</td>
<td>18S TD 95753211</td>
<td>18S TD 97023364</td>
</tr>
<tr>
<td>18S TD 95443421</td>
<td>18S TD 95733445</td>
<td>18S TD 98703168</td>
</tr>
<tr>
<td>18S TD 95793452</td>
<td>18S TD 95793452</td>
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</tr>
<tr>
<td>18S TD 96253466</td>
<td>18S TD 9603457</td>
<td></td>
</tr>
<tr>
<td>18S TD 97393436</td>
<td>18S TD 97343399</td>
<td></td>
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<td>18S TD 97693466</td>
<td>18S TD 9773399</td>
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<tr>
<td>18S TD 99003251</td>
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<tr>
<td>18S UD 06502400</td>
<td>18S UD 06502400</td>
<td></td>
</tr>
<tr>
<td>18S TD 93001800</td>
<td>18S TD 93001800</td>
<td></td>
</tr>
</tbody>
</table>
SDA: Secondary Danger Area (Buffer Zone); defined on CLNC Special as the yellow/green area. Manual artillery safety computations are performed from this area.

PIA: Primary Impact Area; defined on CLNC Special as the red area, no targets outside this area will be engaged with any weapon system. No access to this area is authorized without EOD escort.

155 PDA: Primary Danger Area; not currently defined on the CLNC Special. Targets outside this area will not be engaged by 155 mm howitzers. Artillery safety computations with the Automated Range Safety System (ARSS) will be computed from this area.

5. G-10 Impact Area

**IMPACT AREA:** G-10

**DESCRIPTION:** Bomb and Target Range

**PRIMARY RANGE USE:** Familiarization Range

**ALTERNATE RANGE USES:**
1. Air to Ground Weapons
2. Helicopter and tiltrotor Gunnery Range
3. Mortar Range
4. Field Artillery Indirect Fire Range
5. Infantry Weapons Range
6. Machinegun Range
7. Guided Missile Range
8. Naval Gunfire Range

**STATUS:** Active

**LOCATION:** Center of MCB Camp Lejeune East of New River

**PRIMARY DIRECTION OF FIRE:** None

**WEAPONS ACCOMMODATED:**
- All pistols
- All Shotguns
- All Rifles
- All Sniper Rifles
- All Machineguns
- M242 Chain Gun
- 60/81/120mm Mortar
- 155mm Field Artillery
Aircraft Weapons
Javelin M98A1
SMAW MK-153
AT-4/M72A7 LAW
TOW Missile
Helicopter and tiltrotor Weapon Systems
Naval Gunfire

**AMMUNITION AUTHORIZED:**
All Pistol DODICs
All Shotguns DODICs
All Rifles DODICs
All Sniper Rifle DODICs, Except A606
All Machineguns DODICs
All DODICS 60/81/120 MM Mortars
20mm (TP)
25mm (TP-T and APDS-T)
30mm (TP-T)
40mm (TP-T)
2.75 inch Rocket;
TP/HE/HP/ILLUM/Flechette
105mm (including AC-130)
155mm HE, WP, Illum, Smoke
MK76 Practice Bomb
BDU 33
BDU 45
LASER Guided Training Round
MK80 Series Bombs (Inert)
M781 Practice Round or M576
5 inch HE/ILLUM (Naval Gunfire)

**TARGETS/SIMULATORS/DEVICES:**
Hard Targets: 55

**FACILITIES (Number of each):**
None

**UTILITIES AVAILABLE:**
Electricity: No
Lights: No
Water System: No

**INSTALLED COMMUNICATIONS:**
None

**AREA SUITABILITY**
Battalion

a. **Range Use Restrictions/Comments:**
(1) Types I, II, and III CAS events are authorized in this facility per current JCAS manual. All restrictions must be read back to terminal controller by aircrew from each attacking aircraft. All attacks must comply with individual target set restrictions listed in the following paragraphs below. Additionally, for Type II and Type III operations on Camp Lejeune, each attack requires inbound with a heading call (in degrees).

(a) Special Range Requests for CAS Types II and III attack profiles with munition combinations for target sets will be submitted to Range Control for approval. New profiles require a face-to-face brief with the Range Safety Specialist using the WD2 tool to receive approval. As profiles are approved, a list will be maintained for future training events. Contact Range Control for the current approved list.

(b) For Type II and III attacks, FAC/JTAC shall confirm aircraft’s navigation system accuracy with aircrew prior to commencing the attack.

(2) HE filled bombs from aircrafts are not authorized.

(3) OPs 2, 3, and 5 serve G-10.

(4) Unit must provide Port-a-Johns.

(5) Maneuver is not authorized down range.

(6) Night Use is authorized if properly scheduled.

(7) LASERS are authorized in accordance with Chapter 9 of this SOP, if properly scheduled, and the LASER Range Certification/Survey is current (provided by Range Control upon checkout of a LASER range).

(8) Red-Cockaded Woodpecker Habitat; no vehicle traffic or training in specifically designated areas.

(9) 2.75 inch illumination rockets must deploy, function, and have spent motor land within the G-10 impact area. FACS, JTACs, and aircrew must take wind speed and direction into account to keep all rocket components within the G-10 impact area.

b. Other Considerations. As organic tools for EOD Operations, the following ammunition is authorized: Special .50
caliber electric impulse cartridges (M174) or shotgun shell. EOD is also authorized to use the following tools: Rocket Wrench, .50 caliber de-armers, JROD, Robot Disrupters.

c. Special Instructions

(1) See Chapter 2, Figure 2-1. Personnel Requirements for Combined Arms/TACP Shoot.

(2) Forward Air Controller (FAC)/Joint Terminal Attack Controller (JTAC)

(a) Any air operation involving aircraft live firing, Close Air Support or Combined Arms Exercises requires positive control of aircraft by a terminal controller/FAC. The FAC may be on the ground or a FAC airborne FAC(A). The term FAC (ground or airborne) is used synonymously with the ROIC of firing regarding these safety regulations.

(b) The FAC must be familiar with all fixed wing, helicopter, and tiltrotor control measures, Airspace Control Agencies, Battle Positions (BPs), Holding Areas (HAs), attack/egress routes and routing procedures serving the G-10 impact area. The FAC is responsible for the deconfliction of all helicopter, tiltrotor, and fixed wing traffic operating under his control.

(c) The FAC must inform aircraft performing missions of the location of each gun position firing into the G-10 impact area and which of the adjacent ranges and training areas around G-10 are occupied. FO’S for artillery/mortar units must co-locate with the FAC when aircraft are using G-10.

(d) The FAC is required to report to BLACKBURN for the Range Face-to-Face brief the day prior to the event.

(e) The FAC will notify BLACKBURN immediately after the last aircraft clears the area so the temporary fire suspension may be lifted for ground units, if in effect.

(f) The FAC must be familiar with the fixed wing Procedural Line procedures (see Chapter 8).

(3) Range Control air requirements for FAC(A)

(a) These procedures are only for squadron specific CAS and FAC(A) training when no ground units are involved.
Working CAS or SIMCAS with ground units will require standard ROIC, RSO, FAC, JTAC, DASC, G-10 Helo, G-10 Fixed, and G-10 Helo/Fixed procedures through the ground unit.

(b) Scheduling. Squadrons submit requests for the range airspace (G-10 Helo, G-10 Fixed, G-10 Helo/Fixed, G-10 LASER) and an OP in RFMSS up to 90 days prior but NLT 48 hours prior to the event. Training areas must be scheduled and approved in RFMSS before submitting a Special Range Request (SRR). Occasionally G-10 is closed Friday through Monday for UXO clean up. Contact RDD to coordinate weekend use.

(c) Submit SRR (Appendix J of this SOP) email to Range Safety Specialist.

(d) Lead IP (FAC and RSO qualified) for flight will be ROIC. RSO (RSO qualified) can be a squadron pilot, FAC qualified is desired but not required. RSO can be E-6 or above if JTAC qualified. RSO will be on the ground in an OP and have communications with BLACKBURN and the flight. RSO maintains target clearance. If LASERS are used, LRSO qualified person can be on the ground, in the air, and be ROIC or RSO.

(e) ROIC, RSO, and LRSO if required, must attend BLACKBURN face-to-face brief the day prior at Range Control. ROIC will give a copy of the SPINS to BLACKBURN/Range Control. SPINS must have ordnance type/DODIC/NALC.

(f) Issues with SRR

1. Authorized ammo versus ordnance delivered.

2. Dive angle and airspeed.

3. HA used/BP to be used: Each BP has a set of restrictions based on ammo, SDZs, hover, running, and diving fires listed later in this appendix.

4. Altitude used.

5. Weather conditions/Low ceiling.

6. Go-No-Go requirements.

7. LASERs - Certified LASER Range Safety Officer.

(g) **Training.** Squadrons send personnel (pilots, FACs, LRSO, and JTACs E-6 and above) to Range Control Safety Officers Course. Completion of the TECOM Range Safety online course via MarineNet is required prior to Range Control Safety Officers course. Personnel are required to bring TECOM course completion diploma to RSO course.

(h) **Commanding Officer’s Certification Letter to Range Control.** Letter needs to be signed by Squadron CO or “By direction” certifying ROICs and RSOs for their qualifications in the enclosure to the letter. Enclosure is also signed by CO or “By direction.” The letter with enclosure must be updated quarterly. Names and certifications are entered into the RFMSS data base at Range Control.

(i) **Execution.** RSO signs for ranges/OP between 5 days prior to 1200 the day prior (1200 Thursday for weekend/holiday shoot, following Monday shoot, and 96 weekends when shoot is Tuesday or Wednesday). RSO checks in from OP with BLACKBURN via normal procedures and receives a HOT range brief. Flight checks in with BLACKBURN and receives a HOT range brief and confirms number of aircraft and ordnance. RSO has communications with BLACKBURN and the flight (Squadron Common). Flight conducts range sweep (over flight) of target are and BPs being used. RSO and ROIC receive clearance from BLACKBURN to go HOT. Flight conducts training on squadron common tactical frequency and monitors BLACKBURN throughout training in the event of check fire, emergency, etc..

(j) Flight lead IP (ROIC) and RSO is responsible for the safe conduct of fires on range, adherence to range fans, SDZs, Range Control SOP Chapter 8, and Appendix B.

(k) Upon completion of the training event, the flight will check out with BLACKBURN. ROIC or RSO will report ordnance expended by DODIC/NALC, type and number of aircraft, number of personnel trained, and request to go COLD. RSO will coordinate with BLACKBURN for a range inspection of the OP.

(4) **Fixed Wing Aircraft**

(a) Fixed Wing Aircraft must use Control Points/IPs and run-in headings as contained in Chapter 8 of this SOP.
(b) Authorized ammunition is MK76, BDU33, BDU45 and MK80 series inert bombs, LGTR, 2.75 inch rockets, 20mm, 25mm, 30mm delivered at 20 degrees or greater dive angle, and AC-130 20mm, 30mm, 40mm, and 105mm. Ammunition (TP only) for the Urban CAS Facility is listed separately in another handout.

(c) The minimum altitude for fixed wing operations inside the restricted area is 3000’ AGL (coordinating altitude). Fixed wing operations below the 3000’ AGL coordinating altitude (i.e. strafing runs/low altitude ingress) are authorized when deconflicted from rotary wing operations with lateral and altitude separation. Fixed wing shall not overfly occupied BPs and HAs.

(d) Fixed wing aircraft must be familiar with the fixed wing Procedural Line procedures (see Chapter 8).

(5) Helicopter and tiltrotor Operations

(a) Authorized ammunition: 20mm, 7.62mm, 2.75-inch rockets, and BGM-71 TOW IIB missiles.

(b) When firing 7.62mm or 20mm ammunition from BP Newt, the “GD” and “GF” training areas must be closed. Road guard positions are 18S TD 902323, 18S TD 909318, 18S TD 18S921317, 18S TD 938329.

(c) BGM-71 TOW IIA/B missiles shall be fired from BP Wolf only. When firing the missile from BP Wolf, Lyman Road shall be closed.

(d) Ammunition may be delivered from within the BPs using Hover Holds, Running Fire, or Diving Fire.

(e) All fires shall be delivered from inside BPs Newt, Eel, Sidewinder, and Wolf unless transitioning to BP Ox operations.

(f) Aircraft/launcher attitude shall not exceed 0 degrees pitch relative to horizon for 2.75 inch rocket delivery.

(g) Arming procedures. The master arm shall not be “armed” until sights are on the target and “cleared hot” is given by the Terminal Controller. At no time shall the aircraft be armed if aircraft/launcher attitude (delivery angle) is greater than 0 degrees pitch relative to the horizon. The master arm shall be secured at the cease-fire lines for each BP
prior to the pull-off. When firing from BP Ox, the aircraft/launcher attitude (delivery angle) shall be at least negative 20 degrees pitch relative to horizon.

(i) When rotary wing aircraft are operating within the restricted Airspace, HA and BP altitude is 2000 ft AGL and below unless FAC/JTAC dictates an alternate altitude. Rotary/Fixed Wing coordinating altitude shall be 3000 ft AGL.

(j) Helicopter and tiltrotor routing/deconfliction. The G-10 impact area is surrounded by Sneads Ferry Road to the west, Lyman Road to the north, and Hwy 172 to the east and south. Whenever transiting between the G-10 holding areas and battle positions, helicopter and tiltrotor aircraft operating at G-10 shall fly over this road network (surface to 500 feet AGL). Clockwise traffic shall be at 300 feet AGL. Counter-clockwise traffic shall be 500 feet AGL.

1. Aircraft shall not fly over the MCB Ammo Storage Point (ASP) (18S TD 885355) when transiting along Sneads Ferry road.

2. Aircraft shall coordinate their transit along the G-10 road network with the FAC/Air Control Agency to ensure deconfliction with other aircraft operating at G-10. All aircraft are responsible to see and avoid other aircraft.

(6) Helicopter and Tiltrotor Holding Areas (HAs)

<table>
<thead>
<tr>
<th>HA</th>
<th>Location (18STD)</th>
<th>Supports BP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emily</td>
<td>GE training area and LZ Crane</td>
<td>Eel</td>
</tr>
<tr>
<td>Nancy</td>
<td>900370, 882370, 880374, 880390, 883390, 900384</td>
<td>Newt</td>
</tr>
<tr>
<td>Sandy</td>
<td>GI training area and LZ Gull</td>
<td>Sidewinder</td>
</tr>
<tr>
<td>Wendy</td>
<td>2 km by 2 km centered on 860350</td>
<td>Wolf</td>
</tr>
</tbody>
</table>

Figure B-1.—Holding Areas

(a) HA Emily. Area dimensions: “GE” training area including LZ Crane; surface to 2000 feet AGL.

1. Holding area for BP Eel.

2. The attack/egress route connecting Holding Area Emily to Eel shall run from the Lyman Road/Hwy 172 intersection (18S TD 956369) Direct to MP-5.
Figure B-2.--Helicopter and Tiltrotor Routing, HAs, and BPs

3. Ingress and egress altitudes along the attack route shall be surface to 2000 feet AGL.

4. LZ Crane shall be closed to helicopter and tiltrotor traffic.

(b) HA Nancy. Area dimensions: WGS-84 18s TD900370, 18S TD 882370, 18S TD880374, 18S TD880390, 18S TD883390, 18S TD900384; surface to 2000 feet AGL.

1. Holding area for BP Newt.

2. LZ Penguin shall serve as the attack/egress route connecting holding area Nancy to Newt (G-8/G-9).

3. Ingress and egress altitudes along the attack route shall be surface to 2000 feet AGL.
4. LZ Penguin shall be closed to helicopter and tiltrotor traffic.

(c) HA Sandy. Area dimensions: “GI” training area including LZ Gull; surface to 2000 feet AGL.

1. Holding area for BP Sidewinder.

2. The attack/egress route connecting Holding Area Sandy to Sidewinder runs from the northwest corner of the GI Training Area (18S TD 954350) along the 35 gridline to Sidewinder.

3. Ingress and egress altitudes along the attack route shall be surface to 2000 feet AGL.

4. LZs Gull and Crane shall be closed to helicopter and tiltrotor traffic.

(d) HA Wendy. Area dimensions: 2 km x 2 km area, centered on WGS-84 18S TD 860350; surface to 2000.

1. Holding Area for BP Wolf. French Creek shall be the attack route connecting HA Wendy to BP Wolf (OP-5). Marines Road, Weil Point Road shall be the egress route connecting BP Wolf to HA Wendy.

2. Ingress and egress altitudes along the attack route shall be surface to 2000 feet AGL.

3. Aircraft shall not fly over the MCB ASP (18S TD 885355) at altitudes below 4000 ft MSL.

4. LZ Jaybird shall be closed to helicopter and tiltrotor traffic.

(7) Helicopter, Tiltrotor, and AC-130 Battle Positions (BPs)

<table>
<thead>
<tr>
<th>BP</th>
<th>Location (18S TD)</th>
<th>Final ATK Cone/Heading</th>
<th>Start Fire Line (18S TD)</th>
<th>Cease Fire Line 18S TD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eel</td>
<td>951370, 951366, 940362, 937366, 947370</td>
<td>Inert: 245-260 mag</td>
<td>MP-5</td>
<td>940362, 937366</td>
</tr>
<tr>
<td>Newt</td>
<td>901374, 902375, 904376, 906375,</td>
<td>Inert: 150-165 mag</td>
<td>The old G-8/9 berm</td>
<td>907364, 913364</td>
</tr>
</tbody>
</table>

Wolf | 894347, 907352, 909347, 896342 | Inert: 080-090 mag HE: 085 mag from OP-5 | G-3 berm | 907352, 909374

Ox | 4 km diameter circle centered on 923353, circular pattern for AC-130 is bordered by Lyman Rd, Hwy 172, and Sneads Ferry Rd. | Inert and HE: from 040 to 120 mag from 180 to 300 mag | In cone and cleared HOT by terminal controller | Circular pattern when exiting cone, diving fire at center of 4 km diameter circle.

**Figure B-3.--Battle Positions**

(a) BP Eel. Area dimensions: 0.5km width, 1.3km length, surface to 2000 feet AGL. WGS-84 18S TD 951370, 18S TD 951366, 18S TD 940362, 18S TD 937366, 18S TD 947370.

1. Final Attack Cone (inert ordnance): 245-260 degrees magnetic from MP-5. Additional 5 degrees can be added once confirmed using the WDZ program 240-260 degrees magnetic.

2. Final Attack Heading (high explosive ordnance): 250 degrees magnetic from MP-5. Additional 5 degrees can be added once confirmed using the WDZ program 245-255 degrees magnetic.

3. Authorized ammunition is 20 mm, 7.62 mm, and 2.75 inch rockets.

4. Ammunition may be delivered from within the G-10 Impact Area using Hover Holds, Running Fire or Diving Fire.

5. Hover Hold. Maximum hover altitude is 300 feet AGL. Aircraft must be forward of MP-5. The cease fire Line for 2.75 inch rockets, 7.62mm and 20mm gun is defined by the Pond at 18S TD 940362 then NW to 18S TD 937366. Aircraft/launcher attitude shall not exceed 0 degrees pitch relative to the horizon for 2.75 inch TP rocket delivery. 7.62mm and 20mm TP guns may be fired from 245-260 degrees magnetic using gunner-controlled off-axis guns or crew served weapons. Fixed forward or Helmet Sight System (HSS) 20mm guns from hover hold are not authorized.
6. **Running/Diving Fire.** The start fire line is defined by MP-5; the cease fire line for 2.75 inch rockets, 7.62mm and 20mm gun is defined by the pond at TD940362 then NW to TD937366. Aircraft/launcher attitude shall not exceed 0 Degrees pitch relative to the horizon for 2.75 inch TP rocket delivery. 7.62mm and 20mm TP guns may be fired fixed forward or from 245-260 degrees magnetic using gunner-controlled off-axis guns or crew served weapons. Helmet Sight System (HSS) 20mm gun is not authorized.

7. **Coordinating Instructions.** Clearance to depart the area is required from the terminal controller/FAC. Units may not occupy MP-5/GP-6 or G-3 when Eel is active. GP-7 shall not fire when BP Eel/HA Emily are active. Aircraft may not occupy BP Wolf when BP Eel is active. LZ Crane shall be closed to helicopter and tiltrotor traffic when BP Eel/HA Emily are active. Maximum altitude shall be 2000 feet AGL.

(b) **BP Newt.** Area dimensions: 0.5 km width, 1.7 km length, surface to 2000 feet AGL. WGS-84 18S TD 901374,18S TD 902375, 18S TD 904376, 18S TD 906375, 18S TD 913364,18S TD 907364:

1. **Final Attack Cone (inert ordnance):** 150-165 degrees magnetic from the old G-8/G-9. Additional 5 degrees can be added once confirmed using the WDZ program 145-170 degrees magnetic.

2. **Final Attack Heading (high explosive ordnance)** 160 degrees magnetic from the old G-8/G-9. Additional 5 degrees can be added once confirmed using the WDZ program 155-165 degrees magnetic.

3. **Authorized ammunition 20mm, 7.62mm, and 2.75 inch rockets.**

4. **The “GD” and “GF” training areas shall be closed in order to fire 7.62mm or 20mm ammunition from BP Newt.**

5. **To fire 20mm or 7.62mm from BP Newt, road guards shall be placed at WGS-84 18S TD 902323, 18S TD 909318, 18S TD 921317, 18S TD 938329. Ammunition may be delivered from within the G-10 Impact Area using hover holds, running fire, or diving fire.**

6. **Hover Hold.** Maximum hover altitude is 300 feet AGL. Aircraft must be forward of the old G-8/9 range.
berms. The cease-fire line for 2.75 inch rockets, 7.62mm and 20mm guns is defined by the east/west dirt road (WGS-84 18S TD 907364 to 18S TD 913364). Aircraft/Launcher attitude shall not exceed 0 degrees pitch relative to the horizon for 2.75 inch rocket delivery. 7.62mm and 20mm guns may be fired from 150-165 degrees magnetic using gunner-controlled off-axis gun or crew served weapons. Fixed forward or Helmet Sight System (HSS) 20mm guns from hover hold are not authorized.

7. Running/Diving Fire. The start fire line is the old G8/G9 berm. The cease-fire line for 2.75 inch rockets, 7.62mm and 20mm guns is defined by the east/west dirt road (WGS-84 TD907364 to TD913364). Aircraft/launcher attitude shall not exceed 0 degrees pitch relative to the horizon for 2.75 inch TP rocket delivery. 7.62mm and 20mm TP guns may be fired fixed forward or from 150-165 degrees magnetic using gunner-controlled off-axis gun or crew served weapons. Helmet Sight System (HSS) 20mm guns are not authorized.

8. Coordinating Instructions. Clearance to depart the area is required from the terminal controller/FAC. Units may not occupy the old G-8 or G-9 when BP Newt is active. MP-1 shall not fire when BP Newt/HA Nancy are active. LZ Penguin shall be closed to helicopter and tiltrotor traffic when BP Newt/HA Nancy are active. Maximum altitude shall be 2000 feet AGL. The “GD” and “GF” training areas must be closed in order to fire 7.62mm or 20mm ammunition from BP Newt.

(c) BP Sidewinder. Area dimensions: 0.5km width, 1 km length, surface to 2000 feet AGL. WGS-84 18S TD 940353, 18S TD 950353, 18S TD 950347, 18S TD 940347.

1. Final Attack Cone (inert ordnance): 265-285 degrees magnetic. Additional 5 degrees can be added once confirmed using the WDZ program 260-290 degrees magnetic.

2. Final Attack Cone (high explosive ordnance): 275-280 degrees magnetic. Additional 5 degrees can be added once confirmed using the WDZ program 270-285 degrees magnetic.

3. Authorized ammunition is 20mm, 7.62mm, and 2.75 inch rockets. Ammunition may be delivered from within the G-10 Impact Area using hover holds, running fire, or diving fire.

4. Hover Hold. Maximum hover altitude is 300 feet AGL. The cease-fire line for 2.75-inch rockets, 7.62mm and
20mm gun is defined by the dirt road (Mossy Pond Rd.) 18S TD 940353 to 18S TD 940347. Aircraft/launcher attitude shall not exceed 0 degrees pitch relative to the horizon for 2.75 inch rocket delivery. 7.62mm and 20mm guns may be fired from 265-285 degrees magnetic using gunner-controlled off-axis guns or crew served weapons. Fixed forward or Helmet Sight System (HSS) 20mm guns from hover hold are not authorized.

5. Running/Diving Fire. The 95-grid line (500 meters west of Hwy 172) defines the start fire line. Mossy Pond Rd, TD940353 to TD940347, defines the cease-fire line for 2.75-inch rockets, 7.62mm and 20mm gun. Aircraft/launcher attitude shall not exceed 0 degrees pitch relative to the horizon for 2.75 inch TP rocket delivery. 7.62mm and 20mm TP guns may be fired fixed forward or from 265-285 degrees magnetic using gunner-controlled off-axis guns or crew served weapons. Helmet Sight System (HSS) 20mm guns are not authorized.

6. Coordinating Instructions. Clearance to depart the area is required from the terminal controller/FAC. Units may not occupy MP-7 or G-3 when BP Sidewinder is active. MP-6/GP-8, GP-7, and GP-9 shall not fire when BP Sidewinder/HA Sandy are active. Aircraft may not occupy BP Wolf when Sidewinder is active. LZ Gull shall be closed to helicopter and tiltrotor traffic when BP Sidewinder/HA Sandy are active. Maximum altitude shall be 500 feet AGL when fixed wing aircraft are on station.

   (d) BP Wolf. Area dimensions: 0.5 km width, 1 km length, surface to 2000 feet AGL. WGS-84 18s TD 894347, 18S TD 907352, 18S TD 909347, 18S TD 896342.

   1. Final Attack Cone (inert ordnance): 080-090 degrees magnetic from OP-5. Additional 5 degrees can be added once confirmed using the WDZ program 075 to 095 degrees magnetic.

   2. Final Attack Heading (High Explosive Ordnance): 085 degrees magnetic from OP-5. Additional 5 degrees can be added once confirmed using the WDZ program 080 to 090 degrees magnetic.

   3. Authorized ammunition: 7.62mm, 20mm, 2.75 inch rockets and BGM-71 TOW IIB missiles. Ammunition may be delivered from within the G-10 Impact Area using hover holds, running fire or diving fire. All fires shall be delivered from
inside the G-10 Buffer Area. At no time will live ordnance be delivered outside the G-10 Buffer/Impact Area.

4. Hover Hold. Maximum hover altitude is 300 feet AGL. Aircraft must be forward of the G-3 berm. The cease-fire line for all ordnance is defined by the eastern boundary (18S TD 907352 to 18S TD 909347). Aircraft/launcher attitude shall not exceed 0 degrees pitch relative to the horizon for 2.75 inch rocket delivery. 7.62mm and 20mm guns may be fired from 080-090 degrees magnetic using gunner-controlled off-axis guns or crew served weapons. Fixed forward or Helmet Sight System (HSS) 20mm guns from hover hold are not authorized.

5. Running/Diving Fire. The Start-Fire Line is the G-3 berm. The Cease-Fire Line for all ordnance is defined by the eastern boundary (18S TD 907352 to 18S TD 909347). Aircraft/launcher attitude shall not exceed 0 degrees pitch relative to the horizon for 2.75 inch TP rocket delivery. TOW running/diving fire is not authorized. 7.62mm and 20mm TP guns may be fired fixed forward or from 080-090 degrees magnetic using gunner-controlled off-axis guns or crew served weapons. Helmet Sight System (HSS) 20mm guns are not authorized.

6. Coordinating Instructions. Clearance to depart the area is required from the terminal controller/FAC. Units may not occupy MP-3, OP-3, MP-7, G-3/G-3 .50 cal, or MP-5/GP-6 when BP Wolf is active. Aircraft may not occupy BPs Eel or Sidewinder when BP Wolf is active. LZ Jaybird shall be closed to helicopter and tiltrotor traffic when BP Wolf/HA Wendy are active. Maximum altitude shall be 2000 feet AGL.

(e) BP Ox. Area dimensions: Circular overhead pattern 4 km diameter centered on 18S TD 923353, 300 ft AGL to 2000 ft AGL. AC-130 pattern is circular bordered by Lyman Road, Hwy 172, and Sneads Ferry Road staying inside road network.

1. Final Attack Cones (inert and high explosive): 040-120 and 180-300 degrees magnetic. Authorized ammunition is 7.62mm, .50 cal, 20mm, 2.75 inch rockets, 30mm 40mm and 105mm (AC-130). Ammunition shall be delivered within the G-10 impact area from an overhead pattern using diving fire only. Aircraft shall not fly over the field ammo storage area (18s TD 885355) at altitudes less than 4000 ft MSL.

2. Diving Fire. 2.75 inch TP rocket, 7.62mm and 20mm TP delivery shall be in a negative (-) 10 degree (or greater) weapon delivery angle relative to the horizon. .50 Cal
weapon delivery angle must be at least 25 degrees or greater below the horizon due to its greater SDZ.

3. **Arming Procedures.** Master arm shall not be “armed” until sights are on the target and a “cleared hot” is given by the terminal controller. At no time shall the aircraft be armed until aircraft/launcher attitude (delivery angle) is at least negative (-) 20 degrees pitch relative to the horizon. Master arm shall be secured at the cease-fire line prior to pull-off.

![Figure B-4.—Battle Position Ox](image)

4. **Coordinating Instructions.** Clearance to depart area is required from the terminal controller/FAC. Concurrent fixed wing operations into G-10 are prohibited while Ox is active.
### G-10 Impact Area

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SDA: Secondary Danger Area (Buffer Zone); defined on CLNC Special as the yellow/green area. Manual artillery safety computations are performed from this area.

PIA: Primary Impact Area; defined on CLNC Special as the red area, no targets outside this area will be engaged with any weapon system. No access to this area is authorized without EOD escort.

155 PDA: Primary Danger Area; not currently defined on the CLNC Special. Targets outside this area will not be engaged by 155 mm howitzers. Artillery safety computations with the ARSS will be computed from this area.
5. G-10 Urban Close Air Support Facility (UCAS)

**RANGE NAME:** G-10 Urban Close Air Support Facility (UCAS)

**DESCRIPTION:** G-10 Urban CAS Training Facility (UCAS)

**PRIMARY RANGE USE:** Urban Close Air Support FAC/JTAC Training

**ALTERNATE RANGE USES:**
1. Air to Ground Weapons
2. Helicopter Door Gunnery Range
3. Aerial Sniper Range (SRR Only)

**STATUS:** Active

**LOCATION:** G-10 Impact Area

**PRIMARY DIRECTION OF FIRE:** None

**WEAPONS ACCOMMODATED:**
- Fixed Wing Weapon Systems
- Helicopter Weapon Systems
- GAUs 16, 19, and 21
- 5.56mm/7.62mm Sniper Rifles

**AMMUNITION AUTHORIZED:**
- 7.62mm Machinegun Ammunition
- .50 cal Machinegun Ammunition
- 5.56mm/7.62mm Sniper Ammunition
- 20mm (TP/TPT Only)
- 25mm (TP/TPT Only)
- 30mm (TP/TPT Only)
- 2.75 Rockets (TP/Illum Only)
- MK76 Practice Bombs
- BDU 33 (TP)
- LASER Guided Training Round LGTR
- Aircraft Illumination

**TARGETS/SIMULATORS/DEVICES:** Commercial Vehicles, Junk (Civilian Type Vehicles)
Total Number of containers - 113
Numerous Man Size Targets

**FACILITIES:** None

**UTILITIES AVAILABLE:**
- Electricity: No
- Lights: No
- Water System: No
INSTALLED COMMUNICATIONS: None

AREA SUITABILITY: TACP/FAC/JTAC Training

a. The UCAS is defined by the following coordinates; 91143590, 91213593, 91533593, 91533574, 91363564, 91283564, and 91143569. The UCAS is defined as a No Fire Area for dud producing ordnance (Air/Ground). Units will refrain from shooting dud producing ordnance within 150 meters from its boundaries of the UCAS.

b. Range Use Restrictions/Comments:

The UCAS/Lego City is a separate training facility within the G-10 Impact Area/R5306D Restricted Airspace and must be scheduled separately in RFMSS. Usage data must be reported separately from what was expended in the G-10 Impact Area.

(1) HE filled fixed wing or rotary wing delivered ammunition is not authorized on this training facility. (Inert/Training Practice Ordnance Only).

(2) OP’s 2, 3, and, 5 will serve the G-10 Impact Area/UCAS.

(3) Maneuvers down range are not authorized into the G-10 Impact Area.

(4) Night use is authorized if properly scheduled in RFMSS.

(5) LASERs are authorized in accordance with Chapter 9 of this SOP and the LASER Range Certification/Survey.

(6) LASER guided and unguided training practice bombs are authorized (Inert/Training Practice Sub-Caliber Only).

(7) Types I, II, and III CAS events are authorized in this facility per current JCAS manual. All restrictions must be read back to terminal controller by aircrew from each attacking aircraft. All attacks must comply with individual target set restrictions listed in the following paragraphs below. Additionally, for Type II and Type III operations on Camp Lejeune, each attack requires inbound with a heading call (in degrees).
(a) Special Range Requests for CAS Types II and III attack profiles with munition combinations for target sets will be submitted to Range Control for approval. New profiles require a face-to-face brief with the Range Safety Specialist using the WDZ tool to receive approval. As profiles are approved, a list will be maintained for future training events. Contact Range Control for the current approved list.

(b) For Type II and III attacks, FAC/JTAC shall confirm aircraft’s navigation system accuracy with aircrew prior to commencing the attack.

(8) This training facility is not equipped with a scoring system (WISS, NDBS, VIT, etc.).

(9) The BDU 45 (TP) and larger MK-80 series TP Bombs are not authorized in the UCAS.

c. Other Considerations

(1) Conflicts

(a) Using G-10 UCAS will conflict with all active gun positions and mortar positions conducting live fire.

(b) Using G-3, G-3 .50 cal, G-3 TOW, G-19A, G-19B

(c) G-6 CBC, ETA-4, G-8, EOD-1

(d) OP-2, OP-3, OP-5 Laser events

(e) All F Ranges Live fire events (F-2, F-4, F-5, F-18, F-18 .50cal, F-25T

(f) LZ Falcon Parachute Ops, Lyman Road Exercises

(g) LZ Tern, LZ Penguin, LZ Raven, LZ Pigeon, LZ Swan, LZ Woodpecker.

d. Special Instructions

(1) Rotary Wing Aircraft. Use the procedures for Holding Area Nancy and Battle Position Newt as listed in paragraph 5, G-10 Impact Area, of this appendix.

(2) Fixed Wing Aircraft
(a) Fixed Wing Aircraft must use IPs and run-in headings as contained in Chapter 8 of this SOP.

(b) Authorized ammunition is MK76, BDU-33, and MK-80 series inert bombs, 2.75 inch rockets, 20mm (TP/TPT), 25mm (TP/TPT), 30mm (TP/TPT) delivered at 20 degrees or greater dive angle. Laser Guided Training Round (sub-cal) are allowed to be delivered in the level lay profile.

(c) The minimum altitude from the Initial Point (IP) to the Pop-Up-Point (PUP) is 1000 feet AGL outside the base boundary and 700 feet AGL within the boundary.

(d) AC-130 aircraft are not authorized to fire the 105mm cannon or any live ammunition at or into the Urban CAS Facility UCAS/Lego City. AC-130 aircraft just fire outside of the UCAS No Fire Area (NFA) in the G-10 Impact Area.
6. K-2 Impact Area

**IMPACT AREA:** K-2

**DESCRIPTION:** Bomb and Target Range

**PRIMARY RANGE USE:** Training Range

**ALTERNATE RANGE USES:**
1. Infantry Weapons Range
2. Mortar Range
3. Artillery (SRR Only)

**STATUS:** Active

**LOCATION:** Center of MCB Camp Lejeune West of New River

**PRIMARY DIRECTION OF FIRE:**

**WEAPONS ACCOMMODATED:**
- All pistols
- All Shotguns
- All Rifles
- M249 SAW
- All Machineguns (except .50 cal)
- 60/81/120mm Mortar
- Aircraft Weapons
- SMAW
- AT-4/M72A7 LAW
- Artillery 155mm/105mm

**AMMUNITION AUTHORIZED:**
- All Pistol DODICs
- All Shotgun DODICs
- All Rifle DODICs
- All Machinegun DODICs (except .50 cal DODICs)
- 60/81/120mm Mortars (All DODICs)
- 20mm (TP)
- 40mm (TP-T)
- 2.75 inch Rocket (TP only)
- MK76 Practice Bomb
- MK80 Series Bombs (Inert)
- M781 Practice Round or M576
- 155mm HE, WP, Illum, Smoke

**TARGETS/SIMULATORS/DEVICES:** Hard Targets: 25

**FACILITIES (Number of each):** None
UTILITIES AVAILABLE:

Electricity: No
Lights: No
Water System: No

INSTALLED COMMUNICATIONS:

Telephones located at ranges

AREA SUITABILITY:

Company/Platoon

a. Range Use Restrictions/Comments:

(1) Several range towers serve the K-2 impact area.

(2) Maneuver is not authorized down range into the K-2 impact area.

(3) Night use is authorized if properly scheduled.

(4) LASERs are authorized in accordance with Chapter 9 of this SOP and the LASER Range Certification/Survey (provided by Range Control upon checkout of LASER ranges).

(5) Red-cockaded woodpecker habitat; no vehicle traffic or training in specifically designated areas. This range will close portions of New River when firing artillery and Navy Boat Crew support and unit observers could/will be required.

(6) Field artillery is authorized for the K-2 on a case-by-case basis. A SRR letter, sent via the chain of command, requesting to fire into K-2 with artillery must be sent to CO MCB Camp Lejeune, Operations and Training, S-3, 30 working days prior to date of the event.

(7) As organic tools for EOD operations, the following ammunition and tools are authorized: Special .50 caliber electric impulse cartridges (M174) or shotgun shell, Rocket Wrench, .50 caliber de-armers, JROD, and Robot Disrupters.

b. Other Considerations: None

c. Special Instructions:

(1) General. Be familiar with the contents of Chapter 5 of this SOP and this Appendix.

(2) Air Operations
(a) Fixed wing aircraft must use Control Points/IPs and run-in headings as contained in Chapter 8 of this SOP. Authorized ammunition is MK76 and MK80 series inert bombs.

(b) Authorized ammunition for helicopter and tiltrotor aircraft is 7.62mm.

(3) **Forward Air Controller (FAC)**

(a) Any air operation involving aircraft live firing/dropping bombs, standard close air support, or combined air/ground exercises requires positive control of aircraft by a FAC/air control agency. The FAC may be on the ground or a FAC airborne FAC(A). The term FAC (ground or airborne) is used synonymously with the ROIC of firing regarding these safety regulations.

(b) FAC/air control agency/artillery RSO and FO are required to report to BLACKBURN for the face-to-face range check-out briefing.

(c) The FAC will notify BLACKBURN immediately after the last aircraft has cleared the area so the temporary fire suspension may be lifted for ground units, if in effect.

(d) The FAC must inform aircraft performing missions of the location of each gun position firing into the K-2 Impact Area and which of the adjacent ranges and training areas around K-2 are occupied. FOs for artillery/mortar units must co-locate with the FAC when aircraft are using the range.

(4) **Range Control air requirements for FAC(A)**

(a) These procedures are only for squadron specific CAS and FAC(A) training when no ground units are involved. Working CAS or SIMCAS with ground units will require standard ROIC, RSO, FAC, JTAC, DASC, K-2 Helo, K-2 Fixed, and K-2 Helo/Fixed procedures through the ground unit.

(b) **Scheduling.** Squadrons submit request for the range airspace (K-2 Helo, K-2 Fixed, K-2 Helo/Fixed, K-2 LASER) and an OP in RFMSS up to 90 days prior but NLT 48 hours prior to the event. Training areas must be scheduled and approved in RFMSS before submitting a Special Range Request (SRR). Occasionally G-10 is closed Friday through Monday for UXO clean up. Contact RDD to coordinate weekend use.
(c) Submit SRR (Appendix J of this SOP) email to Range Safety Specialist.

(d) Lead IP (FAC and RSO qualified) for flight will be ROIC. RSO (RSO qualified) can be a squadron pilot, FAC qualified is desired but not required. RSO can be E-6 or above if JTAC qualified. RSO will be on the ground in an OP and have communications with BLACKBURN and the flight. RSO maintains target clearance. If LASERS are used, LRSO qualified person can be on the ground, in the air, and be ROIC or RSO.

(e) ROIC, RSO, and LRSO if required, must attend BLACKBURN face-to-face brief the day prior at Range Control. ROIC will give a copy of the SPINS to BLACKBURN/Range Control. SPINS must have ordnance type/DODIC/NALC.

(f) **Issues with SRR**

1. Authorized ammo versus ordnance delivered.

2. Dive angle and airspeed

3. HA used/BP to be used: Each BP has a set of restrictions based on ammo, SDZs, hover, running, and diving fires. See appendix B.

4. Altitude used

5. Weather conditions/Low ceiling

6. Go-No-Go requirements

7. LASERs - Certified LASER Range Safety Officer

8. Highway closings - road guards

(g) **Training.** Squadrons send personnel (pilots, FACs, LRSO, and JTACs E-6 and above) to Range Control Safety Officers Course. Completion of the TECOM Range Safety online course via MarineNet is required prior to Range Control Safety Officers course. Personnel are required to bring TECOM course completion diploma to RSO course.

(h) **Commanding Officer’s Certification Letter to Range Control.** Letter needs to be signed by Squadron CO or “By direction” certifying ROICs and RSOs for their qualifications in
the enclosure to the letter. All pages of the enclosure must be signed by the CO or “By direction.” The letter with enclosure must be updated quarterly. Names and certifications are entered into the RFMSS data base at Range Control.

(i) Execution. RSO signs for ranges/OP between 5 days prior to 1200 the day prior (1200 Thursday or Friday for weekend/holiday shoot, following Monday shoot, and 96 weekends when shoot is Tuesday or Wednesday). RSO checks in from OP with BLACKBURN via normal procedures and receives a HOT range brief. Flight checks in with BLACKBURN and receives a HOT range brief and confirms number of aircraft and ordnance. RSO has communications with BLACKBURN and the flight (Squadron Common). Flight conducts range sweep (over flight) of target area and BPs being used. RSO and ROIC receive clearance from BLACKBURN to go HOT. Flight conducts training on squadron common tactical frequency and monitors BLACKBURN throughout training in the event of check fire, emergency, etc..

(j) Flight lead IP (ROIC) and RSO are responsible for the safe conduct of fires on range, adherence to range fans, SDZs, and Range Control SOP Chapter 8.

(k) Upon completion of the training event, the flight will check out with BLACKBURN. ROIC or RSO will report ordnance expended by DODIC/NALC, type and number of aircraft, number of personnel trained, and request to go COLD. RSO will coordinate with BLACKBURN for a range inspection of the OP.

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SDA: Secondary Danger Area (Buffer Zone); defined on CLNC Special as the yellow/green area. Manual artillery safety computations are performed from this area.

PIA: Primary Impact Area; defined on CLNC Special as the red area, no targets outside this area will be engaged with any weapon system. No access authorized without EOD escort.

155 PDA: Primary Danger Area; not currently defined on the CLNC Special. Targets outside this area will not be engaged by 155 mm howitzers. Artillery safety computations with the ARSS will be computed.
APPENDIX C

TRAINING AREAS

1. General. Scheduling of training/maneuver areas will be done in accordance with Chapter 3 of this SOP. Units conducting training in training areas must be inspected by a Range Inspector to be properly cleared.

2. Training Areas and Their Use

   a. The table below lists all the training areas by name and primary use:

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<tr>
<th>TRAINING AREA NAME</th>
<th>PRIMARY USE</th>
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b. Restricted Areas. Restricted areas include residential housing areas, cemeteries, archaeological sites, HAZMAT sites and endangered species sites. Access to these areas and sites is prohibited at all times. Quiet enjoyment of property remains the right of those individuals who reside in the area. No training will be conducted within a 300 meter buffer zone of any residential structure not a part of the training areas, food plots, outlying buildings, pastures, MC Base boundary or planted fields.

c. Regulations. Weapons and ammunition allowed.
(1) Live fire is prohibited unless on a scheduled in RFMSS and signed for live fire range.

(2) Blank fire and MILES gear are authorized in training areas. Request to conduct blank firing/pyrotechnic must be included in RFMSS.

(3) Blank fire and MILES gear will not be fired within a 300 meter buffer zone of any civilian residential structure not a part of GSRA complex or outlying civilian building. At no time will live fire ammunition and blank ammunition be mixed together in a training area.

(4) Use of riot control agents, pyrotechnics, smoke grenades, booby trap simulators, and flash bangs are permitted in training areas east of Highway 17, but are prohibited in the GSRA and Oak Grove training areas because of extreme fire danger.

d. Tactical Training.

(1) Digging of fighting holes, mortar pits, and machinegun pits is authorized except in the Oak Grove training areas. Engineer training that involves digging, plowing or grading and digging in of vehicles requires EMD’s approval. All fighting holes must be filled in and leveled out within 24 hours and inspected by a range inspector.

(2) Vehicle movement off graded/maintained trails and roads in training areas is not authorized unless previously approved by RCO. Many of the areas are wetlands and are not suitable for off-road vehicle (tracked/wheeled) movement. Certain LZs and other designated areas can offer off-road maneuver opportunities; contact Range Control to schedule these areas. Unit representatives should conduct a survey prior to training and organize training events accordingly. Off-road movement, particularly of tracked vehicles, will most likely result in rutting, even in areas approved for such activities. Units are responsible for filling and smoothing out all ruts in order to return the area to usable condition for helicopter and tilt-rotor landing and taking off operations. A Range Inspector must inspect and clear the unit after filling/smoothing of the ruts is completed. At no time will wheeled or tracked vehicles drive over or knock down trees.

e. Police of Training Areas
(1) Police of training areas is the responsibility of the commander of the using unit. All trash, fiber containers, MRE packaging and tactical wire will be picked up by the using unit before departing the training area and returned to dumpsters/landfills mainside.

(2) A Foreign Object Debris (FOD) walk down is required on and adjacent to all TLZs and runways at Camp Davis and Oak Grove at the completion of training. Do not leave any objects, brass, links, and trash on the runways or taxiways in this area. The 2d Marine Aircraft Wing/other services uses these areas for helicopter and tilt-rotor training.

(3) The last using unit will be held accountable for the state of police. If upon arriving at a training area, the area is unsatisfactory, immediately notify BLACKBURN so that corrective action may be promptly initiated. Units failing to report are presumed to accept responsibility for corrective action.

(4) Human waste will be disposed of by the use of field head facilities. Individual "cat-holes" are permissible, but not at Oak Grove. For periods of longer than three days (all times at Oak Grove), units are required to lock on portable heads. Chapter 6 of this SOP is applicable.

f. Privately Owned Vehicles (POVs). Use of POVs to travel to training areas and live fire ranges is prohibited. Limited designated POV parking areas will be cleared and maintained at some ranges. By special arrangement with Range Control, temporary POV permits for other designated parking areas can be obtained if signed for at Range Control. Hunters may use registered off-road recreational vehicles to travel to the authorized hunting areas designated by the Base Game Warden IAW BO 5090.111 and 5090.115.

g. MEDEVAC/CASEVAC Assistance Procedures. MEDEVAC/CASEVAC assistance procedures are as written in Chapter 4 of this SOP. Contact BLACKBURN reporting casualty with intentions. It is recommended using a government safety vehicle to transport MEDEVAC/CASEVAC to unit BAS, MCB Naval Hospital, Bldg AS302 at New River Air Station, or Camp Geiger Dispensary (Bldg G770) during normal working hours. The Hospital Emergency Room is open 24 hours a day. Units conducting training are required to monitor the Range Control Safety net. Units are encouraged to utilize an OE-254 antenna for FM communication, 34.70 MHZ, with BLACKBURN to assist with MEDEVAC/CASEVAC.
h. Environmental Precautions

(1) General Instructions. Environmental precautions concerning wastewater disposal, sanitary waste, spill prevention, containment and cleanup, field vehicle servicing and equipment maintenance, and protection of wetlands are discussed in Chapter 6 and 7 of this SOP and are applicable.

(2) Environmental Surveys. Environmental surveys are periodically conducted aboard MCB. Units are reminded that their training activities cannot disturb the existing wildlife/flora/fauna, natural terrain, or destroy potential sites of historical/archaeological significance.

(3) Fire

(a) Because of the volume of forest fuel loading, (a term which means dry and decayed flammable matter on the ground), and the inaccessibility to many of the training areas by fire fighting and emergency rescue vehicles; the fire condition for training areas should be monitored daily and enforced by the units conducting training. Report all fires to BLACKBURN immediately regardless of location which would include impact areas.

(b) Until the fire hazard is significantly decreased in the GSRA and Oak Grove, use of any pyrotechnics, smoke grenades, booby trap type devices, simulators, flash bangs, and riot control agent (CS) is prohibited. Warming fires are authorized by e-mail special range request in training areas east of Highway 17 if the warming fire checklist is completed. Warming fires are prohibited in the GSRA and Oak Grove training areas.

i. Communications

(1) All ground units training in the MCB Camp Lejeune area will monitor the BLACKBURN frequency 34.70 MHZ FM at all times. Units training in the GSRA will monitor the BLACKBURN frequency 34.70 MHZ FM, retransmission frequency is 40.10. This is a repeated frequency located on the OP-9 Tower. Telephone service is available at numerous ranges. Aircraft will monitor BLACKBURN frequency 233.8 MHZ UHF and call inbound and outbound to TLZs, Camp Davis, and Oak Grove. Communications at Oak Grove is difficult for ground units. Telephone service is available at Oak Grove.
(2) The responsibility for proper communications with BLACKBURN rests with the ROIC. Erection of an OE-254 field antenna is recommended. Units are not authorized field antennas in the middle of a TLZ unless the TLZ is scheduled in RFMSS and signed for.

j. Geographical Data. Detailed geographical data is available from the Geographic Information System Web Page at https:\\gis.lejeune.usmc.mil/igir/default.asp. For printed products such as maps, aerial photos etc. contact the GIS office, phone number 451-9016, or the Range Safety Specialist, at 451-1240.

3. TRAINING/MANEUVER AREAS: The following pages list the individual training areas.
TRAINING AREA: A

STATUS: Active

SIZE: Approximately 340 acres

TRAINING AREA USES:

   Primary Use: Tactical Maneuver Training
   Alternate Use: Infantry Tactics Maneuver Area
                  Small Unit Training

RESTRICTIONS/COMMENTS:

   - Conflicts: Mainly used by MCCSSS

   - Area contains: TLZ Mallard. Training Area A is subdivided into two areas, AA and AC. A-1 baffled pistol range is located outside of training area AC, in the MCCSSS cantonment area.

   - Environmental Restrictions:
     75 acres of wetlands
     Vehicular traffic limited to trails and roads.

   - Maneuver Area Restrictions: Borders MCCSSS Cantonment area, Highway 17 Bypass, the New River, and borders a part of the City of Jacksonville, NC.

   - FAA Restrictions:
     Communication with MCAS New River control tower required for air support operations in training area.

   - Other Considerations: (N/A)

FACILITIES: None

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: No

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: AA

STATUS: Active

SIZE: Approximately 220 acres

TRAINING AREA USES:

Primary Use: Tactical Maneuver Training
Alternate Use: Infantry Tactics Maneuver Area
Small Unit Training

RESTRICTIONS/COMMENTS:

- Conflicts: Extremely small training area and is used mainly by MCCSSS.

- Area contains: N/A

- Environmental Restrictions:
  45 acres of wetlands
  Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions: Borders Highway 17 Bypass, Beirut Memorial, Veteran’s Cemetery, the New River, part of the City of Jacksonville, NC.

- FAA Restrictions:
  Communication with MCAS New River control tower required for air support operations in training area.

- Other Considerations: (N/A)

FACILITIES: None

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: No

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: AC

STATUS: Active

SIZE: Approximately 120 acres

TRAINING AREA USES:

  Primary Use: Tactical Maneuver Training
  Alternate Use: Infantry Tactics Maneuver Area
                  Small Unit Training

RESTRICTIONS/COMMENTS:

  - Conflicts: N/A
  - Area contains: TLZ Mallard
  - Environmental Restrictions:
                      30 acres of wetlands
                      Vehicular traffic limited to trails and roads.


  - FAA Restrictions:
                      Communication with MCAS New River control tower required for air support operations in training area.

  - Other Considerations: (N/A)

FACILITIES: None

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: No

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA:  B

STATUS:  Active

SIZE:  Approximately 1,309.0 acres

TRAINING AREA USES:

   Primary Use:  Tactical Maneuver Training
   Alternate Use:  Infantry Tactics Maneuver Area
                  Small Unit Training

RESTRICTIONS/COMMENTS:

- Area contains: B-12.  B area is subdivided into two areas, BC and BD.
- Environmental Restrictions:
  Areas contain 734 acres of wetlands.  Vehicular traffic limited to trails and roads.  Archaeological Sites, no excavation within marked/signed sites.
- Maneuver Area Restrictions:  Borders MCAS Cantonment area, Highway 17, and MB.
- FAA Restrictions:
  Communication with MCAS New River control tower required for air support operations in training area.
- Other Considerations:  (N/A)

FACILITIES:  New River Air Station, Camp Geiger, Southwest Creek.

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA:  BC

STATUS:  Active

SIZE:  Approximately 952.4 total acres

TRAINING AREA USES:

Primary Use:  Tactical Maneuver Training
Alternate Uses:  Infantry Tactics Maneuver Area
                Small Unit Training
                Formal School Training

RESTRICTIONS/COMMENTS:

- Conflicts:  Borders MCAS New River Cantonment area, Highway 17, and BD.

- Environmental Restrictions:
  Area contains wetlands and RCW habitat.  Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:
  Extensively used by SOI.  Area contains B-12 pistol range.

- FAA Restrictions:
  Communication with MCAS New River control tower required for all air support operations in training area.

FACILITIES: New River Air Station, Camp Geiger, and Back Gate to New River Air Station.

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA:  BD

STATUS:  Active

SIZE:  Approximately 356.6 total acres

TRAINING AREA USES:
   Primary Use:  Tactical Maneuver Training
   Alternate Use:  Infantry Tactics Maneuver Area
                  Small Unit Training

RESTRICTIONS/COMMENTS:
   - Environmental Restrictions:
     153.2 acres of wetlands.  Vehicular traffic limited to trails and roads.  Archaeological Sites, no excavation within marked/signed sites.
     - Maneuver Area Restrictions:  Extensively used by SOI.
   - FAA Restrictions:
     Communication with MCAS New River control tower required for all air support operations in the training area.

FACILITIES:  Trails and Roads

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE Auth:  Yes; only approved eye-safe LASER devices

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA:  E (EA, EB, EB Onslow, EC, E-1)

STATUS:  Active

SIZE:  Approximately 1,605.9 acres, EA 841.2 acres, EB 412.7 acres, EC 219.8 acres, E-1 132.2 acres.

TRAINING AREA USE:

Primary Use:  Amphibious Operations Training Area

Alternate Use:  Swim Site/Vehicular Water Crossing Exercise Area
Small Boat Exercise Area
Unmanned Aerial System (UAS) and Drone Maneuver Area
Amphibious Support Exercises/Splash Point
Anti-Air Missile Range
Tactical Training Area
Recreational swim area

RESTRICTIONS/COMMENTS:

- Conflicts:

  EA is only authorized for training after approval from Base EMD.  EB (just the sand) is authorized for training once scheduled in RFMSS, signed for, and a Beach Checklist is completed.  EB Onslow (sand and water seaward) is authorized for training once scheduled.  EC is the MCCS recreational beach and is scheduled via MCCS.

  - Area contains E-1, N-1/BT-3 Impact Area, H Live Fire Ranges, Brown’s Island, AIWW, and WDZs Gator and Shark, GP-20 (GP CAPEX) ALZ-22, Riseley Pier (No Longer Useable), Onslow Beach and Bay, Tower Seaside (North Tower), Wooden Post marking south end of EB, and SOTG boat house compound.  Units must sign for the EB and EB Onslow Training Areas (Onslow Beach/Onslow Bay) and fill out/sign a Beach Checklist at the time of signing out the beach.  A fence/sign and gate with lock has been installed and will physically separate the EC recreational beach from the EB training beach.  Using units will place a road guard/road guards with communications gear at that location to stop all POV traffic from entering the training area.

  - Environmental Restrictions:
During the months of May through October, certain areas along the beach will be limited for training due to the nesting activities of sea turtles. Disturbance of these areas is prohibited. Sea oats are protected, stay off the dunes. February through April is the period which the right whale migrates north. E training area users must be extremely vigilant for whales during this period. Vehicular traffic limited to trails, roads, vehicle access points from/to the beach, and wet sand area of beach. Keep vehicles off the dunes.

- Maneuver Area Restrictions: Can maneuver only in EB area, which starts at SNCO Beach and ends at South Tower Area.

- Onslow Beach Bridge Crossing Procedures. The following procedures will be used for all tracked vehicles (tanks/AAVs) crossing of the Onslow Beach Bridge to enhance safety and minimize any damage to the bridge. Unit conducting the crossing must contact Range Control (451-1240) during normal working hours before attempting a bridge crossing. If after normal working hours the unit should contact Blackburn who will coordinate with the Bridge Operator. Bridge operator number is 440-7376. This coordination is required before any tracked vehicles can cross the bridge.

  a. The unit must provide Ground Guides (front and back) with road guard vests for each tracked vehicle crossing the bridge.

  b. The tracked vehicle must cross at a slow speed (5 MPH or less). All POVs must be stopped before attempting any crossing.

  c. Only one tracked vehicle at a time and the tracked vehicle must be in the center of the bridge. If a tracked vehicle is towing another disabled tracked vehicle this must be briefed to the bridge operator beforehand.

  d. The unit must sweep off any dirt, mud, or gravel from the paved roadway of the bridge after the crossing is completed.

FACILITIES: Description of other structures: 3 MCCS recreation areas with parking, beach houses, and recreational vehicle parking areas.

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None
WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
**TRAINING AREA: F**

**STATUS:** Active

**SIZE:** Approximately 9,165.5 acres, 4,228 acres of live fire.

**TRAINING AREA USE:**

- **Primary Use:** Tactical Maneuver Training
- **Alternate Use:** Command Post Exercise Training
  - Infantry tactics Maneuver Area
  - Multipurpose Exercise Training Area
  - Mechanized Assault Training
  - Mechanized Combined Arms Maneuver Area
  - Small Unit Training

**RESTRICTIONS/COMMENTS:**

- Area contains: ETA-3, F-2, F25T, F-4, F-5, F-6, F-11A, F11B, F-17, F-18, F-18 .50 cal, F-18 7.62, MOUT CTF, MAC Ranges, Gas Chamber, CAS Holding Area Nancy, TLZs, Coot, Swan, Lark, Raven, Woodpecker, Pigeon, Robin, and ALZ-28

- Environmental Restrictions: Areas contains a Red-cockaded Woodpecker habitat; no vehicular traffic or bivouacking in designated areas. Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions: Area contains GP-1, 2, 3.

- Other Considerations: F is subdivided into seven areas: FA, FB, FC, FD, FE, FF, and FG.

**FACILITIES:** Numerous buildings and towers throughout the F training areas.

**ELECTRICITY AVAILABLE:** No

**INSTALLED COMMUNICATIONS:** None

**WATER SYSTEM:** No

**LASER USE AUTH:** Yes; only approved eye-safe LASER devices.

**NIGHT USE AUTH:** Yes

**MANEUVERS AUTH:** Yes
TRAINING AREA:  FA

STATUS:  Active

SIZE:  Approximately 1,081.3 acres.  Approximately 360.28 acres of live fire.

TRAINING AREA USE:

   Primary Use:  Tactical Maneuver Training
   Alternate Use:  Infantry Tactics Maneuver Area
                  Command Post Exercise Training
                  Mechanized Assault Training
                  Mechanized Combined Arms Maneuver Area
                  Small Unit Training

RESTRICTIONS/COMMENTS:

   - Conflicts.  Closes Ranges F-2, F-5, F-18, F-18 .50 cal, GP-1.

   - Area contains GP-1, TLZ Coot, F-2, and F-5.

   - Environmental Restrictions:
     Area contains approximately 10.29 acres of a Red-cockaded Woodpecker habitat; no vehicular traffic or bivouacking in designated area.  Area contains 160.8 acres of wetlands.  Vehicular traffic limited to trails and roads.

   - Maneuver Area Restrictions:  Borders on Highway 24, Training Areas RB, FF, FE, and FB.

FACILITIES: Small range shed on F-2 and facilities on F-5.

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA: FB

STATUS: Active

SIZE: Approximately 922.2 acres. Approximately 70.39 acres of live fire.

TRAINING AREA USE:

    Primary Use: Tactical Maneuver Training
    Alternate Use: Infantry Tactics Maneuver Area
                    Mechanized Assault Training
                    Mechanized Combined Arms Maneuver Area
                    Small Unit Training

RESTRICTIONS/COMMENTS:

    - Conflicts:
      Closes Ranges F-4, F-18 .50cal, and F-18 7.62.

    - Environmental Restrictions:
      Area contains 20.93 acres of Red-cockaded Woodpecker
      habitat; no vehicular traffic or bivouacking in designated area.
      467 acres of wetlands. Vehicular traffic limited to trails and
      roads.

    - Maneuver Area Restrictions:
      Borders on Highway 24, QA, FE, FA, and contains the F-4
      range.

FACILITIES: None

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA:  FC

STATUS:  Active

SIZE:  Approximately 1982.1 total acres.  Approximately 1108.43 acres of live fire.  MOUT Facility/Mobile MOUT/Mobile MOUT FOB 235.22 acres

TRAINING AREA USE:

Primary Use:  Tactical Maneuver Training
Alternate Use:  Multipurpose Exercise Training Area
              Infantry Tactics Maneuver Area
              Command Post Exercise Training
              Small Dismounted Unit Training
              Small Unit Training
              Mechanized Assault Training
              Mechanized Combined Arms Maneuver Area
              MOUT/Urban Training

RESTRICTIONS/COMMENTS:

- Conflicts:
  Closes Ranges F-4, MAC ranges, MOUT CTF, Mobile MOUT, TLZ

- Environmental Restrictions:
  328.11 total acres of wetlands.  Vehicular traffic limited to existing trails and roads.

- Maneuver Area Restrictions:
  Borders on Highway 172, QB, FE, FF, FG, and Lyman Road.  The church steeple at 85 feet AGL in MOUT Complex is the tallest obstacle to flight.

FACILITIES:  MAC Ranges and MOUT Facility.

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.
NIGHT USE AUTH: Yes
MANEUVERS AUTH: Yes
TRAINING AREA:   FD

STATUS:  Active

SIZE:  Approximately 1064.5 total acres.  Approximately 46.40 acres of live fire.

TRAINING AREA USE:

   Primary Use:  Tactical Maneuver Training
   Alternate Use:  Mechanized Assault Training
                  Multipurpose Exercise Training Area
                  Small Unit Training
                  Small Dismounted Unit Training
                  Infantry Tactics Maneuver Area
                  Mechanized Combined Arms Maneuver Area

RESTRICTIONS/COMMENTS:

- Conflicts:
  G-3 TOW closes FD.

- Area contains TLZ Penguin, two tank crossing pads, gas chamber, NBC trail, F-6 range and F-17 tower, and HA Nancy.

- Environmental Restrictions:
  No vehicular traffic or bivouacking in designated areas.
  Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:
  Borders on Lyman Road, GB, GA, and Sneads Ferry Road.

FACILITIES:  Old Landfill

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA: FE

STATUS: Active

SIZE: Approximately 921.6 total acres. Approximately 253 acres of live fire.

TRAINING AREA USE:

- Primary Use: Tactical Maneuver Training
- Alternate Use: Mechanized Assault Training
- Multipurpose Exercise Training Area
- Small Unit Training
- Infantry Tactics Maneuver Area
- Command Post Exercise Training

RESTRICTIONS/COMMENTS:

- Conflicts:

- Area contains TLZ Swan and GP-2.

- Environmental Restrictions:
  Area contains 17.5 acres of Red-cockaded Woodpecker habitat; no vehicular traffic or bivouacking in designated areas. Contains 253 acres of wetlands. Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:
  Borders on FB, QA, QB, FC, FG, and FA.

FACILITIES: None

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes
MANEUVERS AUTH: Yes
TRAINING AREA: FF

STATUS: Active

SIZE: Approximately 1,020.9 total acres
Approximately 626.5 acres of live fire

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Multipurpose Exercise Training Area
Small Unit Training
Small Dismounted Unit Training
Infantry Tactics Maneuver Area
Command Post Exercise Training

RESTRICTIONS/COMMENTS:

- Conflicts:

- Area contains Wallace Creek

- Environmental Restrictions:
  -
  Area contains 95 acres of Red-cockaded Woodpecker habitat; no vehicular traffic or bivouacking in designated areas. Area Contains 221 acres of wetlands. Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:
  -
  Borders on RA, RB, FA, FE, FC, and FG.

FACILITIES: None

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes
MANEUVERS AUTH: Yes
TRAINING AREA: FG

STATUS: Active

Size: Approximately 2,172.9 total acres. Approximately 1,464.6 acres of live fire.

Training Area Use:

- Primary Use: Tactical Maneuver Training
- Alternate Use: Mechanized Assault Training
- Multipurpose Exercise Training Area
- Small Unit Training
- Small Dismounted Unit Training
- Infantry Tactics Maneuver Area
- Command Post Exercise Training

RESTRICTIONS/COMMENTS:


- Area contains 2d MLG BST complex and 2d CEB ETA-3.

- Environmental Restrictions: Area contains 26.57 acres of Red-cockaded Woodpecker habitat; no vehicular traffic or bivouacking in designated areas. Area contains 897.5 acres of wetlands. Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:
  Borders on Sneads Ferry Road, Piney Green Road, Lyman Road, FC, and FF.

FACILITIES: New landfill and numerous buildings.

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: G

STATUS: Active

SIZE: Approximately 7,433.5 acres

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Mechanized Assault Training
Multipurpose Exercise Training Area
Large Unit Training
Tactical Maneuver Training
Amphibious Support Exercises
Fire Support Coordinator Training
Command Post Exercise Training
Mechanized Combined Arms Maneuver Area
Mechanized Combined Arms Maneuver Area
Tactical Aviation Training
Tactical Air Control Party Training
Naval Gunfire Training

RESTRICTIONS/COMMENTS:


- Environmental Restrictions: Area contains 523.15 acres Red-cockaded Woodpecker habitat; no vehicular traffic or bivouacking in designated areas. Vehicular traffic limited to trails and roads. Archaeological Sites, no excavation within marked/signed sites.


- Other Considerations: The G training area is divided into nine areas; GA, GB, GC, GD, GE, GF, GG, GH, and GI. Of these areas only GF, GG and portions of GA, GB and GI, are suitable for tactical unit training. The rest are primarily surface danger zones and impact areas. The G training areas surround the G-10 Impact Area.
FACILITIES: Towers at OP 2, 3, and 5; fire tower near ETA 4 and ETA-5.

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; ground and aviation approved LASER devices authorized from designated positions.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: GA

STATUS: Active

SIZE: Approximately 767.1 acres. Approximately 233.53 acres of live fire.

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Small Unit Training
Fire Support Coordinator Training
Command Post Exercise Training
Forward Observer Training
Multipurpose Exercise Training Area
Tactical Air Control Party

RESTRICTIONS/COMMENTS:

- Conflicts: G-3 TOW and G-10 Naval Gunfire


- Environmental Restrictions:
  Area contains 20.18 acres of RCW and 309.4 acres of wetlands. No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat. Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:
  Area borders buffer zone for G-10 Impact Area. BP Wolf closes G-3, MP-6, MP-7, MP-5. Borders Sneads Ferry Road, FD, the G-10 Impact Area, and GF. G-3 TOW shuts down Lyman Road, OP-2, OP-3, MAC Ranges, MOUT, MP-2, MP-3, MP-4, ALZ-7, TLZs Raven, Pigeon, and Tern.

FACILITIES: 2 tank crossing pads

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No
LASER USE AUTH: Yes; ground and aviation LASERs from designated ranges and OPs only. Only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: GB

STATUS: Active

SIZE: Approximately 535.4 acres. Approximately 364.21 acres of live fire.

TRAINING AREA USE:

- Primary Use: Tactical Maneuver Training
- Alternate Use: Fire Support Coordinator Training
  Command Post Exercise Training
  Forward Observer Training
  Multipurpose Exercise Training Area
  Small Unit Training

RESTRICTIONS/COMMENTS:

- Conflicts: G-3 TOW


- Maneuver Area Restrictions:

  Area borders buffer zone for G-10 Impact Area. Borders on Lyman Road, FD, GC and G-10 Impact Area

- Environmental Restrictions:

  Area contains 61.3 acres of RCW habitat and 130 acres of wetlands. No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat. Vehicular traffic limited to trails and roads.

FACILITIES: OP-2, OP-3, and two tank crossing pads

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; ground LASERs from designated ranges and OPs only. Only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes
MANEUVERS AUTH: Yes
TRAINING AREA: GC

STATUS: Active

SIZE: Approximately 622.6 acres. Approximately 198.7 acres of live fire

TRAINING AREA USE:

- **Primary Use:** Tactical Maneuver Training
- **Alternate Use:** Fire Support Coordinator Training, Command Post Exercise Training, Forward Observer Training, Small Unit Training

RESTRICTIONS/COMMENTS:

- **Conflicts:** G-3 TOW. BP Eel closes MP-5 and G-3, units may not fire from MP-7 while BP Eel is active. A/C will not occupy BP Wolf while BP Eel is active.

- **Area contains** GP-5, GP-6, GP-8, MP-4, MP-5, MP-6, TLZ Tern, BP Eel, BP Sidewinder, OP-4.

- **Environmental Restrictions:**
  
  Area contains 38.2 acres of RCW habitat and 91.62 acres of wetlands. No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat. Vehicular traffic limited to trails and roads.

- **Maneuver Area Restrictions:**
  
  Area borders buffer zone for G-10 Impact Area. Borders Lyman Road and Highway 172.

FACILITIES: OP-4 and two tank crossing pads

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; ground and aviation LASERs from designated ranges and OPs only. Only approved LASER devices.
NIGHT USE AUTH: Yes  MANEUVERS AUTH: Yes
TRAINING AREA: GD

STATUS: Active

SIZE: Approximately 1,101.7 acres. Approximately 368.7 acres of live fire.

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Fire Support Coordinator Training
Command Post Exercise Training
Multipurpose Exercise Training Area
Small Unit Training

RESTRICTIONS/COMMENTS:

- Conflicts:

  A small portion of G-3 TOW extends into the GD area, CVOT Highway 172, and G-10 Naval Gunfire.

  - Area contains EOD-1, G-6 CBC, GP-11, and MP-8.

  - Environmental Restrictions:

    Area contains 43.7 acres of RCW habitat and 577.5 acres of wetlands. No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat. Browns Swamp is in this area. Vehicular traffic limited to trails and roads.

    - Maneuver Area Restrictions:

      Area borders buffer zone for G-10 Impact Area. Borders Highway 172, GF, GA, and GC.

FACILITIES: Four tank crossing pads.

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; ground LASERs from designated ranges, OPs only. Only approved eye-safe LASER devices.
NIGHT USE AUTH: Yes
MANEUVERS AUTH: Yes
TRAINING AREA: GE

STATUS: Active

SIZE: Approximately 527.4 acres. Approximately 312 acres of live fire.

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Fire Support Coordinator Training
Command Post Exercise Training
Forward Observer Training
Multipurpose Exercise Training Area
Small Unit Training

RESTRICTIONS/COMMENTS:

- Conflicts: G-3 .50 cal shuts down the GE area along with GP-7, TLZ Crane, and CVOT Highway 172.

- Area contains TLZ Crane, GP-7, and HA Emily.

- Environmental Restrictions:

  Area contains 43 acres of RCW habitat and 62 acres of wetlands. No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat. Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:

  Noise Restrictions due to the close proximity of Willis Landing. Borders on Highway 172, Mills Creek, Bear Creek, and GI.

FACILITIES: Four tank crossing pads

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; ground and aviation LASERs from designated ranges and OPs only. Only approved eye-safe LASER devices.
NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA:  GF

STATUS:  Active

SIZE:  Approximately 643.3 acres.  Approximately 82.8 acres of live fire.

TRAINING AREA USE:

Primary Use:  Tactical Maneuver Training
Alternate Use:  Fire Support Coordinator Training
Command Post Exercise Training
Forward Observer Training
Multipurpose Exercise Training Area
Small Unit Training

RESTRICTIONS/COMMENTS:

- Conflicts:  CVOT Highway 172 and G-10 Naval Gunfire.
  Area contains future site of Multi-Purpose Machinegun Range.

- Environmental Restrictions:
  Area contains 4 acres of RCW habitat and 273.3 acres of wetlands.  No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat.  Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:
  Borders on Highway 172, Sneads Ferry Road, GA, and GD.

FACILITIES:  One tank crossing pad

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; ground LASERs from designated ranges and OPs only.  Only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA: GG

STATUS: Active

SIZE: Approximately 1,759.0 acres. Approximately 113.94 acres of live fire.

TRAINING AREA USE:

- Primary Use: Tactical Maneuver Training
- Alternate Use: Amphibious Support Exercises
- Mechanized Combined Arms Maneuver Area
- Multipurpose Exercise Training Area
- Tactical Maneuver Training
- Mechanized Assault Training

RESTRICTIONS/COMMENTS:

- Conflicts:
  - CVOT Highway 172, G-10 Naval Gunfire, and GP-12.
  - Area contains TLZ/DZ Falcon, TLZ/DZ Goose, GP-10, GP-13 and amphibious splash points 4, 5, and 6.

- Environmental Restrictions:
  - Area contains 11.83 acres of RCW habitat and 630 acres of wetlands. No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat. Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:
  - Borders Onslow Beach Road, Freemans Creek, Highway 172 and the AIWW.

FACILITIES: Onslow Beach North Tower

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.
NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA:  GH

STATUS:  Active

SIZE:  Approximately 917.3 acres.  Approximately 653 acres of live fire.

TRAINING AREA USE:

Primary Use:  Tactical Maneuver Training
Alternate Use:  Amphibious Support Exercises
Mechanized Combined Arms Maneuver Area
Multipurpose Exercise Training Area
Tactical Maneuver Training
Mechanized Assault Training

RESTRICTIONS/COMMENTS:

- Conflicts:

  CVOT Highway 172 and G-10 Naval Gunfire.

- Area contains Freemans Creek Landing, G-5, GP-12, AIWW, and access to Amphibious Splash Point 3.

- Environmental Restrictions:

  Area contains 11.1 acres of RCW habitat and 178.7 acres of wetlands.  No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat.  Vehicular traffic limited to trails and roads.  Archaeological Sites, no excavation within marked/signed sites.

- Maneuver Area Restrictions:

  Borders Highway 172, GG, AIWW and GI.  Note:  H Ranges are located in the N-1/BT-3 area.

FACILITIES:  None

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.
NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: GI

STATUS: Active

SIZE: Approximately 559.7 total acres. Approximately 81.98 acres of live fire.

TRAINING AREA USE:

   Primary Use: Tactical Maneuver Training
   Alternate Use: Mechanized Assault Training
                  Mechanized Combined Arms Maneuver Area
                  Small Unit Training
                  Infantry Tactics Maneuver Area

RESTRICTIONS/COMMENTS:

   - Conflicts:

     CVOT Highway 172. G-3 .50 cal shuts down a portion of the GI area. When G-7 is HOT, a large portion of this area is closed.

     - Area contains G-7, GP-9, TLZ Gull, and access to Bear Tower.

     - Environmental Restrictions:

     Area Contains 0.62 acres of RCW habitat and 95.62 acres of wetlands. No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat. Vehicular traffic limited to trails and roads.

     - Maneuver Area Restrictions:

     Borders on Highway 172, GH, AIWW, and GE area.

FACILITIES: None

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes MANEUVERS AUTH: Yes
TRAINING AREA: H

STATUS: Active

SIZE: Approximately 7,310.9 acres

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Military Operations in Urbanized Terrain
Collective Training Facility (MOUT CTF)
Infantry Tactics Maneuver Area
Mechanized Combined Arms Maneuver Area
Command Post Exercise Training

RESTRICTIONS/COMMENTS:

- Area contains Combat Town, Hawk FOB, TLZs Hawk, Jaybird,
  Dove, Dodo, Sandpiper, Egret, Finch, TLZ/DZ Plover, GP-14,
  GP-16, GP-17, GP-21, GP-23, GP-24, GP-25, GP-28, GP-29, GP-30,
  ETA-7, Splash Points 15, 16, 20, 22, 23, 26, and 29.

- Environmental Restrictions:

  Area contains 435 acres of RCW habitat and 3,005 acres of
  wetlands. No vehicular traffic or bivouacking in areas
  designated as a Red-cockaded Woodpecker habitat. Vehicular
  traffic limited to trails and roads. Archaeological Sites, no
  excavation within marked/signed sites.

- Maneuver Area Restrictions: Borders on Highway 172, Sneads
  Ferry Road, French Creek, New River, IA, IE, and JA,

- Other Considerations: H is subdivided into seven areas; HA,
  HB, HC, HD, HE, HF, HG, and HH.

FACILITIES: Tank crossing pads

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA:  HA

STATUS:  Active

SIZE:  Approximately 930.2 total acres

TRAINING AREA USE:

Primary Use:  Tactical Maneuver Training
Alternate Use:  Infantry Tactics Maneuver Area
Command Post Exercise Training
Small Unit Training
Small Dismounted Unit Training

RESTRICTIONS/COMMENTS:

- Conflicts:  ETA-7.


- Environmental Restrictions:

  Area contains 115 acres of RCW habitat and 136 acres of wetlands.  No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat.  Vehicular traffic limited to trails and roads.  Archaeological Sites, no excavation within marked/signed sites.

- Maneuver Area Restrictions:

  Borders on HG, HC, HH, Duck Creek, Goose Creek, and New River.

FACILITIES:  None

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes
MANEUVERS AUTH: Yes
TRAINING AREA: HB

STATUS: Active

SIZE: Approximately 1541.61 total acres

TRAINING AREA USE:

   Primary Use: Tactical Maneuver Training
   Alternate Use: Small Unit Training
                  Infantry Tactics Maneuver Area
                  Command Post Exercise Training

REstrictions/COMMENTS:

   - Conflicts:
     MOUT Combat Town when Simunitions in use.

   - Area contains TLZ/DZ Dodo, TLZs Heron and Dove, Dry Gap

   - Environmental Restrictions:
     Area contains 192.40 acres of RCW habitat and 242 acres of
     wetlands. No vehicular traffic or bivouacking in areas
     designated as a Red-cockaded Woodpecker habitat. Vehicular
     traffic limited to trails and roads.

   - Maneuver Area Restrictions: Borders on HE, HF, IA, IE, HC,
     and HA.

FACILITIES: Numerous buildings in Combat Town.

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: HC

STATUS: Active

SIZE: Approximately 859.8 total acres

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Small Unit Training
            Infantry Tactics Maneuver Area
            Command Post Exercise Training

RESTRICTIONS/COMMENTS:

- Conflicts:
  Portions of the area are restricted when ETA-7 is HOT.

- Area contains GP-29 and TLZ/DZ Plover.

- Environmental Restrictions:

  Area contains 72 acres of RCW habitat and 173 acres of
  wetlands. No vehicular traffic or bivouacking in areas
  designated as a Red-cockaded Woodpecker habitat. Vehicular
  traffic limited to trails and roads.

- Maneuver Area Restrictions
  Borders on Marines Road, HB, HA, HG, HH, and IE.

FACILITIES: None

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA:  HD

STATUS:  Active

SIZE:  Approximately 946.6 total acres

TRAINING AREA USE:

   Primary Use:  Tactical Maneuver Training
   Alternate Use:  Small Unit Training
                  Infantry Tactics Maneuver Area
                  Command Post Exercise Training

RESTRICTIONS/COMMENTS:

   - Conflicts:  None

   - Area contains TLZ Jaybird, Splash Point 20.

   - Environmental Restrictions:

         Area contains 10.12 acres of RCW habitat and 214 acres of
         wetlands.  No vehicular traffic or bivouacking in areas
         designated as a Red-cockaded Woodpecker habitat.  Vehicular
         traffic limited to trails and roads.

         - Maneuver Area Restrictions:  Borders on French Creek, HA,
                                       HC, HE, HH, and Marines Road.

FACILITIES:  None

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA: HE

STATUS: Active

SIZE: Approximately 632.5 total acres

TRAINING AREA USE:

- Primary Use: Tactical Maneuver Training
- Alternate Use: Small Unit Training
  Infantry Tactics Maneuver Area
  Command Post Exercise Training
  Small Dismounted Unit Training
  Mechanized Combined Arms Maneuver Area

RESTRICTIONS/COMMENTS:

- Conflicts: Small portion has restricted movement when Combat Town is HOT.

- Area contains TLZ Hawk and Hawk FOB.

- Environmental Restrictions:

  Area contains 84.37 acres of RCW habitat and 127 acres of wetlands. No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat. Vehicular traffic limited to trails and roads.

  - Maneuver Area Restrictions:
    Borders on Sneads Ferry Road, HB, HD, and HF.

FACILITIES: None

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA:  HF

STATUS:  Active

SIZE:  Approximately 1067.1 total acres

TRAINING AREA USE:

   Primary Use:  Tactical Maneuver Training
   Alternate Use:  Small Unit Training
                 Infantry Tactics Maneuver Area
                 Small Dismounted Unit Training

RESTRICTIONS/COMMENTS:

   - Conflicts:  Restricted movement when Combat Town and Hawk FOB are HOT.

   - Area contains Hawk FOB, Combat Town, and Gillets Creek.

   - Environmental Restrictions:

          Area contains 119 acres of RCW habitat and 422 acres of wetlands.  No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat.  Vehicular traffic limited to trails and roads.

       - Maneuver Area Restrictions:  Borders on Sneads Ferry Road, Highway 172, IA, HB, and HE.

FACILITIES:  One tank crossing pad

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA: HG

STATUS: Active

SIZE: Approximately 588.8 total acres

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Small Unit Training
Infantry Tactics Maneuver Area
Small Dismounted Unit Training

RESTRICTIONS/COMMENTS:

- Conflicts: Restricted movement when ETA-7 is HOT.

- Area contains TLZs Sandpiper and Finch, and GPs 28 and 31.

- Environmental Restrictions:

  Area contains 146.3 acres of wetlands and no RCW habitat. Vehicular traffic limited to trails and roads.


FACILITIES: One tank crossing pad and Splash Point 29.

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: HH

STATUS: Active

SIZE: Approximately 744.3 total acres

TRAINING AREA USE:

  Primary Use: Tactical Maneuver Training
  Alternate Use: Small Unit Training
                Infantry Tactics Maneuver Area
                Small Dismounted Unit Training

REstrictions/COMMENTS:

- Conflicts: Restricted movement when ETA-7 is HOT.

- Area contains GP-23 and Duck Creek.

- Environmental Restrictions:

  Area contains 5.12 acres of RCW habitat and 193.5 acres of
  wetlands. No vehicular traffic or bivouacking in areas
  designated as a Red-cockaded Woodpecker habitat. Vehicular
  traffic limited to trails and roads.

  - Maneuver Area Restrictions: Borders on HA, HC, HD, and
    Marines Road.

FACILITIES: One tank crossing pad and Splash Points 15 and 16.

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA:  I

STATUS:  Active

SIZE:  Approximately 7,385.3 acres

TRAINING AREA USE:

Primary Use:  Tactical Maneuver Training
Alternate Use:  Multipurpose Exercise Training Area
Large Unit Training
Mechanized Combined Arms Maneuver Area
Command Post Exercise Training
Aviation Staging Area/FARP
Amphibious Assault Maneuver Area
Assault Aircraft Landing Strip
Infantry Tactics Maneuver Area

RESTRICTIONS/COMMENTS:

- Area contains TLZ/DZ Albatross, TLZ/DZ Bluebird, TLZ/DZ Canary, TLZ Quail, TLZ Osprey, TLZ Egret, ALZ-8, ETA-1, ETA-2, ETA-2 Line charge, ETA-6 CVOT, GPs; 15, 17, 18, 21, 22, 26, 27, 30, and I-1.

- Environmental Restrictions: Area contains a Red-cockaded Woodpecker habitat. No vehicular traffic or bivouacking in designated areas. Vehicular traffic limited to trails and roads. Archaeological Sites, no excavation within marked/signed sites.

- Maneuver Area Restrictions: Borders on Highway 172, Onslow Beach Road, AIWW, and New River.

- Other Considerations: Area is subdivided into IA, IB, IC, ID, IE, IF, and IG.

FACILITIES:  Courthouse Bay, Traps Bay, Mile Hammock Bay, Splash Points 7, 9, 10, 12, 13, 17, 18, 19, 27, 31, and 34. There are seven tank crossing pads.

ELECTRICITY AVAILABLE:  No
INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No
LASER USE AUTH:  Yes Only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes MANEUVERS AUTH:  Yes
TRAINING AREA:  IA

STATUS:  Active

SIZE:  Approximately 1066.8 total acres

TRAINING AREA USE:

Primary Use:  Tactical Maneuver Training
Alternate Use:  Small Unit Training
  Command Post Exercise Training
  Engineer Maneuver/Training Area
  Infantry Tactics Maneuver Area
  Mechanized Assault Training

RESTRICTIONS/COMMENTS:

- Conflicts:
  When the MCLIC line charge inert is fired a portion of IA is
  shut down.

- Area contains GP-17, GP-21, and TLZ/DZ Osprey.

- Environmental Restrictions:
  - Area contains 49.88 acres of RCW habitat and 660 acres of
    wetlands. No vehicular traffic or bivouacking in areas
    designated as a Red-cockaded Woodpecker habitat. Dry conditions
    and tree harvesting creates high probability for forest fires.
    Vehicular traffic limited to trails and roads.

  - Maneuver Area Restrictions: Borders on Highway 172, HF, HB,
    and IE.

FACILITIES: Numerous tank trails and roads

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA: IB

STATUS: Active

SIZE: Approximately 861.2 total acres

TRAINING AREA USE:

   Primary Use: Tactical Maneuver Training
   Alternate Use: Engineer Maneuver/Training Area
                  Command Post Exercise Training
                  Infantry Tactics Maneuver Area
                  Mechanized Assault Training
                  Large Unit Training

RESTRICTIONS/COMMENTS:

   - Conflicts: None.
   - This area contains TLZ Quail, GP-15, and Gillets Creek.
   - Environmental Restrictions:

       Area contains 1.47 acres of RCW habitat and 434.3 acres of wetlands. No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat. Vehicular traffic limited to trails and roads.

       - Maneuver Area Restrictions
       Borders Onslow Beach Road, AIWW, IG, and Highway 172.

FACILITIES: Two tank crossing pads and Splash Points 7 and 9.

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: IC

STATUS: Active

SIZE: Approximately 905.0 total acres

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Engineer Maneuver/Training Area
               Command Post Exercise Training
               Infantry Tactics Maneuver Area
               Mechanized Assault Training

RESTRICTIONS/COMMENTS:

- Conflicts:
  A portion of the IC area is closed down when the MCLIC Line Charge (Inert) is fired.

- Area contains GP-19.

- Environmental Restrictions:
  - Area contains 46.13 acres of RCW habitat and 155 acres of wetlands. No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat. Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:
  Borders Highway 172, IG, AIWW, ID, IF, and Mile Hammock Bay.

FACILITIES: None

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: ID

STATUS: Active

SIZE: Approximately 293.2 total acres

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Amphibious Support Exercises
Assault Aircraft Landing Strip
Engineer Maneuver/Training Area
Helicopter Rappelling
Infantry Tactics Maneuver
Mechanized Combined Arms Maneuver Area
Unmanned Aerial System (UAS) Maneuver area
Drone Maneuver Area
Boat Ramp/Launch Area (LCAC, LCV, small boats)

RESTRICTIONS/COMMENTS:

- Conflicts: None.

- Area contains TLZ/DZ Bluebird (with future UAS landing strip) and GP-22.

- Environmental Restrictions:

  Area contains 123.3 acres of wetlands and no RCW habitat. Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions: Borders on AIWW, IF, and IC.

FACILITIES: Mile Hammock Bay Boat Ramp/LCAC Launch Area, approved LCAC routes, Splash Points 12 and 13.

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: IE

STATUS: Active

SIZE: Approximately 1438.0 total acres

TRAINING AREA USE:

   Primary Use: Tactical Maneuver Training
   Alternate Use: Command Post Exercise Training
   Infantry Tactics Maneuver Area
   Small Unit Training

RESTRICTIONS/COMMENTS:

   - Conflicts: A portion of the IE area is shut down when the MCLIC line charge inert is fired from ETA-2.


   - Environmental Restrictions:

       Area contains 19.44 acres of RCW habitat and 273 acres of wetlands. No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat. Vehicular traffic limited to trails and roads.

   - Maneuver Area Restrictions: Borders on Highway 172, HB, HC, HG, IA, and Marines Road.

FACILITIES: Two tank crossing pads.

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA:  IF

STATUS:  Active

SIZE:  Approximately 1445.2 total acres

TRAINING AREA USE:

   Primary Use:  Tactical Maneuver Training
   Alternate Use:  Engineer Maneuver/Training Area
                  Infantry Tactics Maneuver Area
                  Command Post Exercise Training
                  Small Unit Training

RESTRICTIONS/COMMENTS:

   - Conflicts: A portion of the IF is closed when the line charge inert MCLIC is fired.

   - Area contains TLZ/DZ Canary, ETA-1, ETA-2, ETA-6 CVOT, and GP-27.

   - Environmental Restrictions:

       Area contains 22.75 acres of RCW habitat and 439.70 acres of wetlands. No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat. Vehicular traffic limited to trails and roads. Archaeological Sites, no excavation within marked/signed sites.

   - Maneuver Area Restrictions: Borders on AIWW, IC, Highway 172, Courthouse Bay, and Howards Bay.

FACILITIES: One tank crossing pad and Splash Points 17, 18, and 19.

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  No

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA:  IG

STATUS:  Active

SIZE:  Approximately 530.3 total acres

TRAINING AREA USE:

Primary Use:  Tactical Maneuver Training
Alternate Use:  Engineer Maneuver/Training Area
Infantry Tactics Maneuver Area
Command Post Exercise Training
Small Unit Training

RESTRICTIONS/COMMENTS:

- Conflicts:  None.


- Environmental Restrictions:

  Area contains 112 acres of RCW habitat and 275.5 acres of wetlands.  No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat.  Vehicular traffic limited to trails and roads.

  - Maneuver Area Restrictions:  Borders on AIWW, IB, IC, Highway 172, and Sulliers Bay.

FACILITIES:  One tank crossing pad

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  No

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA: J

STATUS: Active

SIZE: Approximately 1,143.4 acres

TRAINING AREA USE:

Primary Use: Amphibious Support Exercises
Alternate Use: Engineer Maneuver Training Area
               Infantry Tactics Maneuver Area
               Amphibious Training Area
               Tactical Maneuver Training

REstrictions/COMMENTS:

- Area contains GP-31, GP-32, GP-33, TLZ Oriole, TLZ Sandpiper, LHD Deck, and TLZ Kite.

- Environmental Restrictions:

  Area contains 45 acres of RCW habitat, eagle nesting areas, and 103.6 acres of wetlands. No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat. Vehicular traffic limited to trails and roads. Archaeological Sites, no excavation within marked/signed sites.

- Maneuver Area Restrictions:

  No troop training south of the line drawn from grid coordinate 810296 to 820296. Area contains amphibian vehicle school, barracks, and AAV/EFV maneuver areas. Courthouse Bay and Stone Bay used extensively for AAV/EFV training. Borders HG, New River, and Courthouse Bay.

- Other Considerations: J is subdivided into five sections: JA, JB, JC, JD, and JE.

FACILITIES: Highway 172 runs through the center. Area contains Splash Points 27, 31, 34, 40, and 41.

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No
LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: JA

STATUS: Active

SIZE: Approximately 357.0 total acres

TRAINING AREA USE:

   Primary Use: Tactical Maneuver Training
   Alternate Use: Small Unit Training
                  Engineer Maneuver/Training Area
                  Infantry Tactics Maneuver Area

RESTRICTIONS/COMMENTS:

- Conflicts: None

- Area contains TLZ Sandpiper, Oriole, GP-31, and GP-33.

- Environmental Restrictions:

  Area contains 45 acres of RCW habitat and 115.15 acres of wetlands. No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat. Vehicular traffic limited to trails and roads.


FACILITIES: Splash Points 40 and 41.

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA:  JB

STATUS:  Active

SIZE:  Approximately 194.1 total acres

TRAINING AREA USE:

  Primary Use:  Tactical Maneuver Training
  Alternate Use:  Engineer Maneuver/Training Area
                      Amphibious Training Area
                      Small Unit Training Area

RESTRICTIONS/COMMENTS:

- Conflicts:  None

- Area does not contain any GPs or TLZs.

- Environmental Restrictions:

  Area contains 25.55 acres of wetlands.  Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:  Borders Highway 172, New River, and JC.

FACILITIES:  None

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA:  JC

STATUS:  Active

SIZE:  Approximately 356.0 total acres

TRAINING AREA USE:

- Primary Use:  Amphibious Training Area
- Alternate Use:  Swim Site/Vehicular Water Crossing
  Small Unit Training
  Tactical Maneuver Training
  Engineer Maneuver/Training Area
  Small Boat Launch Operating Area

RESTRICTIONS/COMMENTS:

- Conflicts:  None
- Area contains TLZ Kite and GP-32.
- Environmental Restrictions:
  Area contains American Bald Eagle site and 44.6 acres of wetlands. Vehicular traffic limited to trails and roads. Archaeological Sites, no excavation within marked/signed sites.
- Maneuver Area Restrictions:
  Borders Highway 172, Courthouse Bay, 2d AABn area, 2d Recon Bn area, Amphibious Boat Ramp area.

FACILITIES:  None

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  No

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA: JD

STATUS: Active

SIZE: Approximately 236.3 total acres

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Swim Site/Vehicular Water Crossing
Small Unit Training
Infantry Tactics Maneuver Area
Amphibious Training Area

RESTRICTIONS/COMMENTS:

- Conflicts: None
- Area contains Sneads Ferry Gate and LHD Deck.
- Environmental Restrictions:
  Area contains environmentally sensitive area and 33.65 acres of wetlands. Vehicular traffic limited to trails and roads.
- Maneuver Area Restrictions: Borders on New River, Highway 172 and JB.

FACILITIES: Sneads Ferry Bridge, Sneads Ferry Gate, and Recreational Area.

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: K

STATUS: Active

SIZE: Approximately 3,143.6 acres

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Formal School Training (SOI)

Alternate Use: Small Unit Training
Infantry Tactics Maneuver Area

RESTRICTIONS/COMMENTS:

- Area contains the K-2 Impact Area containing 21 firing ranges, K-510, TLZ Cardinal, GP-34, EOD-2, ETA-5, and ETA-5A.

- Environmental Restrictions:

  Area contains 250.29 acres of RCW habitat and 828 acres of wetlands. No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat. Vehicular traffic limited to trails and roads. Archaeological Sites, no excavation within marked/signed sites.

- Maneuver Area Restrictions: Area borders New River, MC, MD, MF, and LF.

- FAA Restrictions:

  Communication with MCAS New River control tower required for air support operations in training area. Restricted Airspace R-5306E and R-5306D covers the majority of the area.

- Other Considerations: K is subdivided into four areas: KA, KB, KC, and KD.

FACILITIES: Various Small Buildings, Range Towers, and Splash Points 30, 37, 38, and 42.

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No
LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: KA

STATUS: Active

SIZE: Approximately 617.4 total acres

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Small Unit Training
Command Post Exercise Training
Infantry Tactics Maneuver Area

RESTRICTIONS/COMMENTS:

- Conflicts: None
- Area contains: N/A
- Environmental Restrictions:
  Area contains 75.32 acres of RCW habitat and 84.9 acres of wetlands. No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat. Vehicular traffic limited to trails and roads. Archaeological Sites, no excavation within marked/signed sites.
- Maneuver Area Restrictions: Borders, KC, KB, MC, and New River.
- FAA Restrictions:
  Communication with MCAS New River control tower required for air support operations in training area.

FACILITIES: Splash Point 42

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: KB

STATUS: Active

SIZE: Approximately 1,091.8 total acres

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Small Unit Training
Infantry Tactics Maneuver Area
Bivouac Sites for Live Fire Ranges

RESTRICTIONS/COMMENTS:

- Conflicts: Maneuver restrictions when K-510 is HOT.

- Area contains TLZ Cardinal, K-510, and ALZ-20 behind parking lot of K-305.

- Environmental Restrictions:
  Area contains 112 acres of RCW habitat and 275 acres of wetlands. No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat. Vehicular traffic limited to trails and roads. Archaeological Sites, no excavation within marked/signed sites.

- Maneuver Area Restrictions: Area borders Verona Loop Road, KA, KC, KD, and New River.

- FAA Restrictions:
  Communication with MCAS New River control tower required for air support operations in training area.

FACILITIES: Parking Areas for the K Live Fire Ranges and Splash Points 37 and 38.

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes  MANEUVERS AUTH: Yes
TRAINING AREA:  KC

STATUS:  Active

SIZE:  Approximately 1009.3 total acres

TRAINING AREA USE:

  Primary Use:  Tactical Maneuver Training
  Alternate Use:  Command Post Exercise Training
  Infantry Tactics Maneuver Area

RESTRICTIONS/COMMENTS:

  - Conflicts:  None
  - Area contains SOI Land Navigation Courses.
  - Environmental Restrictions:
    Area contains 62.97 acres of RCW habitat and 415.3 acres of wetlands.  No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat.  Vehicular traffic limited to trails and roads.
  - Maneuver Area Restrictions:  Borders Verona Loop Road, MC, KA, KB, and GP-34.
  - FAA Restrictions
    Communication with MCAS New River control tower required for air support operations in training area.

FACILITIES:  1 tank crossing pad

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
**TRAINING AREA:** KD

**STATUS:** Active

**SIZE:** Approximately 425.1 total acres

**TRAINING AREA USE:**

- **Primary Use:** Tactical Maneuver Training
- **Alternate Use:** Command Post Exercise Training
  Infantry Tactics Maneuver Area

**RESTRICTIONS/COMMENTS:**

- **Conflicts:** Maneuver restrictions when EOD-2, ETA-5, or ETA-5A are HOT.

- **Area contains EOD-2, ETA-5, and ETA-5A. Water Drop Zone Farnell Bay is in New River off the shore line of KD.**

- **Environmental Restrictions:**
  Area contains 63.33 acres of wetlands and no RCW habitat. Vehicular traffic limited to trails and roads.

- **Maneuver Area Restrictions:** Area borders New River, K-2 Buffer Zone, and KB area.

- **FAA Restrictions:**
  Communication with MCAS New River control tower required for air support operations in training area.

**FACILITIES:** Splash Point 30

**ELECTRICITY AVAILABLE:** No

**INSTALLED COMMUNICATIONS:** None

**WATER SYSTEM:** No

**LASER USE AUTH:** Yes; only approved eye-safe LASER devices.

**NIGHT USE AUTH:** Yes

**MANEUVERS AUTH:** Yes
**TRAINING AREA: L**

**STATUS:** Active

**SIZE:** Approximately 6,378.7 acres

**TRAINING AREA USE:**

- **Primary Use:** Tactical Maneuver Training
- **Alternate Use:** Small Unit Training

**RESTRICTIONS/COMMENTS:**

- Area contains L-5 range, TLZ Vulture, ALZ-27, Base Rifle Ranges, SOTG and MARSOC complexes, and WDZ Stone Bay is in the New River off the shore line.

- **Environnemental Restrictions:**

  Area contains RCW habitat. No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat. Vehicular traffic limited to trails and roads. Archaeological Sites, no excavation within marked/signed sites.

- **Maneuver Area Restrictions:**
  Borders on Highway 210, Highway 17, Verona Loop Road, M Areas, and New River.

- **Other Considerations:**
  L is subdivided into seven areas: LA, LB, LC, LD, LE, LF, and LG. The LC, LD, and LG areas contain SOTG and MARSOC complexes.

**FACILITIES:** Stone Bay Rifle Range, SOTG and MARSOC complexes.

**ELECTRICITY AVAILABLE:** No

**INSTALLED COMMUNICATIONS:** None

**WATER SYSTEM:** No

**LASER USE AUTH:** Yes; only approved eye-safe LASER devices.

**NIGHT USE AUTH:** Yes

**MANEUVERS AUTH:** Yes
TRAINING AREA:  LA

STATUS:  Active

SIZE:  Approximately 1,437.5 acres

TRAINING AREA USE:

   Primary Use:  Tactical Maneuver Training
   Alternate Use:  Infantry Tactics Maneuver Area
                  Small Unit Training

RESTRICTIONS/COMMENTS:

   - Conflicts:
     Maneuver restriction when L-5 is HOT.

   - Area contains L-5 range and related surface danger zones.

   - Environmental Restrictions:  Area contains 172 acres of RCW
                                 habitat and 275 acres of wetlands.  No vehicular traffic or
                                 bivouacking in areas designated as a Red-cockaded Woodpecker
                                 habitat.  Vehicular traffic limited to trails and roads.

   - Maneuver Area Restrictions:  Borders on LE, LB, LD, Stone
                                 Creek, and LF.

FACILITIES:  Buildings and Towers for L-5 range

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA: LB

STATUS: Active

SIZE: Approximately 722.8 acres

TRAINING AREA USE:

  Primary Use: Tactical Maneuver Training
  Alternate Use: Infantry Tactics Maneuver Area
                 Small Unit Training

RESTRICTIONS/COMMENTS:

  - Conflicts: None
  - Area contains: N/A
  - Environmental Restrictions:

    Area contains 102 acres RCW habitat, 325 acres of wetlands. No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat. Vehicular traffic limited to trails and roads. Archaeological Sites, no excavation within marked/signed sites.

    - Maneuver Area Restrictions: Borders on Highway 17, Highway 210, LD, LA. Close proximity to civilian population.

FACILITIES: Road entrance to L-5 range

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: LC

STATUS: Closed. Current construction for SOTG and MARSOC complexes blocks use of this area.

SIZE: Approximately 1262.2 acres

TRAINING AREA USE:

   Primary Use: Tactical Maneuver Training
   Alternate Use: Infantry Tactics Maneuver Area
                  Small Unit Training

RESTRICTIONS/COMMENTS:

- Conflicts: On-site construction.
  Area contains TLZs Vulture and Owl, SOTG and MARSOC compounds, and Scout Sniper training areas.

- Environmental Restrictions:
  Area contains 314.5 acres of wetlands and no RCW habitat. Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:
  Borders on Highway 210, the New River, Everett Creek, and Stone Bay Rifle Ranges. Close proximity to civilian population.

FACILITIES: SOTG and MARSOC complexes

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: LD

STATUS: Closed. Current construction for SOTG and MARSOC complexes blocks use of this area.

SIZE: Approximately 348.5 acres

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Infantry Tactics Maneuver Area
Small Unit Training

RESTRICTIONS/COMMENTS:

- Conflicts: On-site construction
- Area contains: N/A
- Environmental Restrictions:
  122 acres of wetlands and No RCW habitat. Vehicular traffic limited to trails and roads.
- Maneuver Area Restrictions:
  Borders on Highway 210, Stone Creek, Stone Bay Rifle Ranges, and LB. Scout Sniper training areas.

FACILITIES: SOTG and MARSOC complexes

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: LE

STATUS: Active

SIZE: Approximately 817.5 acres

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Infantry Tactics Maneuver Area
Small Unit Training

RESTRICTIONS/COMMENTS:

- Conflicts:
  Small portion of LE Area is closed down when L-5 is HOT.

- Area contains: N/A

- Environmental Restrictions:
  Area contains 217 acres of RCW habitat, 1 archaeological site, and 315 acres of wetlands. No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat. Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:
  Borders on Highway 17, South Verona Loop Road, LA, LB, and LF. Close proximity to civilian population and Highway 17.

FACILITIES: Tank crossing pads

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA:  LF

STATUS:  Active

SIZE:  Approximately 1,576.0 acres

TRAINING AREA USE:

   Primary Use:  Tactical Maneuver Training
   Alternate Use:  Infantry Tactics Maneuver Area
                   Small Unit Training

RESTRICTIONS/COMMENTS:

   - Conflicts:  Large portion is closed when Rifle Range is HOT. Small portion closed when L-5 is HOT.
   
   - Area contains Surface Danger Zone for L-5, and Surface Danger Zones for the Stone Bay Rifle Ranges.
   
   - Environmental Restrictions:

       Area contains 53 acres of RCW habitat, 9 archaeological Sites, and 472 acres of wetlands. No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat. Vehicular traffic limited to trails and roads.

   - Maneuver Area Restrictions:

       Borders on South Verona Loop Road, Mills Creek, New River, Stone Bay, LA, LE, and K-2 buffer Zone.

FACILITIES: None

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA: LG

STATUS: Closed. Current construction for SOTG and MARSOC complexes blocks use of this area.

SIZE: Approximately 214.2 acres

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Infantry Tactics Maneuver Area
Small Unit Training

RESTRICTIONS/COMMENTS:

- Conflicts: None

- Area contains TLZ Vulture and SOTG and MARSOC complexes.

- Environmental Restrictions:

  Area contains 175 acres of wetlands and no RCW habitat. Vehicular traffic limited to trails and roads.


FACILITIES: SOTG and MARSOC complexes

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA:  M

STATUS:  Active

SIZE:  Approximately 7925.9 acres

TRAINING AREA USE:

Primary Use:  Tactical Maneuver Training
Alternate Use:  Command Post Exercise Training
Small Unit Training
Small Dismounted Unit Training
Tactical Maneuver Training

RESTRICTIONS/COMMENTS:

- Area contains TLZ/DZ Condor, TLZ Parrot, TLZ Eagle, ALZ-29, and SOI Base Camp (Camp Devil Dog).

- Environmental Restrictions:  Areas contains a Red-cockaded Woodpecker habitat and wetlands.  No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat.  Vehicular traffic limited to trails and roads.  Archaeological Sites, no excavation within marked/signed sites.

- Maneuver Area Restrictions:  Bordered by Highway 17, Verona Loop Road, BD, KA, KC, New River, and Southwest Creek.

- FAA Restrictions:  Communication with MCAS New River control tower required for air support operations in training area.

- Other Considerations:  M is subdivided into six areas:  MA, MB, MC, MD, ME, and MF.

FACILITIES:  Tank crossing pads and Splash Points 43 and 44.

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA: MA

STATUS: Active

SIZE: Approximately 1,041.9 acres

TRAINING AREA USE:

   Primary Use: Tactical Maneuver Training
   Alternate Use: Small Unit Training
                   Infantry Tactics Maneuver Area

RESTRICTIONS/COMMENTS:

   - Conflicts: None


   - Environmental Restrictions:
     Area contains 330 acres of wetlands and no RCW habitat. Vehicular traffic limited to trails and roads.

   - Maneuver Area Restrictions:
     Borders BD, MB, Highway 17, and Southwest Creek.

   - FAA Restrictions:
     Communication with MCAS New River control tower required for air support operations in training area.

FACILITIES: Electrical Power Lines

ELECTRICITY AVAILABLE: Yes

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: Yes

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: MB

STATUS: Active

SIZE: Approximately 1,115.2 acres

TRAINING AREA USE:

  Primary Use: Tactical Maneuver Training
  Alternate Use: Small Unit Training
                 Infantry Tactics Maneuver Area
                 Helicopter and Tiltrotor Operations

RESTRICTIONS/COMMENTS:

  - Conflicts: None
  - Area contains TLZ Parrot and outdoor classrooms.
  - Environmental Restrictions:
    Area contains 750 acres of wetlands, 2 archaeological sites, and no RCW habitat. Vehicular traffic limited to trails and roads.
    - Maneuver Area Restrictions:
      Borders Highway 17, MA, MC, North Verona Loop Road, and Southwest Creek.
    - FAA Restrictions:
      Communication with MCAS New River control tower required for air support operations in training area.

FACILITIES: Old field ASP and tower.

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: MC

STATUS: Active

SIZE: Approximately 1297.12 acres

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Small Unit Training
Infantry Tactics Maneuver Area
Helicopter and Tiltrotor Operations

RESTRICTIONS/COMMENTS:

- conflicts: None

- Area contains TLZ Eagle and 5.20 acres of restricted area for a cemetery. WDZ Morgan Bay is in the New River off the shore line.

- Environmental Restrictions:
  Area contains 720 acres of wetlands and no RCW habitat. Vehicular traffic limited to trails and roads. Archaeological Sites, no excavation within marked/signed sites.

- Maneuver Area Restrictions:
  Borders on Southwest Creek, New River, KA, KC, and MB.

- FAA Restrictions:
  Communication with MCAS New River control tower required for air support operations in training area.

FACILITIES: Splash Points 43 and 44

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: MD

STATUS: Active

SIZE: Approximately 1333.0 acres

TRAINING AREA USE:

   Primary Use: Tactical Maneuver Training
   Alternate Use: Small Unit Training
                 Infantry Tactics Maneuver Area

RESTRICTIONS/COMMENTS:

   - Conflicts: None
   - Area contains: N/A
   - Environmental Restrictions:
     Area contains 288 acres of RCW habitat and 700 acres of wetlands. No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat. Vehicular traffic limited to trails and roads.

   - Maneuver Area Restrictions:
     Borders on Verona Loop Road, ME, and MF.

   - FAA Restrictions:
     Communication with MCAS New River control tower required for air support operations in training area.

FACILITIES: None

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA:  ME

STATUS:  Active

SIZE:  Approximately 1,726.3 acres

TRAINING AREA USE:

   Primary Use:  Tactical Maneuver Training
   Alternate Use:  Small Unit Training
                  Infantry Tactics Maneuver Area
                  Command Post Exercise Training
                  Small Dismounted Unit Training

RESTRICTIONS/COMMENTS:

- Conflicts:  Restricted maneuver when Stone Bay Rifle Range is shooting 7.62 mm without angle limiting device.

- Area contains:  N/A

- Environmental Restrictions:
   Area contains a Red-cockaded Woodpecker habitat and 500 acres of wetlands.  No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat.  Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:
   Borders on Highway 17, MD, MF, North and South Verona Loop Road.

- FAA Restrictions:
   Communication with MCAS New River control tower required for air support operations in training area.

FACILITIES:  1 tank crossing pad

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA:  MF

STATUS:  Active

SIZE:  Approximately 1,412.4 acres

TRAINING AREA USE:

   Primary Use:  Tactical Maneuver Training
   Alternate Use:  Small Unit Training
                  Infantry Tactics Maneuver Area
                  Drop Zone, Para-Ops

RESTRICTIONS/COMMENTS:

   - Conflicts:  Restricted maneuver when Stone Bay Rifle Range is
                 shooting 7.62 mm without angle limiting device.

   - Area contains TLZ/DZ Condor

   - Environmental Restrictions:
                 Area contains 280 acres of RCW habitat, 3 archeological
                 sites, and 480 acres of wetlands.  No vehicular traffic or
                 bivouacking in areas designated as a Red-cockaded Woodpecker
                 habitat.  Vehicular traffic limited to trails and roads.

   - Maneuver Area Restrictions:
                 Borders on ME, MF, and South Verona Loop Road.

   - FAA Restrictions:
                 Communication with MCAS New River control tower required for
                 air support operations in training area.

FACILITIES:  SOI Training Site A, small buildings, bleacher area
            and several armor vehicles.

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA: O (Oak Grove)

STATUS: Active

SIZE: 962 acres

TRAINING AREA USES:

Primary Use: Tactical Aviation Training
Alternate Use: Tactical Maneuver Training
Multipurpose Exercise Training Area
Small Unit Training
Small Dismounted Unit Training
Infantry Tactics Maneuver Area
Command Post Exercise Training

O (Oak Grove) is subdivided into 8 areas: Oak Grove OLF, OA, OB, OC, OD, OE, OF and Cantonment Area.

1. Marine Corps Outlying Field Oak Grove. The following provides instructions for the assignment, control, and safe use of the Oak Grove training areas/facilities. All personnel involved in training in these areas will be thoroughly familiar with these instructions.

   a. MCOLF Oak Grove Description. The MCOLF Oak Grove airstrip (35°02’N/77°15’W) is part of a 962-acre training and recreational facility located near the town of Pollocksville, NC. The landing areas consist of two separate runways, 05-23, and 01-19. Runway 05-23 is 4000 feet long by 150 feet wide. Runway 01-19 is 4200 feet long by 150 feet wide. TLZs Bat and Emu are located in the MCOLF Oak Grove area. Closed runway 09/27 is available for low work. Fixed-wing and UAS operations are not authorized at Oak Grove. Units are not authorized to drive on runways. Oak Grove has 7 training areas (Oak Grove OLF, OA, OB, OC, OD, OE, and OF), 2 recreational areas (Rec Area 1 and Rec Area 2) and 1 Cantonment Area. No training is allowed in the Recreational Areas or the Cantonment Area. Vehicular traffic is limited to trails and roads. See Chapter 8, section 8015 for more details.

   b. Scheduling of the Oak Grove training areas does not constitute approval for the use of the TLZs Bat or Emu. Scheduling of the TLZ Bat or TLZ Emu does not constitute approval of use of the Oak Grove training areas. All areas must be scheduled separately.
c. At no time are vehicles allowed on TLZ Bat and TLZ Emu or on the runways or taxiways of Oak Grove OLF without approval of the RCO. All non-approved vehicular traffic will remain on trails and roads, or at a minimum, 500 feet from the runways or the taxiways.

d. Memorandums of Agreement (MOA) between MCB Camp Lejeune and the Pollocksville Fire and Rescue Department exist regarding medical assistance, hazardous spills, and fire fighting assistance. Calling 911 in the Oak Grove area will connect the unit with them.

e. During hours of darkness, blackout driving procedures will be in effect for all vehicles operating within 500 feet of TLZs Bat and Emu and the runways so as not to interfere with Night Vision Goggle training being conducted by air crews.

f. Units conducting blank fire (.50 cal and below) must indicate same on the TAR and must pick-up brass and links. The use of pyrotechnics, smoke, or CS is not authorized.

2. Environmental and Maintenance Considerations.

a. Digging of fighting holes, mortar pits, and machinegun pits is not authorized.

b. Individual "cat-holes" are not permissible. Human waste will be disposed of by the use of portable heads. Chapter 6 of this SOP is applicable.

c. Cutting trees and clearing brush is prohibited.

d. Several grey water septic systems are located in the training areas.

e. Potable and non-potable water is available on site.
TRAINING AREA: Oak Grove OLF

STATUS: Active

SIZE: Approximately 263.12 acres

TRAINING AREA USE:

Primary Use: Tactical Aviation Training
Alternate Use: Tactical Maneuver Training
Multipurpose Exercise Training Area
Small Unit Training
Small Dismounted Unit Training
Infantry Tactics Maneuver Area
Command Post Exercise Training

RESTRICTIONS/COMMENTS:

- Conflicts: None

- Area contains TLZ Bat.

- Environmental Restrictions:
  Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:
  Borders on OA, OB, OC, OD, and OF.

FACILITIES: Runways 1-19 and 5-23.

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: If approved by SRR.
TRAINING AREA: OA (Oak Grove)

STATUS: Active

SIZE: Approximately 157.93 acres

TRAINING AREA USE:

    Primary Use: Tactical Maneuver Training
    Alternate Use: Multipurpose Exercise Training Area
                   Small Unit Training
                   Small Dismounted Unit Training
                   Infantry Tactics Maneuver Area
                   Command Post Exercise Training

RESTRICTIONS/COMMENTS:

    - Conflicts: None
    - Area contains: N/A
    - Environmental Restrictions:
      Vehicular traffic limited to trails and roads.

    - Maneuver Area Restrictions:
      Borders on Oak Grove OLF, OB, Cantonment Area, Trent River
      to the south, and civilian farmer’s field to the east.

FACILITIES: None

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: Yes

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: OB (Oak Grove)

STATUS: Active

SIZE: Approximately 91.87 acres

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Multipurpose Exercise Training Area
               Small Unit Training
               Small Dismounted Unit Training
               Infantry Tactics Maneuver Area
               Command Post Exercise Training

RESTRICTIONS/COMMENTS:

- Conflicts: None
- Area contains: N/A
- Environmental Restrictions:
  Vehicular traffic limited to trails and roads.
- Maneuver Area Restrictions:
  Borders on Oak Grove OLF, OA, OF, and Trent River to the South.

FACILITIES: None

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: OC (Oak Grove)

STATUS: Active

SIZE: Approximately 81.55 acres

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Multipurpose Exercise Training Area
Small Unit Training
Small Dismounted Unit Training
Infantry Tactics Maneuver Area
Command Post Exercise Training

RESTRICTIONS/COMMENTS:

- Conflicts: None
- Area contains: N/A
- Environmental Restrictions:
  Vehicular traffic limited to trails and roads.
- Maneuver Area Restrictions
  Borders on Oak Grove OLF, OD, OE, and Cantonment Area.

FACILITIES: None

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: OD (Oak Grove)

STATUS: Active

SIZE: Approximately 221.79 acres

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Tactical Aviation Training
Multipurpose Exercise Training Area
Small Unit Training
Small Dismounted Unit Training
Infantry Tactics Maneuver Area
Command Post Exercise Training

RESTRICTIONS/COMMENTS:

- Conflicts: None
- Contains TLZ Emu
- Environmental Restrictions:
  Vehicular traffic limited to trails and roads.
- Maneuver Area Restrictions:
  Borders on Oak Grove OLF, OC, OE, OF, and Trent River to the west.

FACILITIES: None

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: OE (Oak Grove)

STATUS: Active

SIZE: Approximately 36.85 acres

TRAINING AREA USE:

  Primary Use: Tactical Aviation Training
  Alternate Use: Tactical Maneuver Training
                  Multipurpose Exercise Training Area
                  Small Unit Training
                  Small Dismounted Unit Training
                  Infantry Tactics Maneuver Area
                  Command Post Exercise Training

RESTRICTIONS/COMMENTS:

  - Conflicts: None

  - Area contains Recreation Area 1 (4.5 acres), boat ramp, picnic and camping areas (no military training allowed in Rec Area 1).

  - Environmental Restrictions:
    Vehicular traffic limited to trails and roads.

  - Maneuver Area Restrictions:
    Borders on Cantonment Area, OC, OD, and Trent River to the northwest.

FACILITIES: Rec Area 1 boat ramp

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: No

NIGHT USE AUTH: Yes

MANEUVERS AUTH: By SRR
TRAINING AREA: OF (Oak Grove)

STATUS: Active

SIZE: Approximately 58.99 acres

TRAINING AREA USE:

Primary Use: Tactical Aviation Training
Alternate Use: Tactical Maneuver Training
Multipurpose Exercise Training Area
Small Unit Training
Small Dismounted Unit Training
Infantry Tactics Maneuver Area
Command Post Exercise Training

RESTRICTIONS/COMMENTS:

- Conflicts: None

- Area contains Recreation Area 2 (2.51 acres), boat ramp, picnic and camping areas (no military training allowed in Rec Area 2).

- Environmental Restrictions:
  Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:
  Borders on Oak Grove OLF, OB, OD, Trent River to the south.

FACILITIES: Rec Area 2 boat ramp

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: No

WATER SYSTEM: No

LASER USE AUTH: No

NIGHT USE AUTH: Yes

MANEUVERS AUTH: By SRR
AREA NAME: Cantonment Area (Oak Grove)

STATUS: Administrative and Maintenance

SIZE: Approximately 37.13 acres

RESTRICTIONS/COMMENTS:

- Conflicts:
  No training is allowed in the Cantonment Area.

- Area contains the personnel and support structure to maintain MCOLF Oak Grove as well as the check in station for the Game Warden and MCCS.

- Environmental Restrictions:
  Vehicular traffic limited to trails and roads.

- Borders on Oak Grove OLF, OA, OC, OE, and Oak Grove Road to the north.

FACILITIES: Several maintenance and administrative buildings.

ELECTRICITY AVAILABLE: Yes

INSTALLED COMMUNICATIONS: Phone (local and DSN)

WATER SYSTEM: Yes

LASER USE AUTH: No

NIGHT USE AUTH: No

MANEUVERS AUTH: No
TRAINING AREA:  Q

STATUS:  Active

SIZE:  Approximately 1,677.8 acres

TRAINING AREA USE:

    Primary Use: Tactical Maneuver Training
    Alternate Use: Small Unit Training
                    Infantry Tactics Maneuver Area
                    Command Post Exercises Training
                    Small Dismounted Unit Training

REstrictions/Comments:

    - Area contains TLZ Robin, TLZ Woodpecker, and GP-3.
    - Environmental Restrictions:
        Area contains a Red-cockaded Woodpecker habitat and wetlands. No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat. Vehicular traffic limited to trails and roads.
    - Maneuver Area Restrictions:
        Borders on Highway 172, Highway 24, FB, FC, and FE.
    - Other Considerations:
        Q is subdivided into two areas: QA and QB

Facilities:  Close proximity to civilian property, Highway 172 and Highway 24.

Electricity Available:  No

Installed Communications:  None

Water System:  No

Laser Use Auth:  Yes; only approved eye-safe LASER devices.

Night Use Auth:  Yes

Maneuvers Auth:  Yes
TRAINING AREA:  QA

STATUS:  Active

SIZE:  Approximately 1,166.0 acres

TRAINING AREA USE:

  Primary Use:  Tactical Maneuver Training
  Alternate Use:  Small Unit Training
                 Infantry Tactics Maneuver Area
                 Command Post Exercises Training

RESTRICTIONS/COMMENTS:

  - Conflicts:  Maneuver restrictions due to F-18 .50 cal SDZ.
  
  - Area contains TLZ Woodpecker, TLZ Robin, and GP-3.
  
  - Environmental Restrictions:
    Area contains 380 acres of RCW habitat and 560 acres of wetlands.  No vehicular traffic or bivouacking in areas designated as a Red-cockaded Woodpecker habitat.  Vehicular traffic limited to trails and roads.
  
  - Maneuver Area Restrictions:
    Borders on Highway 172, Highway 24, FB, FE, and QB.  Close proximity to civilian property along Highway 172.

FACILITIES:  Large civilian antenna nearby

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA: QB

STATUS: Active

SIZE: Approximately 511.8 acres

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Mechanized Assault Training
Cross Country Vehicle Maneuver Area
Small Dismounted Unit Training
Wheeled Vehicle Driving Course

RESTRICTIONS/COMMENTS:

- Conflicts: Maneuver restrictions due to F-18 .50 cal SDZ.
- Area contains GP-3.
- Environmental Restrictions:
  Area contains 250 acres of wetlands and no RCW. Vehicular traffic limited to trails and roads. Armor is limited to the use of tank trails.
- Maneuver Area Restrictions:
  Borders on Highway 172, FC, FE, and QA. Close proximity to civilian property.

FACILITIES: None

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA:  R

STATUS:  Active

SIZE:  Approximately 1,813.4 acres

TRAINING AREA USES:

Primary Use:  Tactical Maneuver Training
Alternate Uses:  Command Post Exercise Training
               Small Unit Training
               Small Dismounted Unit Training
               Infantry Tactics Maneuver Area

RESTRICTIONS/COMMENTS:

- Area contains Henderson and Hickory Ponds and Wallace Creek.

- Environmental Restrictions:
  Area contains wetlands, archaeological sites, and no RCW habitat.  Vehicular
  traffic limited to trails and roads.

- Maneuver Area Restrictions:
  Bordered by Highway 24, Holcomb Blvd, FA, and FF.  The
  Suspect Cargo Area (SCA) at grid 873425 (Old TLZ Roadrunner) is
  restricted.

- Other Considerations
  R is further subdivided into two areas:  RA and RB

FACILITIES:  Camp Lejeune Main Gate, Piney Green Road Gate, and
the future site of the MCCS Skeet Range.

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA: RA (No longer an official training area.)

STATUS: Active

SIZE: Approximately 1,034.1 acres

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Small Unit Training
Infantry Tactics Maneuver Area

RESTRICTIONS/COMMENTS:

No longer an official training area, due to the new Skeet/Paint Ball/Acchery range and the Dog Kennels.

- Conflicts: None

- Area contains 2d Marine Division Land Nav Course, Henderson and Hickory Ponds, and Wallace Creek.

- Environmental Restrictions:
  Area contains approximately 250 acres of wetlands and no RCW habitat. Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:
  Borders Highway 24, Holcomb Blvd, MCB Landfill, and RB.

FACILITIES: Camp Lejeune Main Gate, Piney Green Road, and other MCB buildings in the vicinity.

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: No

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: RB

STATUS: Active

SIZE: Approximately 779.3 acres

TRAINING AREA USE:

   Primary Use: Tactical Maneuver Training
   Alternate Use: Small Unit Training
                  Infantry Tactics Maneuver Area

RESTRICTIONS/COMMENTS:

- Environmental Restrictions:

   - Area contains approximately 250 acres of Natural Heritage Registered Areas, 2 archaeological sites, approximately 175 acres of wetlands, and no RCW habitat. Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:
   Borders Highway 24, MCB Landfill, FA, FF, and RA. The Suspect Cargo Area (SCA) at grid 873425 (old TLZ Roadrunner) is restricted.

FACILITIES: Land Nav Course, Squad and Platoon Training Lanes.

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA:  S (GSRA)

STATUS:  Active

SIZE:  41,000 acres

TRAINING AREA USES:

Primary Use: Tactical Maneuver Training
Alternate Use: Multipurpose Exercise Training Area
Tactical Aviation Training
Small Unit Training
Small Dismounted Unit Training
Infantry Tactics Maneuver Area
Command Post Exercise Training

S (GSRA) is subdivided into 22 areas:  SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ, SK, SL, SM, SN, SO, SP, SQ, SR, ST, SU, SV, and SW.

1. Greater Sandy Run Training Area (GSRA). The following provides instructions for the assignment, control, and safe use of the GSRA training areas/facilities. All personnel involved in training in these areas will be thoroughly familiar with these instructions.

   a. GSRA Description. The GSRA encompasses nearly 41,000 acres of flat, low-lying timberland which contains large areas of wetlands and pocosin swamp. It is bound on the east by U.S. Highway 17 from Holly Ridge, NC to High Hill Road (SR1119) and on the west by North Carolina State Route 50 from Holly Ridge to Padgett Road (SR1104). The northern area is generally bound by Padgett Road (SR1104), Haws Run Road (SR1105), Dawson Cabin Road (SR1107), and High Hill Road (SR1119).

   b. Camp Davis. 2d MAW units, specifically MAG-26 and MAG-29 are the primary users of Camp Davis runways and TLZs Pheasant (Camp Davis North Runway) and TLZ Duck (Camp Davis South Runway). The only exception to this policy is support of Joint/Combined Exercises. All other units desiring to use TLZ Pheasant and TLZ Duck must submit a TAR 14 working days prior to the requested date to Commanding Officer, MCB Camp Lejeune (RCO). RCO will coordinate with MCAS New River to determine if the TLZs are available and approve/disapprove TARs accordingly. TARs must indicate type of training requested. UNITS ARE NOT AUTHORIZED TO DRIVE ANY VEHICLES ON THE NORTH RUNWAY; ALL VEHICLES MUST STAY ON TAXIWAYS. CAMP DAVIS SOUTH RUNWAY CAN BE
SCHEDULED FOR VEHICLE TRAFFIC IF SCHEDULED IN RFMSS AND THE UNIT CONDUCTS A FOD WALKDOWN TO REMOVE ALL DEBRIS. Limited POV parking is accessible through the east entry/exit point at Camp Davis, vic GC 722328.

(1) Scheduling of the Sandy Run Victor (SV) training/maneuver area does not constitute approval for the use of the TLZ Pheasant, TLZ Duck, TLZ Swallow, Camp Davis South or Camp Davis North runways. Scheduling of TLZ Pheasant, TLZ Duck, and TLZ Swallow does not constitute approval of use of the SV. All areas must be scheduled separately.

(2) At no time are wheeled/tracked vehicles allowed on TLZ Pheasant/TLZ Swallow/Camp Davis North and TLZ Duck/Camp Davis South without approval of the RCO. All non-approved vehicular traffic will remain, at a minimum, 500 feet from the runways or the taxiways.

(3) A Memorandum of Agreement (MOA) between MCB Camp Lejeune and the State of North Carolina exists regarding fire fighting assistance. Camp Lejeune has agreed to make TLZ Duck (Camp Davis South Runway) available for air tanker use during periods of high fire occurrence or fire suppression action.

(4) During hours of darkness, blackout driving procedures will be in effect for all vehicles operating within 500 feet of TLZ Pheasant/Camp Davis North and TLZ Duck/Camp Davis South so as not to interfere with Night Vision Goggle training being conducted by air crews.

(5) Units conducting blank fire must indicate same on the TAR and must pick-up all brass and links.

(6) Personnel training at Camp Davis will be informed that the sewer system under portions of the old airstrips and old cantonment area are subject to cave-in, and therefore are off limits.

c. Training in the GSRA.

(1) Live fire is prohibited unless on the live fire ranges SR-6, SR-7, SR-8, SR-10, and SR-11. At no time will dud-producing ordnance, smoke, and pyrotechnics (all) be used in the GSRA complex/ranges.

(2) Blank fire and MILES gear are authorized. Request to conduct blank firing must be included on TAR.
(3) There are several bridges in the area. Units should perform a bridge survey of training areas in which they have scheduled training. The bridge in vicinity GC 630335 is posted with the following weight limits: Single vehicle weight limit-10 tons; semi-tractor, trailer weight limit-18 tons.

2. Endangered Species Sites. Approximate map locations for known rough-leaved loosestrife sites are: Maple Hill Map Sheet, ED. 7-DMA; Series V742, Sheet 5453 II; GC 633373, 698245, 706263; Camp Lejeune Military Installation Map: GC 707267 through 707268, 713283, 715282, 718288, and 718310.

3. GSRA Wetland Mitigation Bank

   a. The GSRA Wetland Mitigation Bank is an officially designated preservation area that was created to provide wetland mitigation for wetlands that were filled for the construction of GSRA training ranges and other projects located on Camp Lejeune.

   b. The mitigation bank is comprised of 2 separate areas totaling 1,250.5 acres, including a portion of the Big Shakey Swamp (143.4 acres) in the ST/SV training areas, and a portion of pine flatwoods and pocosin wetlands (1107.1 acres) in the SL training area.

   c. The GSRA Wetland Mitigation Bank must be protected and as a result is off-limits to certain training activities.

   d. The Big Shakey Swamp is not accessible by roads. The pine flatwoods and pocosin wetlands in the SL training area are bordered by; South Pocosin Road (to the north), Ditches Road (to the South), South Bay Road (to the east), and Prince Trail (to the west).

   e. No tactical vehicles or any type of ground disturbance is permitted within the GSRA Wetland Mitigation Bank boundaries. Training activities within the GSRA Wetland Mitigation Bank boundaries shall be limited to foot traffic only. No tactical vehicles are permitted on Watershed Road, Blue Heron Road, or South Pocosin Road.
4. **Highway 17 Crossings.** Highway 17 can be crossed using the underpasses at the below grid coordinates along Highway 17:

   a. 18S TD 726354
   
   b. 18S TD 722331
   
   c. 18S TD 725301
TRAINING AREA:  SA

STATUS:  Active

SIZE:  Approximately 1,247.5 acres

TRAINING AREA USE:

Primary Use:  Tactical Maneuver Training
Alternate Use:  Multipurpose Exercise Training Area
               Small Unit Training
               Small Dismounted Unit Training
               Infantry Tactics Maneuver Area
               Command Post Exercise Training

RESTRICTIONS/COMMENTS:

- Conflicts:
  Maneuver restrictions when SR-7 is HOT.

- Area contains:  N/A

- Environmental Restrictions:
  Area contains 850 acres of wetlands.  No vehicular traffic
  or bivouacking in designated areas.  Vehicular traffic limited
  to trails and roads.

- Maneuver Area Restrictions:
  Bordered by Perimeter Road, SB, SE, and SF.

FACILITIES:  None

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA:  SB

STATUS:  Active

SIZE:  Approximately 1,129.9 acres

TRAINING AREA USE:

   Primary Use:  Tactical Maneuver Training
   Alternate Use:  Multipurpose Exercise Training Area
                   Small Unit Training
                   Small Dismounted Unit Training
                   Infantry Tactics Maneuver Area
                   Command Post Exercise Training

REstrictions/COMMENTS:

   - Conflicts:
     Maneuver restrictions when SR-6 and/or SR-7 are HOT.
     SB Training Area has a very small section south west corner that
     is impacted by the SDZ of SR-8.

   - Area contains:  N/A
   - Environmental Restrictions:
     Area contains approximately 900 acres of wetlands.  No
     vehicular traffic or bivouacking in designated areas.  Vehicular
     traffic limited to trails and roads.

   - Maneuver Area Restrictions:
     Bordered by Perimeter Road, SA, SC, and SF.

FACILITIES:  None

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA: SC

STATUS: Active

SIZE: Approximately 1,201.59 acres

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Multipurpose Exercise Training Area
Small Unit Training
Small Dismounted Unit Training
Infantry Tactics Maneuver Area
Command Post Exercise Training

RESTRICTIONS/COMMENTS:

- Conflicts:
  Maneuver restrictions when SR-7 is HOT.

- Area contains: N/A

- Environmental Restrictions:
  Area contains approximately 800 acres of wetlands. No vehicular traffic or bivouacking in designated areas. Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:
  Bordered by Dawson Cabin Road, High Hill Road, SB, and SD.

FACILITIES: None

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA:  SD

STATUS:  Active

SIZE:  Approximately 1,455.8 acres

TRAINING AREA USE:

Primary Use:  Tactical Maneuver Training
Alternate Use:  Multipurpose Exercise Training Area
             Small Unit Training
             Small Dismounted Unit Training
             Infantry Tactics Maneuver Area
             Command Post Exercise Training

RESTRICTIONS/COMMENTS:

- Conflicts:
  Maneuver restricted when SR-6 and SR-7 are HOT.  SR-7 contains 368.70 acres of live fire range.


- Environmental Restrictions:
  Area contains 480 acres of wetlands.  No vehicular traffic or bivouacking in designated areas.  Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:
  Bordered by Perimeter Road, SC, SF, SJ, and footprint of SR-7 SDZ.

FACILITIES:  Towers at OP-9.

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA: SE

STATUS: Active

SIZE: Approximately 1,686.05 acres

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Multipurpose Exercise Training Area
                Small Unit Training
                Small Dismounted Unit Training
                Infantry Tactics Maneuver Area
                Command Post Exercise Training

REstrictions/COMMENTS:

- Conflicts:
  Maneuver restricted when SR-6, SR-7, and SR-8 are HOT. Area contains 245.3 acres of live fire SDZs.

- Area contains TLZ Partridge.

- Environmental Restrictions:
  Area contains 780 acres of wetlands and 10 acres of Loosestrife. No vehicular traffic or bivouacking in designated areas. Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:
  Bordered by Perimeter Road, SA, SF, and SG.

FACILITIES: None

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA:  SF

STATUS:  Active

SIZE:  Approximately 4,177.0 acres

TRAINING AREA USE:

Primary Use:  Tactical Maneuver Training
Alternate Use:  Multipurpose Exercise Training Area
Small Unit Training
Small Dismounted Unit Training
Infantry Tactics Maneuver Area
Command Post Exercise Training

RESTRICTIONS/COMMENTS:

- Conflicts:
  Maneuver restricted when SR-6, SR-7, SR-8, and SR-10 are HOT.

- Area contains TLZ Pipit and portions of SR-6, SR-7, and SR-8.

- Environmental Restrictions:
  Area contains 750 acres of wetlands. No vehicular traffic or bivouacking in designated areas. Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:
  Bordered by SA, SB, SD, SE, SG, SH, SI, and SJ.

FACILITIES:  None

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  No

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA:  SG

STATUS:  Active

SIZE:  Approximately 1,743.02 acres

TRAINING AREA USE:

Primary Use:  Tactical Maneuver Training
Alternate Use:  Multipurpose Exercise Training Area
               Small Unit Training
               Small Dismounted Unit Training
               Infantry Tactics Maneuver Area
               Command Post Exercise Training

RESTRICTIONS/COMMENTS:

- Conflicts:
  Maneuver restricted when SR-6, SR-7, and SR-10 are HOT.
  Area contains 243 acres of live fire SDZs.

- Area contains TLZ Flamingo and OP-10.

- Environmental Restrictions:
  No vehicular traffic or bivouacking in designated areas.
  Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions
  Bordered by Highway 50, Perimeter Road, SE, SF, and SH.
  Ground units should stay clear of Hwy 50.

FACILITIES:  Tower at OP-10.

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes

Note; SG Training Area will be impacted with the construction of
the new Infantry Battle Course (IPBC) in the future

C-116
TRAINING AREA:  SH

STATUS:  Active

SIZE:  Approximately 1,076.41 acres

TRAINING AREA USE:

Primary Use:  Tactical Maneuver Training
Alternate Use:  Multipurpose Exercise Training Area
Small Unit Training
Small Dismounted Unit Training
Infantry Tactics Maneuver Area
Command Post Exercise Training Area

RESTRICTIONS/COMMENTS:

- Conflicts:
  Maneuver restricted when SR-7 TOW (Inert), SR-8, and SR-10, are HOT.

- Area contains a portion of SR-10.

- Environmental Restrictions:
  Area contains 622 acres of wetlands. No vehicular traffic or bivouacking in designated areas. Vehicular traffic limited to trails and roads.

  - Maneuver Area Restrictions:
    Bordered by Highway 50, SF, SG, and SI. Ground units should stay clear of Hwy 50.

FACILITIES:  None

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA: SI

STATUS: Active

SIZE: Approximately 3,293.6 acres

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Multipurpose Exercise Training Area
Small Unit Training
Small Dismounted Unit Training
Infantry Tactics Maneuver Area
Command Post Exercise Training Area

RESTRICTIONS/COMMENTS:

- Conflicts: Maneuver restrictions when SR-6, SR-7 (Inert TOW), SR-8, and SR-10 are HOT. Area contains 2,824.06 acres of live fire SDZs.

- Area contains SR-8.

- Environmental Restrictions:

  Area contains 2,200 acres of wetlands. No vehicular traffic or bivouacking in designated areas. Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions: Bordered by SF, SH, SJ, SK, and SL.

FACILITIES: None

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: No

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA:  SJ

STATUS:  Active

SIZE:  Approximately 2,291.7 acres

TRAINING AREA USE:

  Primary Use:  Tactical Maneuver Training
  Alternate Use:  Multipurpose Exercise Training Area
                  Small Unit Training
                  Small Dismounted Unit Training
                  Infantry Tactics Maneuver Area
                  Command Post Exercise Training

RESTRICTIONS/COMMENTS:

  - Conflicts:  Maneuver restrictions when SR-6, SR-7, and SR-10 are HOT.

  - Area contains SR-6 and TLZ Peewee.

  - Environmental Restrictions:

    Area contains approximately 2,200 acres of wetlands.  No vehicular traffic or bivouacking in designated areas.  Vehicular traffic limited to trails and roads.

  - Maneuver Area Restrictions:  Bordered by Perimeter Road, SD, SF, SI, and SM.


ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  No

 NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA: SK

STATUS: Active

SIZE: Approximately 2,563.05 acres

TRAINING AREA USE:

- Primary Use: Tactical Maneuver Training
- Alternate Use: Multipurpose Exercise Training Area
  - Small Unit Training
  - Small Dismounted Unit Training
  - Infantry Tactics Maneuver Area
  - Command Post Exercise Training

REstrictions/Comments:

- Conflicts: Maneuver restricted when SR-10 is HOT. Area contains 1,855.55 acres of live fire SDZ. Ground units should stay clear of Hwy 50.

- Area contains part of SR-10 footprint.

- Environmental Restrictions:

  Area contains approximately 2,000 acres of wetlands. No vehicular traffic or bivouacking in designated areas. Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions: Bordered by Perimeter Road, Highway 50, SH, SI, SL, SO, and SN.

Facilities: None

Electricity Available: No

Installed Communications: None

Water System: No

Laser Use Auth: Yes; only approved eye-safe LASER devices.

Night Use Auth: Yes

Maneuvers Auth: Yes
TRAINING AREA:  SL

STATUS:  Active

SIZE:  Approximately 5,311.85 acres

TRAINING AREA USE:

Primary Use:  Tactical Maneuver Training
Alternate Use:  Multipurpose Exercise Training Area
                Small Unit Training
                Small Dismounted Unit Training
                Infantry Tactics Maneuver Area
                Command Post Exercise Training

RESTRICTIONS/COMMENTS:

- Conflicts: Maneuver restrictions when SR-8 and SR-10 are HOT. Area contains 874.2 acres of live fire SDZs.

- Area contains part of the footprint for SR-8. TLZ Turkey to be enlarged in the future so it can be used as a DZ/LZ.

- Environmental Restrictions:

  Area contains approximately 4,800 acres of wetlands. No vehicular traffic or bivouacking in designated areas. Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:
  Bordered by SI, SK, SM, SP, SR, and SO.

FACILITIES:  None

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA:  SM

STATUS:  Active

SIZE:  Approximately 1,107.45 acres

TRAINING AREA USE:

   Primary Use:  Tactical Maneuver Training
   Alternate Use:  Multipurpose Exercise Training Area
                   Small Unit Training
                   Small Dismounted Unit Training
                   Infantry Tactics Maneuver Area
                   Command Post Exercise Training Area

RESTRICTIONS/COMMENTS:

   - Conflicts:  Maneuver restrictions when SR-10 is HOT.  Ground
                 units shall stay clear of Hwy 17.

   - Area contains BLACKBURN West in Bldg SR-46, GSRA Building
     Complex, GSRA Fire Dept, Fire Tower, 4th Tank Bn area, ALZ 31,
     and TLZ Kingfisher.

   - Environmental Restrictions:

     Area contains Loosestrife and approximately 900 acres of
     wetlands.  No vehicular traffic or bivouacking in designated
     areas.  Vehicular traffic limited to trails and roads.

   - Maneuver Area Restrictions:  Bordered by Highway 17, SJ, SL,
     and SP.

FACILITIES:  Numerous buildings in GSRA Building Complex.  Dixon
              Fire Tower.

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA: SN

STATUS: Active

SIZE: Approximately 1,584.05 acres

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Multipurpose Exercise Training Area
Small Unit Training
Small Dismounted Unit Training
Infantry Tactics Maneuver Area
Command Post Exercise Training

RESTRICTIONS/COMMENTS:

- Conflicts: Maneuver restrictions when SR-10 is HOT. Ground units shall stay clear of Hwy 50.

- Area contains GSRA CVOT and OP-8.

- Environmental Restrictions:

  Area contains approximately 750 acres of wetlands. No vehicular traffic or bivouacking in designated areas. Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions: Bordered by Perimeter Road, Highway 50, SK, SO, and SQ.

FACILITIES: OP-8

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA: SO

STATUS: Active

SIZE: Approximately 1,658.04 acres

TRAINING AREA USE:

  Primary Use: Tactical Maneuver Training
  Alternate Use: Multipurpose Exercise Training Area
                Small Unit Training
                Small Dismounted Unit Training
                Infantry Tactics Maneuver Area
                Command Post Exercise Training

RESTRICTIONS/COMMENTS:

  - Conflicts: Maneuver restrictions when SR-10 is HOT.

  - Area contains SR-10 and part of GSRA CVOT.

  - Environmental Restrictions:

    Area contains approximately 800 acres of wetlands. No vehicular traffic
    or bivouacking in designated areas. Vehicular traffic limited to trails
    and roads.

    - Maneuver Area Restrictions: Bordered by SK, SL, SN, SQ, and SR.

FACILITIES: SR-10 Range Complex, buildings, loading and unloading area, range towers.

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA:  SP

STATUS:  Active

SIZE:  Approximately 981.72 acres

TRAINING AREA USE:

    Primary Use:  Tactical Maneuver Training
    Alternate Use:  Multipurpose Exercise Training Area
                    Small Dismounted Unit Training
                    Infantry Tactics Maneuver Area
                    Command Post Exercise Training

RESTRICTIONS/COMMENTS:

- Conflicts:  Maneuver restrictions when SR-10 is HOT.

- Area contains:  Portions of the GSRA CVOT.

- Environmental Restrictions:

    Area contains Loosestrife and approximately 975 acres of wetlands.  No vehicular traffic or bivouacking in designated areas.  Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:  Bordered by Perimeter Road, SL, SM, SR, and SU.

FACILITIES:  None

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA:  SQ

STATUS:  Active

SIZE:  Approximately 560.0 acres

TRAINING AREA USE:

   Primary Use:  Tactical Maneuver Training
   Alternate Use:  Multipurpose Exercise Training Area
                   Small Unit Training
                   Infantry Tactics Maneuver Area

RESTRICTIONS/COMMENTS:

   - Conflicts:  Maneuver restrictions when SR-10 is HOT.  Ground
                 units should stay clear of Hwy 50.

   - Area contains a portion of the GSRA CVOT.

   - Environmental Restrictions:

       Area contains approximately 350 acres of wetlands.  No
       vehicular traffic or bivouacking in designated areas.  Vehicular
       traffic limited to trails and roads.

       - Maneuver Area Restrictions:  Bordered by Perimeter Road,
                                     Highway 50, SN, SO, ST, and SW.

FACILITIES:  None

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes

MANEUVERS AUTH:  Yes
TRAINING AREA: SR

STATUS: Active

SIZE: Approximately 990.2 acres

TRAINING AREA USE:

Primary Use: Tactical Maneuver Training
Alternate Use: Multipurpose Exercise Training Area
        Small Unit Training
        Small Dismounted Unit Training
        Infantry Tactics Maneuver Area
        Command Post Exercise Training

RESTRICTIONS/COMMENTS:

- Conflicts: None.

- Area contains a portion of the GSRA CVOT.

- Environmental Restrictions:

  Area contains approximately 750 acres of wetlands. No vehicular traffic or bivouacking in designated areas. Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:
  Bordered by SL, SO, SP, SU, and SW.

- FAA Restrictions: Aircraft operating north of grid line 26 shall monitor BLACKBURN (233.8 UHF, 119.5 VHF) for status of GSRA ranges.

FACILITIES: None

ELECTRICITY AVAILABLE: No

INSTALLED COMMUNICATIONS: None

WATER SYSTEM: No

LASER USE AUTH: Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH: Yes

MANEUVERS AUTH: Yes
TRAINING AREA:  ST

STATUS:  Active

SIZE:  Approximately 2,421.45 acres

TRAINING AREA USE:

Primary Use:  Tactical Maneuver Training
Alternate Use:  Multipurpose Exercise Training Area
Small Unit Training
Small Dismounted Unit Training
Infantry Tactics Maneuver Area
Command Post Exercise Training

RESTRICTIONS/COMMENTS:

- Conflicts:  Ground units shall stay clear of Hwy 50.

- Area contains TLZ Phoenix, a portion of GSRA CVOT, OP-11, and SR-12/Home Station Lane Training (HSLT) IED complex.

- Environmental Restrictions:

  Area contains approximately 2,000 acres of wetlands.  No vehicular traffic or bivouacking in designated areas.  Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:  Bordered by Perimeter Road, Highway 50, SQ, and SV.

- FAA Restrictions:  Aircraft operating north of grid line 26 shall monitor BLACKBURN (233.8 UHF, 119.5 VHF) for status of GSRA ranges.

FACILITIES:  OP-11 tower

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes  MANEUVERS AUTH:  Yes
TRAINING AREA:  SU

STATUS:  Active

SIZE:  Approximately 1,447.30 acres

TRAINING AREA USE:

Primary Use:  Tactical Maneuver Training
Alternate Use:  Mechanized Assault Training
Multipurpose Exercise Training Area
Small Unit Training
Small Dismounted Unit Training
Infantry Tactics Maneuver Area
Command Post Exercise Training
Mechanized Combined Arms Maneuver Area

RESTRICTIONS/COMMENTS:

- Conflicts:  Ground units shall stay clear of Hwy 17.

- Area contains a portion of the GSRA CVOT.

- Environmental Restrictions:
  Area contains Loosestrife and approximately 1,200 acres of wetlands.  No vehicular traffic or bivouacking in designated areas.  Vehicular traffic limited to trails and roads.

- Maneuver Area Restrictions:  Bordered by Perimeter Road, Highway 17, SP, SR, SV, and SW.

- FAA Restrictions:
  Aircraft operating north of grid line 26 shall monitor BLACKBURN (233.8 UHF, 119.5 VHF) for status of GSRA ranges.

FACILITIES:  None

ELECTRICITY AVAILABLE:  No

INSTALLED COMMUNICATIONS:  None

WATER SYSTEM:  No

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes  MANEUVERS AUTH:  Yes
TRAINING AREA:  SV

STATUS:  Active

SIZE:  Approximately 2,458.76 acres

TRAINING AREA USE:

Primary Use:  Tactical Aviation and Ground Maneuver Training
Alternate Use:  Multipurpose Exercise Training Area
Small Unit Training
Small Dismounted Unit Training
Infantry Tactics Maneuver Area
Mechanized Combined Arms Maneuver Area
Airfield Seizure Facility

REstrictions/Comments:
- Conflicts:
  Camp Davis N/S runway, TLZ Phoenix rotary wing external cargo lifts and Holly Ridge exclusion zone. Close proximity to town of Holly Ridge. No vehicle traffic on runways. Ground units shall stay clear of Highway 17 and 50.
  - Area contains TLZ Duck, DZ/TLZ Pheasant, TLZ Swallow, Camp Davis N/S runways, Airfield Seizure Facility, and a portion of the GSRA CVOT.
  - Environmental Restrictions:
    Area contains approximately 650 acres of wetlands. No vehicular traffic or bivouacking in designated areas. Vehicular traffic limited to trails and roads.
  - Maneuver Area Restrictions. Bordered by Highway 17, Highway 50, ST, SU, and SW.
  - FAA Restrictions:
    Aircraft operating on Camp Davis N/S runways and TLZs shall monitor BLACKBURN (233.8 UHF, 119.5 VHF) for status of GSRA ranges/training areas/TLZs.

Facilities:  Numerous buildings
Electricaly Available:  No
Installed Communications:  None
Water System:  No
LASER USE AUTH: Yes; only approved eye-safe LASER devices.
NIGHT USE AUTH: Yes
MANEUVERS AUTH: Yes
TRAINING AREA:  SW

STATUS:  Active

SIZE:  Approximately 658.36 acres

TRAINING AREA USE:

   Primary Use:  Tactical Maneuver Training
   Alternate Use:  Mechanized Assault Training
                  Multipurpose Exercise Training Area
                  Small Unit Training
                  Small Dismounted Unit Training
                  Infantry Tactics Maneuver Area
                  Command Post Exercise Training
                  Mechanized Combined Arms Maneuver Area

RESTRICTIONS/COMMENTS:

   - Conflicts:  None

   - Area contains a portion of the GSRA CVOT.

   - Environmental Restrictions:
     Area contains wetlands. No vehicular traffic or bivouacking in
designated areas. Vehicular traffic limited to trails and roads.

   - Maneuver Area Restrictions:  Bordered by SQ, SR, ST, SU, and
     SV.

   - FAA Restrictions:

     Aircraft operating north of grid line 26 shall monitor
BLACKBURN (233.8 UHF, 119.5 VHF) for status of GSRA ranges.

FACILITIES:  None

ELECTRICITY AVAILABLE:  Yes

INSTALLED COMMUNICATIONS:  Yes

WATER SYSTEM:  Yes

LASER USE AUTH:  Yes; only approved eye-safe LASER devices.

NIGHT USE AUTH:  Yes  MANEUVERS AUTH:  Yes
APPENDIX D
OPERATIONAL RISK MANAGEMENT

1. Purpose. To establish operational risk management procedures in accordance with DODINST 6055.1 (NOTAL), MCO 3500.27B, MCRP 5-12.1C Risk Management and as an integral part of non-live fire training, live fire training, naval operations, other training and planning as directed at all levels of command in order to optimize operational capability, readiness, and enhance mission accomplishment. All commanders will apply operational risk management procedures and develop safety control measures for all phases of training and must complete an ORM Worksheet that is signed, reviewed and on site/on the range for the training event.

2. ORM is a decision making process that enhances operational capability and risk reduction. Risk management and risk assessment are formal, essential tools of operational planning. Sound decision-making requires the use of these tools, both in battle and training. It is a method for identifying hazards, assessing risks, and implementing controls to reduce the risks associated with any and all operations or training events. Units are required to conduct ORM for all high risk training.

3. These instructions apply to all Marine Corps units and other service units that use MCB Camp Lejeune live fire ranges, non-live fire training in all training areas, and other related training facilities.

4. Basic Principles of ORM
   a. Accept risk when the benefits outweigh the cost.
   b. Accept no unnecessary risk.
   c. Anticipate and manage risk by planning.
   d. Make risk decisions at the right level.

5. Unit commanders will:
   a. Implement the ORM process within their command when conducting live fire, non-live fire, conducting training in training facilities and all other phases of training aboard MCB Camp Lejeune.
b. Incorporate identified hazards, risk assessments, and controls into written operation orders and plans for live fire events.

c. Conduct a thorough risk assessment for all new or complex evolutions (Live Fire Movement/Maneuver Events/High Risk Training Events) and define acceptable risk and possible contingencies for the evolution.

d. Address the ORM process in safety, training, and lessons learned reports to the Base Range Safety Specialist as directed.

e. Inform the chain of command as to what hazard cannot be controlled or mitigated at their command level.

f. Submit to Base Range Control an ORM worksheet with each Special Range Request/Jane Wayne Day/Warrior Night/Mess Night or any other letter being submitted to Range Control. All pages of the ORM worksheet must be signed by unit CO or “by direction.”

g. Review DODINST 6055.1, MCO 3500.27B, MCRP 5-12.1C for additional information/guidance on Operational Risk Management.

6. Sources of cause factors from accidents and injuries: Individual 48%, Leader 18%, Standards 18%, Training Standards 8%, Support 8%.

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<tr>
<th>DEGREE OF PROBABILITY</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>Likely (A)</td>
<td>Likely to occur immediately or within a short period of time. Expected to occur frequently to an individual item or person or continuously to a fleet inventory, or group.</td>
</tr>
<tr>
<td>Probably (B)</td>
<td>Probability will occur in time. Expected to occur several times to an individual item or person or frequently to a fleet, inventory, or group.</td>
</tr>
<tr>
<td>May (C)</td>
<td>May occur in time. Can reasonably be expected to occur some time to an individual item or person or several times to a fleet, inventory, or group.</td>
</tr>
<tr>
<td>Unlikely (D)</td>
<td>Unlikely to occur.</td>
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## HAZARD SEVERITY

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>DEGREE OF SEVERITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>CATEGORY I</td>
<td>The hazard may cause death, loss of facility/asset, or result in grave damage to national interests.</td>
</tr>
<tr>
<td>CATEGORY II</td>
<td>The hazard may cause severe injury, illness, property damage, damage to national or service interests, or degradation to efficient use of assets.</td>
</tr>
<tr>
<td>CATEGORY III</td>
<td>The hazard may cause minor injury, illness, property damage, damage to national, service or command interests, or degradation to efficient use of assets.</td>
</tr>
<tr>
<td>CATEGORY IV</td>
<td>The hazard presents a minimal threat to personnel safety or health, property, national, service or command interests, or efficient use of assets.</td>
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## RISK ASSESSMENT MATRIX

<table>
<thead>
<tr>
<th>PROBABILITY</th>
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<tbody>
<tr>
<td>CATEGORY</td>
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<td>-------------</td>
</tr>
<tr>
<td>SEVERITY</td>
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<tr>
<td>I</td>
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<tr>
<td>II</td>
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<tr>
<td>III</td>
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<tr>
<td>IV</td>
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### RISK ASSESSMENT CODE (RAC)

<table>
<thead>
<tr>
<th>Number</th>
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<tbody>
<tr>
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<tr>
<td>2</td>
<td>Serious</td>
</tr>
<tr>
<td>3</td>
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<td>Minor</td>
</tr>
<tr>
<td>5</td>
<td>Negligible</td>
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</tbody>
</table>

**NOTE:** See next page. This is to allow the removal of document for reproduction as needed. This is only an example of the form. Units are authorized other formats for the ORM worksheet. All pages of the ORM worksheet must be signed by the person that prepared the worksheet and the person that reviewed it. Risk Decision Authority Sigature/Rank/Unit

Do not accept any unnecessary risk and ensure risk decisions are made at the appropriate command level.

Overall risk after controls are implemented and residual risk has been identified. Low (L), Moderate (M), High (H), Extremely High (EH).
<table>
<thead>
<tr>
<th>A. Mission or Task</th>
<th>B. Date/Time Group</th>
<th>C. Data Prepared</th>
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<table>
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<tr>
<th>D. Prepared By:</th>
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<table>
<thead>
<tr>
<th>E. Task</th>
<th>F. Identity &amp; Assess Control</th>
<th>G. Develop Controls</th>
<th>H. Determine Residual Risk</th>
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<tr>
<th>I. SUPERVISE AND EVALUATE</th>
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<tr>
<th>J. Implement Controls</th>
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<thead>
<tr>
<th>K. Determine overall mission/task risk level after controls are implemented (circle one)</th>
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</thead>
<tbody>
<tr>
<td>LOW (L)</td>
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<table>
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<th>L. SUPERVISE AND EVALUATE</th>
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<thead>
<tr>
<th>M. How To:</th>
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<thead>
<tr>
<th>N. Implement Risk</th>
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<tr>
<th>O. Task Hazards</th>
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</table>

<table>
<thead>
<tr>
<th>P. Identify &amp; Assess Controls</th>
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<td><strong>A-D</strong></td>
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<td><strong>J</strong></td>
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<tr>
<td><strong>K</strong></td>
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<tr>
<td><strong>L</strong></td>
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</tbody>
</table>
7. **Overall Mission/Task Risk Level**

   a. **Extremely High**: Loss of ability to accomplish the mission if hazards occur during mission. A frequent or likely probability of catastrophic loss or frequent probability of critical loss exists.

   b. **High**: Significant degradation of mission capabilities in terms of required mission standard, inability to accomplish all parts of the mission, or inability to complete the mission to standard if hazards occur during mission. Occasional to seldom probability exist of a critical loss exists. A likely to occasional probability exists of a critical loss. Frequent probability of marginal losses exists.

   c. **Moderate**: Expected degraded mission capabilities in term of the required mission standard; will have a reduced mission capability if hazards occur during mission. An unlikely probability of catastrophic loss exists.

   d. **Low**: Expected losses have little or no impact on accomplishing the mission. The probability of critical loss is unlikely, while marginal loss is seldom or unlikely. The probability of a negligible loss is likely or of personal injury.
APPENDIX E

ROIC AND RSO CHECKLIST

1. General
   a. This appendix is meant to be a helpful reference (Quick Guide) for personnel acting in the capacity of Range Officer in Charge (ROIC) and Range Safety Officer (RSO) for live fire training/training facilities events. This appendix is not a replacement for the Range Control SOP or any other range safety references. ROICs and RSOs are responsible for understanding and abiding by everything contained in the Range Control SOP BO 3570.1C and the Marine Corps Order 3570.1B/DA PAM 385-63 (Range Safety) when executing their duties/functions. Training must be conducted safely and well coordinated/deconflicted. Training and Education Command, Range and Training Area Management Division have developed a USMC Range Safety Pocket Guide (current version) that can be utilized as a source document/range safety tool/checklist. Copies can be obtained on the Camp Lejeune web page or at: https://rtam.tecom.usmc.mil. Copies of this Range OIC/RSO pocket guide are provided/issued out at the Range OIC/RSO Class.

   b. Does your training require a Field Exercise Request for Environmental Impact Review (FEREIR)? Training exercises requiring a FEREIR include - but are not limited to - establishment of a tactical fuel farm, FARP, TWPS site, cutting vegetation, fuel/generators or non-routine activities at Onslow Beach. See Chapter 6 for more information.

   c. Report all accidents/incidents/mishaps to BLACKBURN and your chain of command. When a range incident is declared by the ROIC/RSO, the training event will be stopped until sufficient information is gathered to determine what happened, how it happened, and what steps are needed to preclude a recurrence.

   d. ROICs/RSOs will report to BLACKBURN when occupying a live fire range and upon departing.

   e. All ROICs and RSOs should be familiar with the Marine Corps Base Range Regulations, MCO 3570.1B/DA PAM 385-63 and all other related orders, letters, and policies as required or directed.

   f. Observe all prescribed field sanitation procedures on ranges, training areas, and training facilities. Ensure a complete and detail police call is conducted of the entire range
after training is completed and inspected by a range inspector. All types of debris should be removed from the range/training area. At no time will ROIC/RSO allow the burning or burying of trash/ammunition dunnage on the range/training area/training facility. Warming fires/camp fires are not authorized on a live fire range.

g. Do not allow any modification of the range or its facilities without prior written approval from Range Control/Range Maintenance.

h. Anyone observing a fire on a live fire range, in the training area, or the impact area will report it to BLACKBURN immediately. The observer will give the exact location by grid if possible and the direction the smoke is traveling. Units will continue to train unless notified by BLACKBURN otherwise. At no time will Marines enter an impact area to extinguish or control the fire. If the fire is in the training area, the ROIC will move the unit/equipment out of danger and take necessary action to extinguish or control the fire if possible or required. Units will report to BLACKBURN when smoke from fires moves across any MSRs on and off base that may inhibit driver visibility.

i. Units will not bivouac on a live fire range unless specifically authorized by Range Control via e-mail. Using units must request/schedule the training areas adjacent to the live fire range for bivouacking purposes if needed.

j. ROICs/RSOs must be alert for severe weather conditions at all times. Alerts and information will be provided by BLACKBURN as information is made available. Other than Hurricane Condition II, the decision to depart the field/live fire range in severe weather is a unit commander’s decision/call.

k. At no time will privately owned firearms be allowed on a live fire range aboard MCB unless authorized by MCB Range Control Officer. This does not include MCCS sponsored, authorized, and scheduled recreational events like the skeet range.

l. ROICs/RSOs will conduct all safety briefs/checks before live fire begins. Ensure the ROICs/RSOs have a total count of personnel/weapons/ammunition and equipment on his/her range/training area/training facility.
m. When tracked/wheeled vehicles are used in the live fire event and vehicles are in close proximity of ground personnel, ground guides and safety buffer zone/distances will be used with the required safety distances. ROICs/RSOs will enforce all speed limits on ranges. Sleeping areas will be established for bivouac locations and marked for safety. Units are not authorized to sleep next to wheeled/tracked vehicles.

n. The ROICs/RSOs will return all equipment to Range Control Scheduling Department NLT 24 hours after the scheduled training event.

2. ROIC/RSO Qualification
   a. All ROICs/RSOs of live fire ranges must complete the Marine Corps Range Safety (Basic) Distance Learning Course and possess a valid Camp Lejeune, Range Safety Card. Range Safety Cards are valid for three (3) years. Range safety briefs are conducted once a week at Range Control, Building 54, on each Friday at 0800 unless the Friday is a federal holiday. The door to the conference room will be open at 0700, and attendance is on a first come, first served basis with limited seating. Special briefings of 40 or more personnel can be conducted for Reserve units or off base units on a case-by-case basis and must be coordinated 10 days in advance by calling the Range Safety Specialist/Range Control Operations Officer at 451-1240/451-1236. The ROIC/RSO must possess their Range Safety Card to sign for the range or while on the range at all times.

   b. ROICs will be qualified and certified by a current Commanding Officer’s certification letter with enclosure that must also be signed to supervise a live fire range with that weapon/weapon system and ammunition being fired.

   c. RSOs must be qualified and certified by a current Commanding Officer’s certification letter with enclosure to supervise all live fire safety activities with that weapon/weapon system and ammunition being fired.

   d. The ROIC/RSO will have on hand and be familiar with current field and technical manuals (TMs) for the weapon system/ammunition being fired. **Think safety.** Do not throw, kick or otherwise rough handle any ammunition. When opening ammunition boxes/cans use only approved tools (no e-tools/axes or k-bars). Live ammunition will be kept separate from blank ammunition at all times.
3. **ROIC/RSO Responsibilities**

a. ROIC/RSO will be present and observing the range during all periods of live firing and exercise full control over all activities conducted on that range, training area, or training facility. The ROIC/RSO can not take part in the live fire/non-live fire training event at all.

b. ROIC must maintain and monitor primary and alternate communications with BLACKBURN at all times. CELL PHONES ARE NOT AN APPROVED/AUTHORIZED FORM OF COMMUNICATION at Camp Lejeune. The ROIC/RSO will put the range into a “Check Fire” status if either means of communication ceases to work. Your call sign is the range number/training area you are requesting permission to go HOT on or train in (Example Lima-5/Fox-2/GP-22/Training Area GF). DO NOT USE YOUR UNIT’S TACTICAL CALL SIGN!

c. Entry into any impact area is prohibited without prior approval from Range Control/Base EOD. Any entry into the impact area is considered hazardous. Appropriate control and supervision is mandatory. Handling or removing unexploded ammunition (duds) by unauthorized personnel is not authorized.

d. Ensure all road guards are posted at the correct locations, they are properly equipped, properly trained on the communication gear provided, and fully understand the mission/tasks and their responsibilities. If the range has gates ensure they are checked/secured/locked. Personnel will not pass or circumvent road guards or roadblock/gates without permission from Range Control. Violators will be reported to BLACKBURN.

e. Report any range repairs, improvements, or problems to the Range Inspectors and report it to Range Control via the range report or ICE.

f. ROICs/RSOs must understand and comply with all environmental and conservation requirements.

g. During live fire events, ROICs/RSOs will ensure all members conducting live fire have sleeves down and wear helmets, flak jackets, and hearing protection. To request a deviation of this requirement, a Special Range Request letter must be submitted to Range Control 30 working days before the scheduled event. (Example: Scout Sniper live fire without flaks/helmets).

h. The RSO will supervise the reception (verify proper DODIC and types for that range) and storage of all munitions at
the range and issue point. Ammunition will be under guard at all times and must be stored properly. Units will avoid excess breakout. Ammunition should be protected from the elements. Flame/spark producing items, flammable liquid and designated smoking areas should be at least 50 feet from the ammunition storage/issue site.

i. RSOs will separate all blank type ammunition from live fire type ammunition (never mix live ammunition/blank ammunition). Ensure all BFAs have been removed from weapons before conducting live fire training. Double check magazines to ensure no live ammunition is present or mixed with blank ammunition. Ensure the correct BFA is being used on that weapon.

j. Ammunition that fails to perform as expected can normally be attributed to a malfunction, human error, or a weapon/equipment deficiency. In every instance, it must be reported up the chain of command. Follow the instructions on the Ammunition Malfunction Data Collection Guide (8025 NAVMC 10135) and unit ammunition SOPs. Ammunition will always be inspected for obvious defects/serviceability. Think safety, conservation, and accountability with ammunition at all times.

k. ROICs/RSOs must ensure all proper procedures for handling misfires/hangfires are followed. Required time limits and procedures must be followed to prevent injury as prescribed by applicable TMs/FMs/MCDPs/MCWPs/MCOs/Army Orders and other required references.

l. ROICs/RSOs will report all duds to Blackburn. Fired munitions and/or projectiles will not be tampered with by the unit. Any item/object that appears to be a dud will be treated as such.

m. To prevent accidents caused by the blast effects of certain training ammunition devices such as artillery simulators, hand grenade simulators or flash bangs, their use will be limited to personnel designated by unit leaders and under the close supervision of a Marine NCO/SNCO experienced in the proper use of that training device. Ensure safe distance when using training devices or training ordnance.

n. The destruction of excess powder bags and charge increments under field training conditions is authorized if part of the training event and the mortar or gun position is scheduled and the unit is still in a “HOT” status. Precautions
will be taken when burning field artillery powder bags and mortar charges/increments to ensure all established safety and fire prevention procedures are met.

o. Privately owned vehicles will never be used to transport ammunition, weapons, pyrotechnics, or explosives.

p. RSOs must ensure each weapon is inspected before live firing and observed during live firing to assure the safe functioning and operation of the weapons. PFI/LTIs should be current and complete for all weapons firing on the range. Weapons should be properly cleaned and lubricated. Ensure all weapons have been properly cleared and inspected before leaving the firing line.

q. If weather conditions such as rain, fog, smoke, dust, or other factors obscure the target area or range limit markers, firing will stop until conditions improve. Firing indirect weapons (artillery/mortars) requires the FO to have eyes on the target(s) within the scheduled impact area and he must be able to see the impact of each round fired.

r. During periods of dry weather, which produce a severe danger of fire, BLACKBURN will impose restrictions covering certain munitions like tracers and others along with ranges, to reduce the probability of range fires. For the use of fire/flame/heat producing munitions see Fire Readiness Plans 1-8 in the Environmental Handbook for Trainers and Chapter 7 of this SOP.

s. No digging is authorized on ranges except to properly emplace the weapons systems. Within a training area, all fighting positions will be filled in at the completion of the training event. No digging is authorized in ALZs/TLZs/GPs.

t. Report any and all POL/HAZMAT spills immediately to EMD and Range Control.

u. Remove all communications wire, engineer stakes, concertina wire, trip wire, and guided missile wire from the range or training area. Do not leave any barrier material on the roads.

v. If the live fire training event requires a special range request, the request and approval must be on the range with the ROIC/RSO at all times.
w. Review the quickest and safest route to the nearest medical facility with the safety vehicle driver and corpsman.

4. Briefs, procedures, and checklists. The following tabs are provided as guidance to safely execute training on ranges.
   a. Tab (A) is the Range Live Fire Safety Brief.
   b. Tab (B) is the Position Safety Officer Checklist.
   c. Tab (C) is the Officer in Charge Brief.
   d. Tab (D) is the Organizational Brief.
   e. Tab (E) is the Introduction/Instruction ROIC/RSO Safety Brief.
   f. Tab (F) is the During Live Fire Brief.
   g. Tab (G) is the After Firing Brief.
   h. Tab (H) is the Firing Commands Checklist.
   i. Tab (I) is the Dud Round Procedures.
   j. Tab (J) is the Range Operations Checklist.
RANGE LIVE FIRE SAFETY BRIEF

TAB (A)

1. This is your Range Safety Brief for Range ____.

2. The Officer in Charge (ROIC) is:

3. The Range Safety Officer (RSO) is:

4. The Position Safety Officers (PSOs) are (if required):

5. The Misfire Pit (if required) is located:

6. Safety is Paramount.
   Safety will always be the **NUMBER ONE** priority. No movement on
   the range will be conducted without the RSO being informed.
   All road guards will be briefed and emplaced by the RSO only.
   Anyone departing or entering the range will notify the RSO
   before doing so.

7. Everyone is a Safety Officer. If you observe a situation
   that you feel is unsafe call an immediate **cease-fire** (check fire
   for mortars) or **stop** (for individuals, Javelins, SMAWs, blasting
   caps). A cease-fire must be given verbally or physically by
   giving the hand and arm signal to cease-fire (Palm outboard,
   moving your arm up and down in front of your face). In the case
   of a cease-fire all weapons will go to Condition 4. Do not wait
   to be told. ROIC/RSOs will check the backblast area to ensure
   it is properly cleared.

8. Red Pyrotechnics (smoke, pyrotechnic signal devices) will
   ONLY be used to signal for an emergency cease-fire.

   Note: Using unit must provide the red pyrotechnics (Unit SOP).

9. During firing the ROIC will be located ____________ and the
   RSO will be located _________________. The PSOs will be
   located ___________________. The corpsman will be located
   _____________________. The safety vehicle will be located
   ________________.

10. The dedicated safety vehicle is located ______________
    and the safety driver is ____________________. Ensure the
    safety vehicle has a strip map to the Camp Lejeune Naval
    Hospital or nearest medical facility.
11. MEDEVAC/CASEVAC will be handled by the safety corpsman and the ROIC or RSO; all other personnel will stay clear of the emergency. (Go over routes to hospital or nearest LZ). Muster at the assembly area for accountability.

12. Duds (UXO) (are/are not) found on this range. Do not pick up, kick, or hit any ordnance on this range. Notify the RSO immediately of possible dud locations. Dud procedures for this range are as follows:

13. There (will be/will not be) maneuvering on this range. If a Marine is within 15 degrees or a thumb hand fist (5 Finger Rule) width of your muzzle DO NOT FIRE. Be aware of your position and the Marines around your position. If you are in doubt of the situation DO NOT FIRE. Be careful if using the RCOs due to the blind spots on the left and right of your muzzle.

14. Overhead fire (is/is not) authorized for this range. The overhead firing procedures for this range are as follows:

15. The 4 Weapons Safety Rules are:
   a. Treat every weapon as if it were loaded.
   b. Never point your weapon at anything you do not intend to shoot.
   c. Keep your finger straight and off the trigger until you are ready to fire.
   d. Keep your weapon on safe until you are ready to fire.

16. If you should encounter a stoppage apply immediate action and if necessary remedial action and complete the drill. Continue with the drill until you hear the command cease-fire or stop, at which point you will comply unless told to do otherwise by a safety officer. (Go over immediate action for all weapons being fired on the range.) Each weapon system has different immediate action procedures and must be strictly adhered to in order to prevent an accident.

17. The uniform for this range is_______________; hearing protection is required on this range while conducting live fire. (If maneuvering, hearing protection should not be
Tab (A)

worn, or just one ear). Observe the downrange area. Your left lateral limit is ______________; your right lateral limit is ______________. Your internal lateral limits are the left and right of your targets. Your limit of advance is ______________. All of your rounds will impact in this range fan. You will fire on your designated targets only. Muzzles will be pointed in a safe direction at all times.

18. The only types of ammunition that will be used on this range are__________________________.

Note: Brief any notice of ammunition reclassification or ammunition information notice, this will come out as a message.

19. The weapons that will be used on this range are_________.
   (Go over condition codes for all weapons being fired.)

20. Any left-handed shooter or thrower (for hand grenades)?

21. Does anyone here wear glasses or contacts and that does not have them here?

22. Brief any range regulations and weather that might apply.

23. The designated smoking area is _____________________.
   (There is no smoking within 50 ft of the ammunition).

24. Brief the range layout. (Left/Right Lateral Limits)

25. Continually check the range impact area to ensure it is clear of all personnel and equipment. Additionally, you should look out for any low flying aircraft.

26. Helmets, flak jackets, and hearing and eye protection will be properly worn and used.

27. Ammunition issue point is located _________________.
   Ensure ammunition is properly stored and guarded.

28. No cross range firing. Stay within your lane.

29. This concludes your Range _______Safety Brief. Are there any questions?
30. Shakedown of all personnel will take place and 100 percent accountability of ammunition.

Note: Expenditure reports for ammunition will be filled out at the range after the unit shakedown.

31. The location of the Armorer is:

32. All ammunition dunnage will be removed from the range and taken to DRMO. Ensure it is separated by brass (by type caliber/mm), links, and trash. At no time will live ammunition/brass/links or other types of ammunition dunnage that would normally be turned in to DRMO, be put into any of the dumpsters/trash aboard the MC Base. At no time will this material be burned or buried aboard MCB Camp Lejeune. Officers/SNCOs/NCOs will supervise/enforce.

33. Report all Marines/Sailors trained, ammunition expended by type, and DODIC to BLACKBURN.

ALWAYS REFER TO LOCAL RANGE CONTROL REGULATIONS FOR MORE INFORMATION.
POSITION SAFETY OFFICER CHECKLIST  (If required)

1. Do not mix blank ammunition with live fire ammunition. Ensure the BFA has been removed before firing live ammunition and installed before firing blank ammunition.

2. Review MEDEVAC/CASEVAC procedures. Ensure the safety vehicle driver is familiar with the route to the Camp Lejeune Naval Hospital.


4. Walk the ground and go over the signal plan and the cease fire plan.

5. Review the level of training and the associated risk, think ORM, and fill out an ORM worksheet.

6. Assign Position Safety Officer specific duties for the exercise.

7. Discuss potential friction points or critical areas within the scheme of maneuver that require specific attention.

8. Closely supervise immediate action procedures at all times.

9. Enforce muzzle awareness.

10. Enforce proper weapons handling.

11. Supervise weapons conditions/weapons safety rules.

12. Verify the use of required safety gear.

13. Take actions necessary to prevent dangerous situations.

14. Walk the range with Marines/Sailors.

15. Brief range lateral limits by ground feature or azimuth.

16. Use compass to measure weapon safety angles. No cross range firing.
17. The requirements for initiating a cease-fire and the signal for cease-fire.

18. The location of limits of advance for individual target engagement.

19. Actions during prolonged weapon stoppages.

20. The evaluation system if necessary.

21. The sequence of the debrief/after action review/hot wash.

22. Issue start line brief. Ensure timelines are met.

23. Ensure weapons are cleaned, lubricated and properly checked before conducting live fire.

24. All unit ROICs/RSOs will conduct a post firing shake down of all weapons to include stock weapons and all crew served mounted or un-mounted weapons before departing the range. Leaders must check all magazines to ensure ammunition does not leave the range.

**NOTE:** READ ALL LOCAL RANGE REGULATIONS BEFORE FIRING
OFFICER IN CHARGE BRIEF

STATIC LIVE FIRE

1. Ensure all range flags are up/red lights are set.

2. Ensure all targets are set up. Targets in stands. Target type. Ensure targets are not on steel stakes.

3. Establish solid/dual communications with range control via landline or radio. CELL PHONES ARE NOT AN APPROVED/AUTHORIZED FORM OF COMMUNICATION!

4. Physically review ammunition DODICs against the draw and ammunition permitted for that range.

5. Assign person to prepare ammo for issue for all relays. _______ rounds per shooter. ____________ relays.

6. Ensure the range is laid out correctly.
   a. Within the SDZ.
   b. Target line in correct spot, spot check.
   c. Firing lines are in the correct spot.
   d. Ammo issue point is in correct spot.
   e. First aid kit is in the correct spot.

7. Preliminaries. (Shooters are facing down range at the _____ yd line/firing line).
   a. Count off and assign relays if necessary.
   b. Conduct a complete safety check (CLEAR EXTRA WPNS!)
   c. Prepare weapons for firing. (Ensure proper functioning and lubrication of weapons.)
   d. Brief safety PSOs while weapons are getting prepared.

8. PSOs/ARSOs: Constantly watch the shooters for any safety violations and immediately correct them as well as report it to
Tab (C)

myself or to the RSO. _________ will position himself on the left half of the firing line and will be the center of the firing line when moving up and down range. _________ will position himself on the right half of the firing line and will take down all scores on any scored event.

9. Ammo SNCO/NCO. ___________ will be the Ammo NCO. You will break down the ammo into ___ piles of ____ rounds each with one set of earplugs per pile. You will also be responsible for the first aid kit.

NOTE: READ ALL LOCAL RANGE CONTROL REGULATIONS BEFORE FIRING

| COURSE OF FIRE: |
|-----------------|-----------------|-----------------|
| DISTANCE        | #ROUNDS         | POSITION        | #DRILLS |
| __________________|_________________|_________________|

10. Conduct of Fire. In the event a weapon has a stoppage or malfunction and cannot be cleared by the shooter or PSOs/ARSOs, the weapon will be left on the firing line, muzzle pointed down range, weapon on safe if possible. The shooter will complete the drill with a stock weapon. An armorer will be called to clear it if needed/required.

11. Medical Emergency Plan. If a medical emergency arises, ___________ will contact the corpsman via voice or radio. The command for cease-fire will be given and ___________ will clear the firing line, moving the rest of the shooters away from the casualty, and to the designated assembly area. He will also take charge, clear, and maintain the casualty’s weapon. The other PSOs will administer first aid to the casualty until the corpsman arrives.

RANGE CONTROL WILL BE CONTACTED TO GO INTO A CHECK FIRE.

READ THE SAFETY BRIEF!!! Give local safety rules.
ORGANIZATIONAL BRIEF

1. Appointments.
   a. The ROIC is ________________________________.
   b. The RSO is ________________________________.
   c. Safety supervisors are ________________________.
   d. Ammo SNCO/NCO is ____________________________.
      The ammo issue point is located__________________.
   e. The corpsman is ___________________________ and is
      located ______________________________. Safety Vehicle/Driver
      are located ________________________________.

2. Range Layout: Your targets are the down range area. Face
   about. You are at the ______ yard line. The yard lines
   are: ______________. To your left is range_________. To your
   right is range ___________. It is hot/cold and may go hot/cold
   anytime.

   NOTE: READ ALL LOCAL RANGE CONTROL REGULATIONS BEFORE FIRING

3. System of Work/Tasks. There will be ______ relays (they
   have been designated already). There are _____ target pullers.
   After completion of all of the shooting you will evaluate and
   repair your target.

4. Scoring System. Your score will be the number of rounds on
   target out of ________.

5. Ammo Issue. You will be issued ______ rounds. You will
   fill your magazines with ___________ rounds each. When I give
   you the command, you will face to the right and file off to the
   ammo point. Then you will move to the _____ yard line, take a
   knee and fill your magazines.

6. Road Guard Positions/Equipment

   Note: Road Guards should be positioned in pairs. (Unit SOP)
INTRODUCTION/INSTRUCTION FOR ROIC/RSO SAFETY BRIEF

1. Stages Reached. Up to this point you have been given basic weapons instructions (BWIs), practice periods, and the weapons handling test.

2. Purpose. The purpose of this shoot is for the shooter to____________________________________________________________.

3. Reason why and incentives.________________________________. The reason for this shoot is__________________________________.

4. Remind and review_________________________________________. Common mistakes are_________________________________________. Remember everything from your BWI and practice period.

5. Teaching Points_______________________________________________.

6. General Brief of Exercise_____________________________________.

7. This is what is going to happen_________________________________.

DURING LIVE FIRE

1. ENSURE THAT SHOOTERS ARE WEARING EAR PROTECTION CORRECTLY. DETAILED BRIEF BEFORE EACH DRILL: Explain each drill before it is fired.

2. FOLLOW THE COURSE OF FIRE: Do not deviate. SAFELY CONDUCT THE SHOOT: As always safety is paramount!

3. CHECK FOR ERRORS AND CORRECTIONS: Ensure the SNCOs/NCOs conduct proper checks and coaching techniques.
AFTER FIRING

1. CONDUCT A THOROUGH SAFETY CHECK AND COMPLETE POLICE CALL.
   a. Have the shooters get on line at the ______ yard line, and face down range, **Unload, show clear, check magazines, and check magazine pouches. Bore Punch and upper receiver check.** Clear the extra weapons and CONDUCT SHAKE DOWN!
   b. INSPECT WEAPONS: REPORT ALL PROBLEMS TO THE UNIT ARMORY. IDENTIFY WEAPONS FOR REPAIR.
   c. After weapons are cleared face up range. Have details appointed to take down targets, police call, etc.

2. Regroup at a convenient place. SUMMARIZE, BRING UP POINTS, QUESTIONS TO/FROM, STATE STANDARD ACHIEVED AND LOOK FORWARD TO NEXT TRAINING EVENT.

3. Call BLACKBURN stating range _____ is COLD. Now the range flags come DOWN! Request a range inspector from BLACKBURN. COMPLETE POLICE CALL, ALWAYS LEAVE THE RANGE IN BETTER SHAPE THAN YOU FOUND IT.

4. Range clearance. A range inspector will inspect the range and a Viper Card will be issued once the range is cleared.

5. RETURN RANGE PROPERTY WITHIN 24 HOURS AFTER EVENT.
## Firing Commands

### Direct Fire

Key Word: **ADDRAC**

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>DEFINITION</th>
<th>EXAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alert</strong></td>
<td>Alerts the firing unit for further instruction.</td>
<td>“Squad”</td>
</tr>
<tr>
<td><strong>Direction</strong></td>
<td>General direction to target.</td>
<td>“Direct Front”</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>Brief description of target</td>
<td>“Machinegun Bunker”</td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td>Approximate range in meters to target</td>
<td>“Three hundred”</td>
</tr>
<tr>
<td><strong>Assignment</strong></td>
<td>Tells who is to fire on the Target</td>
<td>“Rifleman”/“Squad”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Fireteam”</td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td>The command to commence and control the fires</td>
<td>“Rapid”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“On my signal”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMMAND</th>
<th>DEFINITION</th>
<th>EXAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FILL</strong></td>
<td>Used to alert the shooter to fill magazines.</td>
<td>“Fill one magazine ten rounds”</td>
</tr>
<tr>
<td><strong>LOAD</strong></td>
<td>A magazine is inserted into the weapon.</td>
<td>“With a magazine of ten rounds, load”</td>
</tr>
<tr>
<td><strong>MAKE READY</strong></td>
<td>A round is chambered.</td>
<td>“Make ready”</td>
</tr>
<tr>
<td><strong>FIRE</strong></td>
<td>The shooter is allowed to fire the weapon.</td>
<td>“On my command...Fire”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Fire at will”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“You may commence firing”</td>
</tr>
</tbody>
</table>
When firing dud-producing ammunition such as TOW IIB, M72A7 LAAW, AT-4, MK-153 SMAWs, 60/81/120mm Mortars, MK-19 40 mm, Hand Grenades and M203/M32 the RSO is required to have a minimum of 1 misfire pit close by. (Not required for TP rounds.) All misfire pits will be located a minimum of 50 meters from both ends of the firing line and should be at least 5 feet long, 3 feet wide and 2 feet deep with the long end pointing down range. The pit must be large enough to place the largest weapon on the range into it. If a dud is found on the range, the using unit will not touch the round. Report it to BLACKBURN who will call Base EOD for support. If the dud round cannot be removed from the weapon, the weapon will be placed in the dud pit pointed down range and Base EOD will be called by the RSO or ROIC via Blackburn. Depending on the local range regulations firing may continue once approved by Blackburn. The ROIC or RSO must check with range control before firing may begin. Never leave the range with a dud in the pit until someone from Base EOD or the ammunition technician from that unit takes responsibility for it.
RANGE OPERATIONS CHECKLIST

1. Mission Analysis
   a. Who will be firing on the range? Number of personnel?
   b. What weapons will be used and courses of fire?
   c. What range will the training be conducted on?
   d. When is the range scheduled and when does it go hot?
   e. Has a request to bivouac been approved?

2. Logistical Requirements
   a. Has sufficient ammunition of the correct DODIC and type for that range been requested for the number of personnel?
   b. Are the range facilities adequate for the type of training to be conducted?
      (1) Has the range request/RFMSS request been submitted?
      (2) Has enough time been scheduled to complete the training?
      (3) Have any conflicts that have surfaced been resolved?
   c. Has the transportation request been submitted? Has the safety vehicle been requested as well as additional transportation as needed?
   d. Has the communication request been submitted?
      (1) Is there a primary and alternate plus additional radios for road guards?
      (2) Is an OE-254 needed? If yes, has it been requested?
      (3) Is a radio operator needed?
   e. Has the chow request been submitted?
f. Has a corpsman been requested?

(1) Back board, stretcher and C collar.

(2) Medical kit

3. Become the Expert

a. Review TMs, FMs and all orders for the weapons/weapons systems and related equipment to be fired. READ ALL References.

b. Ensure that the weapons to be fired have been LTI/PFI’d by an armorer.

c. Read the range regulations (Range Control SOP) for the range to be used. If questions arise, visit Range Control.

d. Check T&R, MPS, and ITS manuals to see if training tasks can be integrated into the range training plan.

4. Determine Personnel Requirements

a. ROIC. Overall responsible for the safety and conduct of the range, he will not participate in training. The ROIC will position himself where he can best control the training. All personnel who have questions and concerns about the training will go through the ROIC and not walk up to the firing line and make suggestions to the RSO. The ROIC is responsible for ensuring the unit commander and battalion gunner (if assigned) have received a confirmation brief. The ROIC will personally call in to BLACKBURN/Range Control when requesting to go HOT or COLD, the ROIC must be a Gunnery Sergeant (fire and movement)/Staff Sergeant (static fire) or above and the RSO must be a Staff Sergeant or above. ROIC will ensure a unit representative is at contractor supported ranges within 1 hour of the scheduled HOT time or lose the range.

b. RSO. Responsible for the safety of the range/event, he will not participate in the training. He will be in position near the firing line and have control of the NCO/SNCO giving the commands, PSOs/ARSOs and the shooters. Prior to the shoot the RSO will give the safety brief to all persons involved in the shoot in any way. The RSO will ensure all shooters have a
Tab (J)

weapon they have BZO'd and that any shooter needing eyeglasses that does not have them will not shoot. He will ensure every Marine on the firing line is wearing hearing protection and other gear as required. Upon completion of live fire the RSO will ensure a proper police call is conducted of the entire range. The RSO must be a Staff Sergeant or above unless a deviation from the Commanding Officer, MCB from the rank requirements set forth by MCO 3570.1B/DA PAM 385-63 and this SOP has been granted.

c. PSOs/ARSOs. Are responsible for executing the plan that the ROIC and RSO have designated. They will ensure the Marines on the firing line are following all safety precautions and are following the commands of the RSO. They will have a bore punch already assembled and will ensure weapons are in Condition 4 when the Marines leave the firing line, except in emergency procedures. PSOs/ARSOs should be a corporal or above.

d. Command NCO/SNCO. Is responsible for giving all commands on the line. He will be briefed by the ROIC and RSO as to the course of fire. He will assist the corpsman in an emergency situation after he ensures that all weapons are in Condition 4. The Command NCO/SNCO should be a corporal or above.

e. Ammunition NCO. Is responsible for breaking the ammunition down according to instructions passed by the RSO. He is responsible for ensuring that Marines get the proper amount of ammunition and that it is distributed in an orderly manner. He will save all ammunition cans to ensure there is enough for ammunition turn in. The Ammunition NCO should be a corporal or above.

f. The ROIC/RSO will brief the target detail and target operators on their duties and functions and all safety requirements.

g. Tower Operator. Generally is a civilian/contractor who will operate the target system/range.

h. The using unit should have a backup plan for hip pocket classes that would support the live fire exercise to fill in for delays in transportation, weather, logistics, or any other requirements.
Tab (J)

i. **Radio/Telephone Operator (RTO)** is responsible for establishing and maintaining communications. The RTO will continuously monitor the safety net and ensure that radio checks are conducted every 30 minutes (on the hour/half hour) while in a hot status. The RTO will immediately let the RSO know if he loses communications with BLACKBURN.

j. **Road Guards** will be properly positioned and briefed on their duties by the RSO. The RSO will ensure and maintain positive communications with all road guards. If communication is lost with road guards, the RSO will place the firing into an immediate check fire until communications are restored. Appendix A of this SOP states if road guards are required. Road guard maps will be provided to the ROIC once the range is checked out and signed for.

k. **Corpsman** is responsible for providing immediate first aid to anybody incurring an injury. He will not participate in training. He will need to be stationed with his medical kit off from the firing line but in a position where he can observe the firing line and react if needed.

l. **Armorer** is responsible for ensuring that the ROIC and RSO are briefed on any weapons malfunctions/discrepancies prior to, during and after the shoot. The armorer will provide any maintenance within his capability at the range. He will ensure there is CLP on hand and any special tools necessary to assist him in his duties for that particular shoot. The armorer will not approach the firing line unless called for by the RSO. Weapons must be physically checked/cleared before leaving the firing line by the ROIC/RSO.

m. **Safety Vehicle Driver** must have the vehicle physically present during all live fire exercises and react as directed by the ROIC/RSO. The safety vehicle/driver must be close to the training as terrain or situation will permit. The driver must be familiar with all routes to emergency medical facilities.

5. **Equipment Suggestions:**

   a. **Red Range Flag.** Range regulations require the red range flag to be flown on each live fire range.

   b. Other safety equipment (aiming circle, compass, SL-3 Items).
Tab (J)

c. Base EOD support, if necessary/required.

d. Appropriate publications pertaining to the training that will be conducted such as TMs/FMs for weapons and ammunition.

e. Radios and back up radios/spare batteries. (Squelch off)

f. Field phones and wire, if necessary/required.

g. OE-254 antenna, if necessary/required.

h. Public Address System (PA) set with back up bullhorn, if necessary/required.

i. Training aids for concurrent training stations.

j. Sandbags

k. Bivouac site (Bivouacking on a live fire range is not permitted unless approved by Range Control/Blackburn).

l. White tape or green chemical lights for helmets of control personnel.

m. Vehicle flags for tracked vehicles involved in firing.

n. Safety vehicle

o. Ear Plugs

p. Water cans with potable water.

q. Score card, if necessary

r. Cleaning equipment for weapons.

s. Shovels, brooms and other cleaning supplies and equipment, if necessary.

t. Target, and target accessories, if necessary.

u. Tarp, stakes, and rope to cover the ammunition.

v. Spare weapons and repair parts as needed.
w. Tow bar and slave cables for vehicles, if necessary.

x. Fuel cans for vehicles, if necessary.

y. TRASH BAGS!!!

6. **Determine Available Resources**

a. Keep unit integrity.

b. Utilize NCOs

c. Effect coordination with supporting organizations:
   
   (1) Ammunition
   
   (2) Transportation
   
   (3) Training aids
   
   (4) Corpsman
   
   (5) Chow
   
   (6) Weapons
   
   (7) Other equipment (safety pyrotechnics and security ammunition).

7. **Proper Supervision**

a. **Publish LOI**

   (1) Uniform for range and firing personnel.

   (2) Mode of transportation, departure times and places.

   (3) Method of messing to be used.

   (4) Any special requirements being placed on the unit.

   (5) Operational Risk Management/Signed/Received Worksheet.
Tab (J)

(6) Emergency Medical Evacuation Plan.

(7) Concept for training.

(8) Scheme of maneuver.

(9) Rest/Sleep/Mess Plan.

b. Organize a plan for firing:

(1) Determine range organization.

(2) Outline courses of fire/individual training standards to be used.

(3) Have fire commands/ORM ready for use on the range.

(4) Set rotation of stations/firing points.

c. Rehearse concurrent training instructions.


e. Brief and rehearse PSOs/ARSOs on range operations and all his duties.

f. Collect and concentrate equipment for use on the range in one location.

g. Obtain training aids/devices/mock-up/other training devices.

h. Pick up target(s), if required. NO steel engineer stakes to be utilized. Steel targets must be approved by a SRR.

i. Report to range control to sign for range up to 5 days in advance, NLT 1200 the day prior, and 1200 on Thursday for weekend and Monday training. If training is on a Tuesday or Wednesday following a Monday/Tuesday holiday, unit must check out range by 1200 Thursday.

8. **Occupy the Range**
Tab (J)

a. Request permission to occupy the range, from Range Control (BLACKBURN), 34.70 MHZ.

b. Establish good primary and alternate communications, 34.70 MHZ. CELL PHONES ARE NOT AN APPROVED/AUTHORIZED FORM OF COMMUNICATION WITH BLACKBURN (DO NOT ASK)!

c. Have designated areas prepared:

(1) Parking (See Chapter 1 and 11 of the SOP)
(2) Ammunition Supply Point.
(3) Medical station and safety vehicle location.
(4) Water, trash, dunnage and messing point.
(5) Concurrent training planned.
(6) Tactical landing zones for MEDEVAC if needed.
(7) Assigning a smoking area, if desired/required /needed.

d. Inspect the range for operational condition, general safety and cleanliness.

e. Raise red range flag when occupying or firing according to the Range Control SOP.

f. Check ammunition to ensure it is the correct type and quantity and that it is serviceable. Do not fix blank ammunition and live ammunition.

g. Ensure that range personnel are in proper uniform and the all safety equipment is in position/staged/worn.

h. Receive firing unit data/safety data.

i. Conduct safety checks on weapons/ammunition.

j. Check for clean, lubricated, and fully operational weapons/weapon systems.
k. Conduct safety briefing (to include all administrative personnel on the range).

l. Organize personnel into firing order (keep unit integrity if possible).

m. Request permission to go “HOT” from Range Control (BLACKBURN).

9. Conduct of Firing

a. Maintain continuous communications with BLACKBURN, 34.70 MHZ. Radio checks conducted every 30 minutes (on the hour/half hour) while in a “Hot” Status.

b. Commands from the tower or command NCO/SNCO clear and concise.

c. Range areas policed, to include surrounding areas.

d. Ammunition accountability maintained.

e. Personnel accountability maintained.

f. Vehicles parked in appropriate areas/locations.

g. Personnel in proper uniform/equipment.

h. Ear plugs/eye protection used at all times.

i. On the spot corrections being made by NCOs/SNCOs when Marines/Sailors use poor techniques or fail to hit the target.

j. Conservation of ammunition enforced. “No Mad Moments or Trash Shots.”

k. Weapons cleared/checked before they are taken off the firing line.

l. Personnel checked for brass and live ammunition before they leave/depart the range.

m. Ensure all safety rules are in place, enforced, and supervised at all times by the command/commander. Ensure proper weapon condition codes/weapon safety rules are used.
n. Maintain muzzle awareness at all times.

o. Learn to live with loaded weapons! Check and recheck!

10. Closing of the Range

a. Close down the range according to the Range Control SOP.

b. Request permission to go COLD from Range Control (BLACKBURN), 34.70 MHZ.

c. Remove all equipment, ammunition, dunnage, and trash from the range/training area/training facility.

d. Conduct ammunition “shake down and check all ammunition sources.” Collect unused ammunition and account for every round/device.

e. Police the range and all surrounding areas.

f. Request a range inspector from Range Control (BLACKBURN), 34.70 MHZ, when ready to be inspected and cleared.

g. Report any range problems by submitting an After Action Report or utilize ICE.

h. Report any noted safety hazards/dump sites to Range Control and the Range Inspectors.

i. ROICs/RSOs can go to the following web page and fill out an Interactive Customer Evaluation (ICE) form on Range Control and submit it online. Listed below is the web page. [http://ice.disa.mil/index.cfm?fa=site&site_id=113](http://ice.disa.mil/index.cfm?fa=site&site_id=113)

11. Ammunition. Ammunition accountability and proper DODIC/type verified for that range when delivered to the range; processing of expenditure reports and completion of turn-in documents (when required) before ammunition leaves range.

a. Accurate expenditure reporting cannot be overemphasized. MCO P8020.10B series specifically requires ROICs/RSOs to complete this report before departing the range. If this document is completed correctly, on time, and at the
range (after a thorough shake-down), ammo-theft will cease, improper ammo storage (in wall lockers, desks, armories, etc.) will not take place, and there will be no need for subsequent investigations.

b. Accurate malfunction reports cannot be overemphasized by the using/firing unit. Providing this information as required to higher headquarters/Marine Corps Orders ensures that ammunition available for issue is safe and the best available in order to maximize training time.
APPENDIX F

NAVAL GUNFIRE

1. Purpose

a. In order to enhance the level of training for Shore Fire Control Party(s) (SFCP) and other Marine units (MARSOC, MEU, ANGLICO, Force RECON, RECON Bn, etc.) that are required to maintain proficiency in delivery of Naval Surface Fire Support (NSFS), the Commanding Officer, MCB Camp Lejeune, North Carolina has authorized NSFS firing from qualified ships (as defined below) into the G-10 Impact Area. To ensure the safe conduct of SFCP/NSFS training, this annex prescribes procedures for the planning, coordination, and firing of NSFS aboard MCB Camp Lejeune.

b. The following is a list of references that will be used when NSFS is used at MCB Camp Lejeune/G-10.

(1) MCO 3570.1B/DA PAM 385-63.

(2) USN Fleet Exercise Publication (FXP) 5B Series Change 2.

(3) Allied Tactical Publication (ATP) 4E – Naval Gunfire Procedures.


(5) NAVORD PUB TW024-AA-ORD-010, Ammunition (Serviceable, Suspended, and Limited Use).

(6) MCB Camp Lejeune, Base Order P3570.1B.

(7) 10th Marines SFCP SOP (TBP).

(8) Navigational Chart 11543 (Cape Lookout-New River) River) NAD 83/WGS-84.

(9) Camp Lejeune Military Installation Map (V742S Edition 1-DMA) NAD 83/WGS-84.

(10) COMNAVSURFLANT STANDING LETTER OF INSTRUCTION (LOI) FOR G-10 NAVAL SURFACE FIRE SUPPORT (NSFS) SHORE FIRE CONTROL (SFCP) ISO TENTH MARINES AND PRE-FIRE MESSAGE.
2. Scope. The procedures described in this Appendix and all references listed above apply to all Marine and Naval Forces conducting SFCP/NSFS training aboard MCB CLNC. CO, MCB CLNC is the only approval authority for deviation from this Order.

3. General
   a. Inert ordnance (Training Practice) is not cleared for fire into the G-10 Impact Area and will not be used.

   b. Prior to firing, the Range Officer In Charge (ROIC), Range Safety Officer (RSO), and/or Naval Gunfire Liaison Officer (NGLO) shall conduct a face-to-face range safety brief with the firing ship(s). This brief will be conducted after the ROIC/RSO/NGLO have conducted a face-to-face brief with BLACKBURN and Range Scheduling the day prior to the live fire event. The purpose of this brief is to ensure shipboard personnel are cognizant of range safety requirements, procedures, and scheduled training events. Unit conducting NSFS must release a NSFS Pre-fire message at least 3 working days (72 hours) before the scheduled event and ensure “CO MCB CAMP LEJEUNE NC S3” is listed on the message routing.

   c. Prior to firing into the G-10 Impact Area, the supporting ship(s) must conduct a Pre-Action Calibration Fire (PACFIRE) seaward in order to verify 5”/54 or 5”/62 gun system operation, check meteorological data, determine Initial Salvo Velocity (ISV) and conduct barrel warming. Results of this PACFIRE must be updated into the ship’s fire control computer and verified by Gunfire Liaison Officer (GLO) prior to any firing into G-10. The ship is responsible for scheduling the W-122 airspace and water space with the Atlantic Fleet Exercise Coordination Center (AFECC) and Fleet Area Control and Surveillance Facility Virginia Capes (VACAPES).

   d. The initial fire mission into the G-10 impact area will be a single shot center grid registration adjust mission to ensure accuracy of gun and spot corrections are having desired effect. TGT 8 will normally be used for this fire mission.

   e. In accordance with this SOP, ROIC/RSO and the participating ship(s) will maintain two-way communications with BLACKBURN at all times, on frequencies designated in paragraph 7 below, while the range is “HOT.”

   f. Prior to live-fire, a non-firing rehearsal utilizing reference (9) geography should be conducted. This rehearsal may be conducted while enroute to MCB Camp Lejeune/Onslow Bay.
g. Ships are responsible for maintaining clearance of water surface area 350 meters from ship along gun-target line.

h. Ships are cleared for overhead fire beyond the 350-meter point. Ships must verify munitions to be fired are cleared for overhead fire per reference (5). Approved DODICs for firing into G-10 Impact Area are (no exceptions):

<table>
<thead>
<tr>
<th>Projectile</th>
<th>DODIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>HE-CVT</td>
<td>D350</td>
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<tr>
<td></td>
<td>D295</td>
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</tr>
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<td>D333</td>
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</tbody>
</table>

i. The G-10 Impact Area is defined by the following coordinates:

1. 3438.70N5-07717.23W7 (GRID 18STD90373605)
2. 3438.88N4-07716.57W3 (GRID 18STD91403637)
3. 3438.59N2-07715.57W6 (GRID 18STD93003580)
4. 3437.88N3-07715.49W3 (GRID 18STD93003447)
5. 3437.62N5 07716.76W4 (GRID 18STD91053405)

Note: Rounds impacting outside G-10 will result in an immediate “Check Fire” until target coordinates/gun fire control solution can be verified.
j. MCB Camp Lejeune has established a **No Fire Area (NFA)** within the G-10 Impact Area (Urban CAS Facility/Lego City). It is defined by the following coordinates:

(1) (GRID 18STD91143590)
(2) (GRID 18STD91213593)
(3) (GRID 18STD91533593)
(4) (GRID 18STD91533574)
(5) (GRID 18STD91363564)
(6) (GRID 18STD91283564)
(7) (GRID 18STD91143569)

*Note: This area must be marked on the map by the SFCP team and ship.*

k. NSFS Spotters/Observers will normally be placed at a vantage point perpendicular to the gun-target line in order to adjust fires. Primary Observation Post will be OP-5/G-3 Berm, but other OPs, such as OP-2/OP-3, may be utilized if scheduled and signed for when training more than one SFCP/Spot Team.

l. No intentional discharge of ordnance into the water is permitted.

m. Naval vessels will not discard refuse overboard or pump bilges in the vicinity of MCB CLNC.

n. Ships must report number and type by DODIC of rounds/fuzes expended to the ROIC/RSO (NGLO) at end of training. This information will then be forwarded to BLACKBURN along with number of Marines/Sailors trained.

o. Ships must maintain a constant lookout (visual and radar) for low flying aircraft and surface vessels that may interfere with the live-fire training event.

p. U.S. Coast Guard Regulations require that the Atlantic Intracoastal Waterway (AIWW) between Onslow Beach Bridge and Bear Tower be closed to routine marine traffic during NSFS live-firing events. MCB Camp Lejeune will coordinate with U.S. Coast
Guard for issuance of applicable Broadcast Notice To Mariners (BNTM) 30 days in advance, Broadcast Warnings, and schedule the Navy Boat Crew to enforce the closure.

q. State Highway 172 aboard MCB Camp Lejeune will be closed between the intersections with Sneads Ferry Road (south) and Lyman Road (north) during all NSFS live-firings. The unit(s) conducting training is/are responsible for providing the personnel and equipment required to accomplish the HWY 172 closure. At a minimum, eight personnel and one NCOIC with VHF communications gear and transportation will be employed. The following checkpoints will be established prior to and maintained throughout any live fires with 2 guards that are briefed on duties at each site:

1. Intersection of HWY 172 and Sneads Ferry Road (mechanical gate with flashing lights installed and orange cones placed out).

2. Intersection of HWY 172 and Lyman Road (mechanical gate with flashing lights installed and orange cones).

3. At ETA-4 and Sneads Ferry Road.

4. At Freeman Creek Landing and Highway 172.

5. Close and lock gate at TLZ Goose.

r. Two-way communications between all four (4) checkpoints and the ROIC/RSO (NGLO) must be maintained continuously while the range is “HOT.”

s. Additionally, road guards will be deployed at least one hour prior to commencement of live-fires in order to thoroughly sweep HWY 172, Freeman’s Creek Road, and boat launch areas prior to HWY 172 closure. It is the ROIC/RSO’s responsibility to ensure that all the (8) detour signs and (2) gates are properly displayed in a down position and lights are properly functioning before going “HOT.” After the training event, all signs and gates need to be returned to the up position and cones removed. This operation must be checked and supervised by the ROIC/RSO (NGLO).

t. When available, a Naval Gunfire Liaison Officer (NGLO) will be placed on the firing unit of a US ship during live fire in order to facilitate a safe evolution. A NGLO is required for all foreign ships. All ships should have reference (9) to
easily communicate grid locations with BLACKBURN. NGLO shall ensure ships have reference (9) prior to going to ship so he can bring one if necessary.

4. Safety
   a. Every person involved in this training is a safety officer and can initiate a “Check Fire,” when an unsafe condition or act is observed. Only the ROIC/RSO (NGLO) may cancel a “Check Fire.”

   b. Unlike artillery, naval gunfire does not depend on the angle of fire to control the angle of fall. Due to the ballistics of naval gunfire and the related trajectory, the angle of fall for naval gunfire is a function of range. As such, the only approved Fire Support Area (FSA) for NSFS into G-10 Impact Area is bounded by the following coordinates:

   (1) 3429.33N4-07714.61W6 (GRID 18STD94001865)
   (2) 3432.31N6-07708.44W0 (GRID 18SUD03552395)
   (3) 3430.90N9-07707.43W8 (GRID 18SUD05052130)
   (4) 3427.89N3-07713.62W6 (GRID 18STD95451595)

   This FSA ensures a minimum range of 14,000 meters (14 km) to the near boundary of the G-10 Impact Area and an angle of fall greater than 20 degrees.

   NOTE: Naval Gunfire is not authorized into the G-10 NO FIRE AREA (UCAS Site, Lego City). See paragraph 3.j. of this Appendix.

   c. The maximum height (ordinate) of the NSFS shall not exceed 17,999 MSL.

   d. The ROIC/RSO (NGLO) is responsible for determining the minimum and maximum gun target line relative to the assigned FSA. These will be between 309-353 degrees true.

   e. The above standards are normally not negotiable and are in place to preclude lower round trajectory resulting in a higher skipping probability.

   f. An immediate “Check Fire” will be called for any of the following reasons:
(1) Loss of communications between spotters and firing unit (ship); or RSO, firing unit (ship) and BLACKBURN; or RSO and all road guards.

(2) Targets (G-10 Impact Area) NOT visible to spotters.

(3) Range foulers (land, sea, or air; sea mammals, boats, turtles, aircraft, ground units, etc.).

(4) Gun or Gun Fire Control System (GFCS) casualty.

(5) Gun sight angle less than 15 degrees.

(6) Gun Target Line (GTL) outside safe firing limits.

(7) Marine mammals within 100 feet of ship.

(8) Whales, turtles, or manatees within 500 yards of ship.

5. Personnel, Duties, And Responsibilities. When conducting unit level SFCP/NSFS training, not in conjunction with a combined arms exercise live fire, the required personnel with their duties and responsibilities are listed below:

a. Observation Position (OP) ROIC and RSO.

(1) ROIC may be either the NGLO or qualified NSFS spotter E7 or above that has a valid MCB Camp Lejeune RSO Card.

(2) Perform duties IAW Chapter 2 of this Order and 10th Marine Regiment Safety SOP.

(3) Schedule G-10 Impact Area, observer positions, and EB Onslow as required.

(4) ROIC/NGLO is responsible for signing for the Ranges and conducting a face-to-face brief with BLACKBURN at least one day prior to exercise and prior to briefing Naval Surface Fire Support Ship (NSFS). Brief shall include but not limited to pre-exercise message, FSA, concept of operations, Operational Risk Management, safety issues, and ship’s readiness ratings.

(5) Conduct a face-to-face brief with designated firing unit(s) prior to any live firing into the G-10 Impact Area.
(6) RSO duties IAW Chapter 2. RSO may also serve as LRSO (if school trained and certified by unit CO), when employing lasers.

b. Firing Unit

(1) The Commanding Officer of the NSFS ship is responsible for all aspects of safe firing (sea side) aboard the ship.

(2) Responsible to adhere to all regulations and procedures prescribed in Chapter 2 of this SOP.

(3) Must request airspace/waterspace, W-122 (surface-17,999ft), from FACSFAC VACAPES and Onslow Beach water space from MCB Camp Lejeune Range Control.

(4) Ensure all ammunition is cleared for overhead fire and is on the approved DODIC list.

(5) Maintain positive two-way communication with BLACKBURN on 233.8 UHF (primary) or 34.70 VHF (primary) and commercial telephone (910) 451-3064/4449 (alternate). Conduct communications checks every 30 minutes on the half hour and hour when in a “HOT” status.

(6) To go “HOT,” the ship must follow procedures as prescribed in Chapter 3 of this SOP.

(7) When firing in conjunction with a combined arms exercise personnel required include: OP ROIC, RSO/LRSO, G-10 Helo RSO, R-5306D RSO.

6. Coordinating Instructions

a. Live-fire NSFS/SFCP training will be scheduled per Chapter 3 of this SOP. Normally 30 days lead time is required in order to coordinate AIWW closure and issue the appropriate Broadcast Notice to Mariners (BNTM), schedule the range sweep aircraft and airspace warnings. Requests of less than 30 days will be handled on a case-by-case basis. 2d Marine Division and 10th Marines NGLOs will assist in the planning and coordination of all NSFS/SFCP live-fire training and should be contacted early on in the process.

b. Supported unit (SFCP/Spot Team) will publish a pre-exercise message to ALCON NLT 72 hours from execution of exercise. Pre-Exercise format per reference (4).
c. Full service charge is the only authorized propellant for firing aboard MCB CLNC. Reduced charge is strictly forbidden.

d. Only "qualified" NSFS capable ships will be assigned to conduct live-fire support for SFCP training aboard MCB CLNC. A qualified ship is designated as one that has successfully completed a FIREX I qualification and has an M-2 or better NSFS readiness rating.

7. Communications
   a. Range Control MCB CLNC nets:
      (1) Range Control Safety Net 34.70 FM Squelch Off.
      (2) Air Safety Control Net 233.8 UHF.
      (3) Civilian Air Safety Net 119.5 VHF.
      (4) Commercial Telephone Number (910)451-3064/4449 or DSN 751.

   b. NSFS Coordination/Spotter Nets and Road Guard Coordination Net will be promulgated in the Pre-Exercise message.

   c. After the scheduled event, using unit will provide after action comments to Range Control and update the NSFS Usage Spreadsheet with the required updated data. A copy of the spreadsheet will be sent to Range Control within 72 hours after completion of the event.
APPENDIX G

GREATER SANDY RUN AREA TRAINING COMPLEX (GSRA)

1. General

   a. Background. The Greater Sandy Run Area (GSRA) Training Complex is a 41,000 plus acre parcel located to the west/southwest of Highway 17/MCB Camp Lejeune. It consists largely of cutover timber, pine plantations, large areas of wetlands and a pocosin swamp. Within the GSRA (southern part) is Camp Davis, a WWII Army Airfield (Camp Davis North and South Runways) and training facility located at the southern end near the small town of Holly Ridge. All support facilities were removed from Camp Davis when the Army departed. The airfield consists of a road network and two runways with supporting taxiways dating from the early 1940s.

   NO DUD PRODUCING ORDNANCE IS AUTHORIZED IN THE GSRA TRAINING COMPLEX AT ALL. PYROTECHNICS/SMOKE ARE NOT AUTHORIZED IN THE GSRA TRAINING COMPLEX AT ALL. All units must police and remove all trash, ammunition dunnage from the live fire ranges, training facilities, and training areas.

   b. Location. The GSRA Training Complex is located within Onslow County. The town of Verona is located adjacent to the northeastern boundary of GSRA. Highway 17 is a common eastern boundary. Highway 17 along this boundary includes three underpasses, allowing grade-separated access from Camp Lejeune to the GSRA. Padgett, Haws Run, Dawson Cabin, and High Hill Roads make up the northern boundaries. NC Highway 50 makes up the western boundary. See Appendix C, for the training areas within the GSRA.

   c. Threatened and Endangered Species. Pocosin areas in the GSRA have long functioned as de facto wildlife refuges in coastal North Carolina as more suitable areas were developed for human habitation or use. Fauna of these areas is typical of that indigenous to the southern U.S. coastal plain. In addition to the many species of birds, fish, amphibians, and small mammals, which occur naturally within the pocosin and surrounding uplands, larger animals such as bobcats, black bear, turkeys, and white-tail deer are present. Because the GSRA is widely used by local hunters, public safety is always a concern especially during hunting season.

2. Ranges, Training Areas, and Training Facilities
a. General. The GSRA Training Complex presently contains five (5) live fire ranges, 22 training and maneuvering areas, ten (10) tactical landing zones, one (1) para-drop zone, and an airfield seizure facility. Other ranges and training facilities are scheduled to be developed and constructed in the future and additional correspondence will be released to address those new ranges and facilities as required.

b. Live Fire Ranges

(1) SR-6

(a) Description. SR-6 is an Infantry Platoon Battle Course (IPBC) and field firing range located in the vicinity of grid coordinates 719329. This range is used as a static target practice range, moving realistic target range, basic techniques of fire range, and a live-fire maneuver range, where troops are firing at targets as they maneuver down the length of the range. Target arrays and the number of targets engaged are by approved scenarios. Stationary and Moving Infantry Targeting system (SITS/MITS) targets and operator must be scheduled via RFMSS. Vehicle-mounted weapons systems (7.62mm and below) for static fire require prior SRR approval. Night exercises/operations are authorized. Class 1-4 LASERs are authorized on this range. Primary direction of fire is 320 degrees magnetic. For more information on this range see Appendix A of this SOP.

(b) Access to Range. To reach SR-6 from Verona Loop, vehicles must proceed west on Verona Loop Road, pass Verona Loop Road and Old Wilmington Road intersection, and proceed straight ahead through the vehicle underpass. Crossing under Hwy 17 underpass, vehicles will proceed south to the intersection of Hwy 17 and Moore’s Ridge Road. Vehicles using Hwy 17 exit west at the second overpass and proceed to Moore’s Ridge Road and follow it around. Vehicles will then proceed west on Moore’s Ridge Road; range is across from the Fire Department/SR-46 Compound. Moore’s Ridge Road is off limits to all tracked vehicles.

(2) SR-7

(a) Description. SR-7 is a Multi-Purpose Training Range and field firing range located in the vicinity of grid coordinates 722368. It is designed to train both infantry and armored (wheeled and tracked) vehicles, either separately or simultaneously. It consists of a dual track tank trail; with a
single return track and a fully Remote Engagement Target System (RETS) equipped targets system with multiple target types (infantry stationary and moving; and armor stationary and moving). Only training practice (TP) projectiles and small arms will be fired from armored vehicles. Down range maneuvering cannot take place or is limited while firing is occurring at SR-6. Target arrays and the number of targets engaged are by approved scenarios. Night operations are authorized. Class 1-4 LASERs are permitted and are authorized if scheduled in RFMSS. Primary direction of fire is 268 degrees magnetic. The inert (TP) TOW missile is authorized from the right-hand side only. At no time will dud producing ordnance be used on SR-7. For more information on this range see Appendix A of this SOP.

(b) Access to Range. To reach SR-7 from Verona Loop, tracked vehicles must proceed west on Verona Loop Road until reaching the northern Hwy 17 underpass, Loop Road and Hwy 17 intersection. Proceed straight ahead through the vehicle underpass. Crossing under Hwy 17 underpass, vehicles will proceed through SR-Gate #3 to the range entrance. All other vehicles using Hwy 17 exit west at the northernmost overpass and proceed along the tactical trail to the range entrance.

(3) SR-8

(a) Description. SR-8 is a contract run Multi-Purpose Machinegun (MPMGR) and Sniper Range that can be scheduled up to 16 hours per day. It is located in the vicinity of grid coordinates 699321. It is designed to train machinegun gunners/teams/squads/sections and sniper teams (7.62mm/.50cal sniper rifles) either separately or simultaneously. It consists of a large dirt berm for firing with fully RETS equipped single and double E-type targets. Only small arms will be fired from ground mounted or wheeled vehicle mounted machineguns (5.56mm, 7.62mm, and .50 cal). The MK-19 40mm machinegun is not authorized on SR-8. Down range maneuvering with vehicle mounted machineguns is limited to two wheeled vehicles at a time, which can move down range up to 450 meters. Maneuvering (live fire and movement) down range with troops is not authorized. Target arrays and the number of targets engaged are by approved scenarios. Night operations are authorized if properly scheduled. Class 1-4 LASERs are permitted and authorized. Primary direction of fire is 325 degrees magnetic. At no time will dud producing ordnance be used on SR-8. Use of .50 cal Sniper Round DODIC A606 is not authorized. For more information on this range see Appendix A of this SOP.
(b) Access to Range. To reach SR-8 from Verona Loop, vehicles must proceed west on Verona Loop Road past Verona Loop Road and Old Wilmington Road intersection, and proceed straight ahead through the vehicle underpass. Crossing under Hwy 17 underpass, vehicles will proceed south to the intersection of Hwy 17 and Moore’s Ridge Road. Vehicles using Hwy 17 exit west at the second overpass and proceed to Moore’s Ridge Road and follow it around. Vehicles will then proceed west on Moore’s Ridge Road; the range is beyond the Fire Department/SR-46 Compound/4th Tank Bn Compound. Moore’s Ridge Road is off limits to all tracked vehicles.

(4) SR-10

(a) Description. SR-10 is a Multi-Purpose Range Complex located in the vicinity of grid coordinates 656267. It is designed to provide collective training facilities for tanks, LAVs, AAVs, and AH-1 helicopters. The Range Complex accommodates platoon-level collective training exercises as well as individual and crew qualification training. It consists of dual side-by-side tank ranges, each with multiple tank trails in which tanks can maneuver while firing and is fully RETS-equipped with multiple target types. Only plastic, non-explosive, non-dud producing projectiles will be fired from armored vehicles. Target arrays and the number of targets engaged are by approved scenarios. Night operations are authorized. Lasers are permitted with approval. Primary direction of fire is 5 degrees magnetic. For more information on this range see Appendix A of this SOP.

(b) Access to Range. There are two separate tank trails connecting the GSRA firing ranges back to the central part of Camp Lejeune. Tracked vehicles cross the New River by means of pontoon bridge barges. The crossing point connects Weil Point on the east bank of the New River to Rhodes Point on the west bank. Tracked vehicles then proceed west on designated tank trails along Rhodes Point Road and Old Town Point Road (TLZ Cardinal), crossing Verona Loop Road to Steel Tower Road to Old Wilmington Road. The tank trail divides before reaching Hwy 17. Crossing under Hwy 17, tracked vehicles proceed south on the perimeter road along a designated tank trail until they reach the range entrance.

(5) SR-11

(a) Description. SR-11 is a pistol qualification and requalification range. It has a bullet trap and a lead
collection device. It has 14 firing points. This range is
designed to support the 9mm and .45cal pistols. For more
information on this range see Appendix A of this SOP.

(b) **Access to Range.** It is located next to Range
SR-10.

c. **Training and Maneuver Areas (listed North to South)**

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d. **Tactical Landing Zones.** There are a total of ten
designated Tactical Landing Zones (TLZs) within the GSRA
Training Area. These are distributed evenly throughout the GSRA
to give complete access for various training scenarios and for
medical evacuation in case of medical emergencies. An access
road serves each TLZ. TLZs can be scheduled in RFMSS. If TLZs
are to be used for rotary wing external load operations or other
ground training; they must be scheduled in RFMSS, signed for by
ground units, and must be inspected by a Range Inspector.

(1) **TLZ Flamingo** is located within the SG training area
in the vicinity of grid coordinates 616353. Enter by way of SR-
Gate #11.

(2) **TLZ Partridge** is located within the SE training area
in the vicinity of grid coordinates 647378. Enter by way of SR-
Gate #8 or #11.

(3) **TLZ Snipe** is located within the SD training area in
the vicinity of grid coordinates 723372. Enter by way of SR-
Gate 3 (SR-7 Range).
(4) **TLZ Kingfisher** is located within the SM training area in the vicinity of grid coordinates 714326. Enter by way of SR-Gate P (SR-6 Range).

(5) **TLZ/Drop Zone Pheasant** is located within the SV training area in the vicinity of grid coordinates 666235. Enter by way of SR-Gate #22 or #23 (Camp Davis). Pheasant is also a parachute drop zone and the Camp Davis North Runway is next to the drop zone.

(6) **TLZ Peewee** is located within the SJ training area in the vicinity of grid coordinates 708334. Enter by way of SR-Gate B (SR-6 South Range). TLZ is equipped with LZ marking lights.

(7) **TLZ Pipit** is located within the SF training area in the vicinity of grid coordinates 693352. Enter by way of SR-Gate #3. TLZ is equipped with LZ marking lights.

(8) **TLZ Phoenix** is located within the ST training area in the vicinity of grid coordinates 648234 and is used by helicopter training squadrons for external load training on a regular basis. Enter by way of SR-Gate #19 just off Highway 50.

(9) **TLZ Duck** is located within the SV training area in the vicinity of grid coordinates 657215 and is also called Camp Davis South. Enter by way of SR-Gate #22 just off Highway 17.

(10) **TLZ Swallow** is located within the SV training area in the vicinity of grid coordinates 666245 and is located just north of the Camp Davis North Runway. Enter by way of SR-gate #22 just of Highway 17 and proceed north along the taxiways.

(11) **TLZ Turkey** is located within the SL training area in the vicinity of grid 788312. Enter by taking CC Road to Northbay Road. TLZ Turkey is scheduled for vegetation management and expansion to accommodate MV-22 operations in the future.

e. **Para-Drop Zones.** PDZ Pheasant is located in the vicinity of grid 666235 and is 1400 meters long by 400 meters wide.

f. **Airfield Seizure Facility (ASF).** There are five cinder block structures located at Camp Davis (Between Camp Davis North and South Runways) to provide opportunities for realistic training scenarios in assault and seizure tactics of a runway.
These structures consist of two mock hangars with dummy aircraft, a mock control tower, a mock terminal building, and a mock maintenance building evenly distributed along the two airfields. The cinder block structures are only building shells containing no equipment, offices, or providing any other functional services other than their usefulness as a training device. Buildings are placed as realistically as possible including appropriate airfield safety setbacks so they will not represent a hazard to air traffic at Camp Davis. There are two (2) old A-4 and (2) F-4 aircraft located at the airfield. Units are not authorized to move these aircraft. The ASF must be scheduled in RFMSS, signed for, and must be inspected by a Range Inspector. For more information on the ASF see Appendix A of this SOP.

(1) Bldg SR-25 (Mock Tower) grid 662226.

(2) Bldg SR-26 (Mock Hangar #1) grid 661222.

(3) Bldg SR-27 (Mock Hangar #2) grid 660222.

(4) Bldg SR-28 (Mock Maintenance Bldg) grid 662226.

(5) Bldg SR-29 (Mock Terminal) grid 665232.

g. Observation Posts. There are a total of four observation posts (OPs) distributed throughout the GSRA. These consist of 125 foot metal towers with a small-enclosed observation room at the top; they are tied into the base telephone system, and reached by access road. These OPs are not served by any utilities other than communications, power for electrical receptacles, and illumination lights. Lights are located to maximize the view of major training areas as well as other key elements, such as roads, both military and civilian. The towers are in a position to provide feedback on training performance and to spot possible unsafe situations or training conflicts before they develop into more serious situations.

(1) OP-8 is located within the SN training area in the vicinity of grid 639355. Enter by way of SR-Gate #9 (Davis Tram Road).

(2) OP-9 is located within the SD training area in the vicinity of grid 722373. Enter by way of SR-Gate #3 (SR-7 Range).
(3) OP-10 is located within the SG training area in the vicinity of grid 629357. Enter by way of SR-Gate #11 (Rawls Road).

(4) OP-11 is located within the ST training area in the vicinity of grid 65102585. Enter by way of SR-Gate #18 (Wells Road Trail). Unit requesting OP-11 must coordinate with Range Control and the staff of Home Station Lane Training Complex (CIED Battle Course).

h. Battalion Bivouac Areas

(1) There are two battalion bivouac areas (BnBiv) sited in the GSRA.

(a) BnBiv #1 is mainly used for units training on Range SR-6. BnBiv #2 is mainly used for units training within the Camp Davis/SV training area. These areas will accommodate up to 800 troops.

(b) BnBiv #1 is located in the vicinity of grid 709312 (SL training area/LZ Turkey). Bivouacking is not authorized in the nearby wildlife food plot

(c) BnBiv #2 is located in the vicinity of grid 677234 near Camp Davis (SV Training Area).

i. Restricted Areas

(1) Vehicle Movement. Vehicle movement off graded gravel maintained roads in all training areas in the GSRA is not authorized. Privately owned vehicles (POVs) are not authorized in training areas without RCD permission/issued POV passes. POVs are authorized for hunters during the hunting season with a Game Warden’s pass. Designated POV parking areas are provided by DOD permit in approved areas. Hunters may use registered off-road recreational vehicle to travel to authorized hunting areas designated by the Base Game Warden. All vehicles must display a DOD vehicle permit per applicable Base Orders. Units should never drive around a locked gate.

(2) Tracked Vehicles. Tracked vehicles are not authorized to travel within the interior of the GSRA unless maneuvering on a designated range or tank trail in training area scheduled by the unit in RFMSS. Support vehicles must use gravel graded maintained roads while operating in the GSRA. Off-road travel in training areas is not authorized. Traveling
to and from firing ranges will be accomplished using gravel graded roads only. Tracked vehicles are not authorized in the Camp Davis area unless approved by RCD. Tracked vehicle are not authorized on the Camp Davis North/South Runways/Taxiways. Tracked vehicles are not authorized to travel south on the outer tactical perimeter road past SR-10 Range entrance. Traveling along the outer tactical road along Highway 50 is not authorized. Tracked vehicles traveling from Verona Loop will use an underpass IAW tracked vehicle movement guide which will be provided by Range Control when required.

(3) Tactical Vehicles. Tactical vehicle movement is allowed, however, movement is restricted to gravel graded maintained roads. The GSRA is mostly wetland and is not suitable for off-road vehicles. Therefore, off-road vehicle use is not authorized. There are several bridges within the GSRA that have vehicle restrictions (weight and width). In all cases, unit representatives should conduct a survey/recon of routes and location prior to training. Speed limits must be enforced, supervised and proper road crossing procedures must be in place, enforced and supervised by the command at all times.

j. Additional GSRA Updates/Comments: Contact Range Control directly for more information.

1. CVOT GSRA is a collection of tank trails/gravel roads within the following training areas SP, SQ, SR, SU, SW, ST, and SV that must be scheduled in RFMSS as CVOT GSRA which includes six (6) standard used/controlled check points. Range Control will provide a map will be provided on request of the site.

2. Home Station Lane Training Complex (HSLT CIED Battle Course) with the GSRA Training Area ST just off Highway 50 by Wells Road. A separate SOP will be published on this site/training complex and will be made available on request. This site will have a staff from the Marine Corps Engineer School that will conduct training on request.
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1. General Information and Instructions. This information is provided to all using units to brief and rule out any misunderstandings or myths with rules and regulations pertaining to the MOUT facilities aboard Camp Lejeune. The following information is concerning basic information on check-in/check-out procedures, type of training that is authorized within the MOUT facilities and any special considerations for live fire.

   a. Reserving the Facility

(1) All using units must reserve the following facilities through the MOUT Staff via a Training Area Request (TAR) so it can be scheduled in RFMSS; MOUT Lejeune, Mobile MOUT, Urban Training Facilities (UTF-1 and UTF-2), Combat Town, Hawk Forward Operating Base (Hawk FOB), Farm House, MOUT Complex Sniper Tower, and the five (5) live fire buildings. Descriptions of the live fire MOUT Facilities; Combat Town, Mobile MOUT, and MOUT UTF operations can be found in Appendix A. The MOUT Staff also schedules TLZ Pigeon, TLZ Raven, and ALZ-28. Ensure the unit enters the actual training dates and times that the unit will be occupying the facility. Types of training that require a Special Range Request (SRR) are: all live fire (any weapon that will launch a projectile except pyrotechnics requires an SRR), any explosives and breaching charges/operations, and the use of CS which is not authorized in the building. MOUT Staff will enter unit request into RFMSS once any/all scheduling and coordination/conflict issues are resolved. If tracked vehicles are to be used as part of training in any of the MOUT Facilities, an approved grader request (approved by unit who owns graders) shall be submitted to MOUT Staff before any training with tracked vehicles can commence. Track Vehicles are no longer authorized in the MOUT Complex on the paved roads.

(2) The using unit must sign for the facilities at Range Control no earlier than 5 days in advance and no later than 1200 the day prior to training, or by 1200 on the last working day prior to the training day. The Range Officer in Charge (ROIC) or Range Safety Officer (RSO) must proceed to the MOUT and sign for the facility by 1400 the same day. They must have all required SRR information with them and signed by the Range Control Officer that day. If the using unit is going to bivouac, they must reserve the bivouac site via original TAR.
b. Checking In and Out of the Facilities

(1) Once the using unit has reserved, checked out, and picked up all required SRR information from Range Control, the unit must check-in with the MOUT Staff located in Building 20 at the MOUT Facility. The using unit will fill out a check-in/check-out sheet, and a walk-through of the facility will be conducted at that time. Any concerns dealing with training or any regulations not covered in this brief can be worked out with the MOUT Staff.

(2) Check out time of the facility must be coordinated with the MOUT Staff. Incorporate this time with the original request due to an oncoming unit being scheduled immediately following. Plan for facility inspections and gear turn in to be complete prior to 1500 due to the considerable amount of time this process can take.

c. Training Within the MOUT Facility. The following types of training do not require an SRR; using the facility with blank ammunition (all types), smoke, pyrotechnics, booby-trap simulators, illumination flares (M203 and pop-ups are not authorized inside buildings), and Simunitions.

d. Live Fire Training Within the MOUT Facilities. The following types of training must be approved via SRR; standard ball for 7.62mm Sniper, 5.56mm, 9mm, and .45 caliber ammunition, M40/MK11/MK12 sniper rifle for .22 caliber long rifle, and 7.62mm, 5.56mm frangible ammunition. SRR is required due to the unique training requirement of the specialized equipment that is needed such as approved bullet traps. Breaching doors by shotgun or breaching charges and any explosive charge being used to breach doors not to exceed .25 or 1/4 pound Net Explosive Weight (N.E.W.) are limited to assigned buildings. No trash shots are authorized at the MOUT Facility and the surrounding areas. The facility is not an approved Demolition/Explosive Range. Unit will be responsible for replacing wooden doors and windows.

e. HRST Operations Within the MOUT Facility. HRST training must be conducted by SOTG certified HRST Master; to include rappelling from any buildings at the MOUT and all fast roping. HRST training may only be done from approved buildings. The use of grappling hooks requires a Safety NCO in position at all anchor points. Rotary wing HRST are limited to TLZ Pigeon (Hotel rooftop); approaches to the TLZ should be from the NE to
prevent damage to the rooftops of buildings directly south of the TLZ.

f. Simunition Use in the MOUT Facility

(1) Using units are authorized to use simunitions/SESAMS within the MOUT Facilities. The MOUT Facility has all approved Simunitions/SESAMS gear and equipment. The gear can be checked out from the MOUT Staff prior to training. The staff requires a 3-5 day notice prior to checkout in order to prepare the gear.

(2) Prior to firing Simunitions/SESAMS you must:

(a) Contact MOUT Staff 3-5 days prior if gear is required.

(b) Reserve and sign for MOUT Facility.

(c) Have a command certified ROIC and RSO.

(d) Have proper PPE. All Marines must have helmet, flak jacket, gloves, sleeves rolled down, approved facemask, approved neck protector (towel around neck will not be authorized), and groin protector (athletic cup or a towel folded up is acceptable). No exceptions to this rule to include all support personnel, instructors, and observers.

(e) Ensure all personnel in the MOUT Facility participating in and observing the training wear all safety gear at all times.

(f) Ensure all personnel participating in Simunitions/SESAMS use have a safety brief.

(g) Have a gate guard posted at the main gate of the MOUT Facility.

(h) Have communications with MOUT Staff and BLACKBURN (34.70 MHz) at all times.

(i) Have a corpsman and government safety vehicle on sight.

(j) Ensure a 150-meter safety bubble is placed around the training area to ensure that no innocent bystanders are injured. All spectators and bystanders within 150 meters must have all required PPE on at all times.
(3) Simunitions/SESAMS safety

(a) No intentional firing at head or face (headshots) or below the waist.

(b) No shots will be taken at distances from 5 feet or closer.

(c) Simunition/SESAMS rounds travel at approximately 400 feet/second and can cause damage to soft, unprotected tissue including eyes, throat, genitals, and exposed skin. The unit ROIC/RSO has ultimate responsibility for the safe usage of this training system in its assigned 150 meter training location.

g. MOUT Facility Safety Rules

(1) At least one manhole cover must be removed while the sewer system is in use.

(2) Do not cross any safety chains within the buildings.

(3) All units must have a corpsman and government safety vehicle aboard at all times. If either is not present, training will stop.

(4) All roof hatches must be kept closed at all times.

(5) Report all accidents to MOUT Staff and Range Control (BLACKBURN on 34.70 MHz).

(6) All live fire CQB training must be supervised by a CQB/Breach RSO. RSO must be an E-6 or above.

(7) No smoke/pyrotechnics in the sewers/tunnels.

(8) Booby trap simulators will be placed below knee level.

h. Units Are NOT Authorized to Do Any of the Following Activities Within the MOUT Facility.

(1) Construct fighting positions in MOUT Facility.

(2) Construct additional mouse holes.
(3) Drive personally owned vehicles in the MOUT Facilities unless authorized by the MOUT Staff.

(4) Construct open fires.

(5) Bivouac anywhere except the approved bivouac area.

(6) Drive POVs past main entrance gate without MOUT Staff permission.

(7) Use field expedient waste sites (Use Port-a-Johns only).

(8) Removing rubble from waste areas and placing in other locations.

(9) Use false water wells, sewer trainer, or Port-a-Johns, water obstacles, drain pipes, and basements as a trash dump.

(10) Deface any buildings or structures within the MOUT Facilities.

(11) Use Buildings 19 or 20 as part of training.

(12) Remove or damage any window shutters, building or roof hatches, lights or light covers, signs, statues, or devices.

(13) Tamper with water wells (wells have non-potable water).

(14) Remove rocks from drainage ditches.

(15) Put trash in any area except trash bags and designated dumpsters.

(16) Expend ammunition, pyrotechnics, etc. in bivouac site.

(17) Barricade, block, or remove doors (metal doors cost are over $500 each). Coordinate with MOUT Staff prior to breaching doors.

(18) When inside the containers/buildings or tunnels, the use of HC smoke, all other type/color smoke, CS, white phosphorous (WP), incendiaries, pyrotechnics, trip flares and
arty simulators is prohibited. 40mm M203 TP, 40mm Smoke, 40mm CS, 40mm Star Clusters, 40mm Star Parachutes and 40mm Illumination are not authorized inside the containers/buildings. Do not use smoke, pyrotechnics, or illumination against the compound walls. When tunnels are in use the vent fans must be turned on.

(19) Conduct training in the holding ponds.

i. **Equipment and Training Available to Using Units**

(1) All members of the MOUT Staff are certified Basic Urban Skills Training (BUST) Instructors by the Marine Corps Warfighting Lab. All of the MOUT Staff members possess an 0369 MOS. The MOUT Staff is available to any using unit for instruction, critiques, and aggressors upon request.

(2) The following gear is available to any using unit upon request.

(a) Aggressor uniforms

(b) Simunition equipment

(c) Flip charts

(d) Classroom use (on request)

(e) Knee/elbow pads

(f) Blue body grenades

(g) Ladders

(h) Cable ladders

(i) Assault packs

(j) Battering ram

(k) AT-4s and RPG

(l) Rubber rifles; AK-47 and M16

2. **Misconceptions of the MOUT Facility**
a. Using units cannot use smoke in the MOUT. Using units are allowed to use smoke in approved areas of the MOUT and smoke does not require an ammunition can.

b. Check-in/check-out procedures are difficult. The check-in/check-out procedures are not any different from all live fire ranges. The MOUT Facility will be inspected prior to checking out. Units who use tracked vehicles will not be able to checkout until grader work is completed to the satisfaction of the MOUT Staff.

c. Units are not allowed to spend the night in the MOUT. Using units are authorized and encouraged to train at night in the MOUT. Units cannot "go administrative", stop training, and sleep in the buildings. They must use the bivouac site for sleeping.

3. Summary and Diagrams

a. Many units have misconceptions of the MOUT. If a unit wants to do realistic training and feels the regulations interfere with this, the MOUT Staff can work through 99.9% of all issues they may have. The MOUT Facility is designed to support units training for combat.

b. The MOUT Staff is available to all using units to answer any questions concerning the MOUT Facility. Phone number is 451-2364. Any concerns, questions, or comments with the MOUT facility should be addressed prior to unit training in order to meet the unit’s training requirements. The most common error with using units is not having an SRR submitted to Range Control in a timely manner. The MOUT Staff is committed to support training, however, the unit must also do its part in requesting the use of the facility. Additional buildings and container buildings are being constructed and this list will be updated as required. Tabs (A) and (B) are provided as checklists.

<table>
<thead>
<tr>
<th>Bldg Num</th>
<th>Description</th>
<th>Bldg Num</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hotel</td>
<td>17</td>
<td>Bank</td>
</tr>
<tr>
<td>2</td>
<td>City Hall</td>
<td>18</td>
<td>Gas Station</td>
</tr>
<tr>
<td>3</td>
<td>Apartment</td>
<td>19</td>
<td>Warehouse (Off Limits)</td>
</tr>
<tr>
<td>4</td>
<td>Apartment</td>
<td>20</td>
<td>MOUT HQ (Off Limits)</td>
</tr>
<tr>
<td>5</td>
<td>U. S. Embassy</td>
<td>21</td>
<td>Residence</td>
</tr>
<tr>
<td>6</td>
<td>Office</td>
<td>22</td>
<td>Residence</td>
</tr>
<tr>
<td>7</td>
<td>Church</td>
<td>23</td>
<td>Residence</td>
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<td>-----------------</td>
</tr>
<tr>
<td>9</td>
<td>Apartment</td>
<td>25</td>
<td>Residence</td>
</tr>
<tr>
<td>10</td>
<td>Business/Mall</td>
<td>26</td>
<td>Residence</td>
</tr>
<tr>
<td>11</td>
<td>Apartment</td>
<td>27</td>
<td>Residence</td>
</tr>
<tr>
<td>12</td>
<td>Town House</td>
<td>28</td>
<td>Residence</td>
</tr>
<tr>
<td>13</td>
<td>Town House</td>
<td>29</td>
<td>Rubbled Bldg</td>
</tr>
<tr>
<td>14</td>
<td>Town House</td>
<td>30</td>
<td>Rubbled Bldg</td>
</tr>
<tr>
<td>15</td>
<td>School</td>
<td>31</td>
<td>Gas Station</td>
</tr>
<tr>
<td>16</td>
<td>School Gym</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure H-1.--MOUT Building Numbers and Description**
MOUT COLLECTIVE TRAINING FACILITY
CHECK IN
CHECK OUT

Unit__________________________________Phone ___________________
ROIC________________________________________________________
RSO________________________________________________________

Training dates__________Training time,
Start_______End_______

Number of personnel being trained_____________________________________

Classroom Requested, Yes / No,
Date_________Time_________________

Rotary Wing Assets Being Used, Yes / No,
Date_________Time_________________

MOUT Check in inspection results:

MOUT Check out inspection results:

I,__________________________________, have read and understand the
MOUT SOP and have received a safety brief from the MOUT Staff.
I am satisfied with the check in inspection results and assume
responsibility for the MOUT Facility.

Signature___________________________________Date________________

MOUT Staff signature________________________Date________________

Tab (A)
MOUT COLLECTIVE TRAINING FACILITY
COMPANY GUNNERY SERGEANT NOTES

[ ] All trash will be placed in the dumpsters located next to Building 20, MOUT Staff office. The larger dumpsters labeled wood/metal are for MOUT Staff use to dispose of building materials and are not for using units. It is unauthorized to place ammunition cans, links, and brass in the dumpsters. The using unit will be responsible for the disposal of ammunition cans, links, and brass. The facility has two dumpsters down range that are secured. These are training aids and are not to be used for trash.

[ ] Port-a-Johns and head facility are to be used by all personnel. No urinating or defecating in the facility except in the Port-a-Johns and head facility. The using unit will provide toilet paper. The using unit will remove all trash that is placed in the Port-a-Johns. Five Port-a-Johns are located behind Building 20 and two next to Building 8. Contractors clean the Port-a-Johns on Tuesday and Thursday. Using unit can request the head facility from the MOUT Staff. Once signed for, the head is the responsibility of the using unit and becomes part of the clearing of the facility. Very often MRE trash is put in toilets which causes them to back up. The unit will not receive a viper card from the MOUT Staff until the head facility passes inspection.

[ ] The administration building is off limits to training. The classroom is available upon request of the using unit. A working party will clean the classroom each day that it is used. Units will use the bay door located on the east side of the building to enter and exit the classroom. A unit telephone is located outside of the building for use. The MOUT Staff will not answer this phone and deliver messages to the units. The office is for authorized personnel only.

[ ] Building 19, MOUT Facility Warehouse, is located northeast of the facility and is off limits to all training.

[ ] Training aids located in the facility, (cars, signs, gas station and so on) are to enhance training. Do not cause further damage to these items. Units will be held accountable for this type of conduct.

[ ] If a using unit is requesting gear, a SNCO or higher will sign for it.
This facility has one white water bull for the MOUT Staff. Units will bring their own water bulls. No bathing or shaving at the water bull, use the head facility. The facility does not have running water or a head inside of Building 20. There are ten watering points located in the facility that are non-potable water. Do not drink this water under any circumstances.

If a unit is running 24-hour operations in the facility a radio must be set up to monitor Range Control (BLACKBURN), 34.70 MHz, for safety only. Do not call in HOT or radio checks every 30 minutes unless you are shooting live ball ammunition. MOUT Staff will control all other training at the facility.

If a unit is using concertina wire in conjunction with training, the unit will recover all wire at the end of the operation. No wire will be left out under any circumstances.

The MOUT Facility has limited cleaning gear such as brooms and shovels for end of operation clean up that can be checked out by the using unit. This equipment will be signed for and returned when finished. Units are encouraged to bring their own cleaning gear to speed up the clean up.

The using unit must bring their own trash bags and head cleaners.

No POVs in the MOUT Facility unless approved by the MOUT Staff and issued a POV pass.

Using units are not authorized to go administrative (stop training) and sleep in the MOUT Facility buildings or containers.

A government safety vehicle, driver, A-driver, and corpsman will be on hand at all times or training will stop.

No smoke will be deployed on roofs, in the attics, in the sewers/tunnels, or any confined space. If smoke is used in these areas training will stop.

Building 20, MOUT Facility Administrative Building is off limits to training to include the immediate surrounding area. If the using unit is utilizing the classroom, all personnel will enter and exit through the bay door located on the east side of Tab (B)
the building. Personnel will not cut through the office or work area.

[ ] All furniture that is moved inside the buildings or placed outside of any buildings must be put back at the end of the operation.

[ ] All simunition/SESAMS uppers must be cleaned each day of use, failure to do so will cause the weapon to malfunction. All that is needed is a patch with oil punched through the bore.
APPENDIX I

OBSERVATION POSTS

Observation Posts (OPs) are designated and identified as listed below and must be requested in the same manner as other training facilities/ranges. Using units will maintain communication with Blackburn at all times on 34.70 MHz. Using units will report all maintenance problems with OPs to Range Control at 451-5803. Using units will police up the OPs and surrounding area. Other training may be conducted with some OPs through a Special Range Request by identifying coordinates, stating intended purpose, and time period.

<table>
<thead>
<tr>
<th>OP</th>
<th>COORDINATES</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>18S TD 91553747</td>
<td>Lucky’s Mound, G-10 Impact Area, Lasers Authorized</td>
</tr>
<tr>
<td>3</td>
<td>18S TD 92773704</td>
<td>G-10 Impact Area, Lasers Authorized</td>
</tr>
<tr>
<td>5</td>
<td>18S TD 89803440</td>
<td>Poggemeyer’s Peak, Lasers Authorized, Range Control Radar System</td>
</tr>
<tr>
<td>6</td>
<td>18S TD 90023225</td>
<td>G-10, Fire Tower</td>
</tr>
<tr>
<td>8</td>
<td>18S TD 63983056</td>
<td>SN Area GSRA 125 Ft</td>
</tr>
<tr>
<td>9</td>
<td>18S TD 72273673</td>
<td>SD Area GSRA 120 Ft SR-7 Range</td>
</tr>
<tr>
<td>10</td>
<td>18S TD 63243001</td>
<td>SG Area GSRA 125 Ft</td>
</tr>
<tr>
<td>11</td>
<td>18S TD 64872567</td>
<td>ST Area GSRA 125 Ft</td>
</tr>
<tr>
<td>F-5</td>
<td>18S TD 90954289</td>
<td>F-5 Live Fire Range, Control Tower</td>
</tr>
<tr>
<td>L-5</td>
<td>18S TD 73563115</td>
<td>L-5 Live Fire Range, Control Tower</td>
</tr>
<tr>
<td>Bear Tower</td>
<td>18S TD 97403420</td>
<td>N-1/BT-3, AIWW</td>
</tr>
<tr>
<td>North Onslow</td>
<td>18S TD 93072880</td>
<td>N-1/BT-3, AIWW</td>
</tr>
<tr>
<td>Hathcock Range</td>
<td>18S TD 76303080</td>
<td>Firing Tower/Control Tower Rifle Range Sniper Range</td>
</tr>
</tbody>
</table>

Note 1: A new communications tower, with no observation platform, is planned for construction further inland near the old South Tower location.
Note 2: The route to OP-11 is within the Home Station Lane Training Complex (CIED Battle Course) and must be coordinated with Range Control and the staff (MCES) of training complex before entering/using.

Note 3: A new observation tower is planned for construction just off Highway 172 by the CBC G-6 Range for the G-10 Impact Area in the future.

Note 4: A new tower/OP is planned to be built on OP-2 in the future.

Note 5: New metal range tower are also located at K-501, K-503, K-504, K-510, F-6 and can only be used if that range is scheduled in RFMSS.

Note 6: A new tower has been built in the MOUT Complex.
APPENDIX J

SPECIAL RANGE REQUEST (SRR) FORMAT

1. Purpose of a Special Range Requests. A SRR is required whenever the training unit desires to use a training area, training facility, or live fire range for purposes other than what is identified in this SOP. As such, the submission of a SRR should be related to a truly unique training requirement or training standard. Approval and execution of a SRR requires manual manipulation of the RFMSS, which preempts the software’s ability to deconflict routine safety issues/concerns, and could require other training areas and live fire ranges to be in a cold status or deconflicted by the unit and Range Control.

2. Examples Requiring a Special Range Request

   a. Use of ALZs and designated TLZs (TLZ Phoenix, Camp Davis Airfield, Oak Grove Airfield, and TLZ Pheasant (MAG 29)) require approval (written/e-mail) from a cognizant authority of that respective unit with confirmation notification via e-mail forwarded to Range Control for entry into RFMSS.

   b. Using live fire and maneuver training on static live-fire ranges or as per Appendix A. (Example: fire and maneuver on F-18, CBC G-6, Mobile MOUT Live Fire, or MAC-3).

   c. Firing large caliber weapons (40mm and above) between the hours of 2359 to 0600. Firing beyond established quiet hours on all Sundays between 2359 to 1200 for all weapon systems. (Small arms are authorized to fire past 2359 depending on location/range and day).

   d. Use of the MOUT Complexes/Facilities/ranges beyond prescribed contractor support times.

   e. Employing a weapon system/ammunition other than those identified in this SOP for a specific range which would be based on the SDZ. Will the requested weapon system and ammunition SDZ fit within the SDZ for that range? Can the SDZ be safely mitigated?

   f. Requesting to use improvised demolitions or conducting night demolitions training.

3. SRR Submission and Format
a. Prior to submitting the SRR, the unit must schedule the training area, training facility, live fire range, or Tactical Landing Zone/Gun Position/Mortar Position via RFMSS. This precludes Range Control from reviewing an SRR that cannot be approved because the training area, training facility, or live fire range has not been scheduled in RFMSS and another unit has it scheduled.

b. The SRR with reviewed and signed Operational Risk Management (ORM) matrix/worksheet must be signed on all pages and submitted to the Commanding Officer, MCB Camp Lejeune, NC. (attn: Range Control Officer). Hand delivery to Range Control is the preferred manner. LIVE FIRE SRRs MUST HAVE BATTALION LEVEL OPERATIONS SECTION ENDORSEMENT WITH SIGNED AND REVIEWED ORM WORKSHEET AND SHOULD BE RECEIVED AT RANGE CONTROL AT LEAST 10 WORKING DAYS PRIOR TO THE FIRST DAY OF INTENDED TRAINING. This lead-time provides the Range Control Safety Specialist adequate time to view the request and refine any safety parameters as required. Other time constraints associated with training on Camp Lejeune include the closure of the Atlantic Intracoastal Waterway (45 working days notice to obtain air sweep support) or activation of the R5306D/E and R5303/R5304 (GSRA air space) (1 & 2 days notice to obtain air space must also be factored into the timeline).

c. Use the following sequence of paragraphs to ensure all required information is submitted:

(1) Paragraph 1. State the standard purpose for the range, training facility, or training area and nature of the SRR usage requested. State the range/training/area facility has been scheduled in RFMSS.

(a) Example. TLZ Falcon: TLZs are used for heliborne operations. 2d Tank Bn requests to conduct tank maneuver training and command post operations. TLZ Falcon is scheduled for 12–15 Dec 20XX in RFMSS.

(b) Example. F-18 is a static firing range. 1st Bn, 8th Mar requests to conduct live fire and maneuver training. F-18 is scheduled for 12–13 Jan 20XX in RFMSS.

(2) Paragraph 2. State the weapons/weapons system and ammunition to be employed. List all ammunition by DODIC.

(3) Paragraph 3. Describe the scheme of maneuver (SOM) to be employed. Provide a detailed narrative that sequentially
lays out the phases of the training to be conducted, including the planned timeline (day/night) for the scheduled events.

(4) Paragraph 4. Provide an ORM matrix. Identify the increased risk that may be incurred and the steps to be taken that will mitigate the risks. (Example of mitigation: Assigning an increased number of PSOs/Assistant RSOs during live-fire maneuver exercises). The ORM matrix must be signed and reviewed by the command conducting the high risk event. The ORM worksheet can be found in Appendix D.

(5) Paragraph 5. Identify the Surface Danger Zones (SDZs). This requirement may be waived if all live fire and effects from live fire are within the approved SDZ for that range/facility.

(a) Identify the SDZ for each weapon system/ammunition being used.

1. Include a clear transparency on a 1:50,000 scale for SDZ or use the RTAM web page: https://rtam.tecom.usmc.mil/AccessRequestWeb/default.aspx?ReturnUrl=%2frm%2f.

2. Include the following information for SDZ.
   a. Map designation
   b. Originator’s name
   c. Originator’s rank/billet
   d. Weapons/Weapon System type
   e. Ammunition type by DODIC
   f. Distance
   g. List of appropriate grids
   h. Listing of appropriate azimuths (in degrees)
   i. Primary direction of fire (in degrees)
   j. SDZ information
(b) Example. SDZ for the M240B, M16A2/M4, and MK-153 SMAW are provided as enclosures (1), (2), and (3) (of the SRR).

1. CLNC 1:50,000
2. 1stLt Marine, I. M. /Unit
3. 1stLt/Plat Cmdr/phone number
4. M249 Weapon System
5. A064 DODIC
6. Distance X
7. (6 digit): firing point 735315
8. Right lateral limit: 65 degrees magnetic; left lateral limit: 098 degrees magnetic
9. PDF 085 degrees MAG/GRID
10. Area(s) (a, h, i, etc) as appropriate

4. Review of SRR

SRRs should be reviewed and endorsed by the appropriate units (Battalion, Regiment, MEU) S-3 Operations Section. SRRs submitted by non-infantry unit, should be reviewed for correctness and accuracy by a Small Arms Weapons Instructor Course (SAWIC) Instructor or an Inter-Service Resident Range Safety Course graduate (Intermediate level, old US Army Training and Doctrinal Command (TRADOC) Level II course). Live fire SRR SDZs should be reviewed by a Marine Gunner/S-3/Operations Section of the using unit for accuracy and correctness (infantry units only). This ensures a battalion/squadron level unit has reviewed and approved the training requirements.

5. Assistance

MCB Range Control can provide assistance in the conceptual development of the SRR and in some cases provide previously approved SRRs of a similar nature. However, due to the large number of SRRs submitted, Range Control cannot be expected to create the required SDZs or do the required risk assessment (ORM worksheet).
APPENDIX K

TRAINING AREAS EXTERNAL TO CAMP LEJEUNE

1. The Commanding Officer, MCB Camp Lejeune, has the delegated authority to execute an agreement with the U. S. Forest Service when other training areas are required.

2. Requests must be submitted by letter via the chain of command to the Commanding Officer, MCB Camp Lejeune (S-3) at least 45 days prior to commencement of training.

3. The following information is required:
   a. Unit requesting training.
   b. Date of request.
   c. Date and description of training.
   d. Attached map, dated and referenced to specific request. Indicate boundary of area requested and special features such as drop zones, command post, training areas, bivouac areas, etc.
   e. Number of troops; number and size of vehicles/equipment.
   f. Sanitation facilities provided.
   g. Field Liaison Contact
      (1) Unit POC
      (2) Grade and name
      (3) Telephone number
   h. MCB Liaison Contact
      (1) Unit POC
      (2) Grade and name
      (3) Telephone Number
   i. Unit POC for billing (Title and Telephone Number)
   j. Inter-Service Support Agreement (ISSA) number.

K-1
4. The using unit commander will meet with the Forest Supervisor's designated liaison officer at the site of planned occupancy one week prior to the commencement of the exercise. The unit commander will be prepared to post signs around the immediate exercise area to caution the public that military vehicles will be using the roads, training in assigned areas.

5. All special instructions received from the Forest Liaison Officer and range regulations of this Manual will apply to training in National Forests.
APPENDIX L

ELECTRONIC WARFARE/DEFENSIVE MEASURE

1. General. The Mid-Atlantic Electronic Warfare Range (MAEWR) has expanded to include Camp Lejeune. The purpose of the MAEWR is to provide realistic Electronic Warfare (EW) and Defensive Measures (DM) training to combat aircrews. Primary reference is the In-flight User’s Guide which describes all the systems and equipment available for mission support. Additional information can be obtained at the following MCAS Cherry Point Range Management Department “Big Rock” website:


Then select the “MAEWR” tab for a copy of the In-flight Guide and Scenario Brief Sheet which is used for detailing mission support specifics.

2. Background

   a. The MAEWR covers portions of Beaufort, Carteret, Craven, Hyde, Pamlico, and Onslow Counties of North Carolina. During the 1990’s, user-generated requirements were identified. MCAS New River squadrons requested “backyard” EW/DM training. The distance to MCOLF Atlantic did not optimize the training evolutions for the rotary wing community. As a result of these requirements COMNAVAIRLANT and CINCLANTFLT agreed to extend the MAEWR to include the Camp Lejeune area.

      (1) The user communities requested greater dispersion of EW threats associated with the MAEWR in the Camp Lejeune area and support of threat recognition/location/shell game capability in order to improve threat presentation for unit level training and MEU/JTFEX support.

      (2) All Electronic Warfare Requests should be entered into RFMSS by the requesting unit after coordination with Northrop Grumman Technical Services, MCAS Cherry Point at 252-466-2885/2823 or DSN 582-2885/2823. The using unit maintains the responsibility for scheduling all training areas aboard MCB Camp Lejeune, not Cherry Point EW Range Management.

3. Available Threats. The following threats are available at Camp Lejeune: SA-6, SA-8, SA-N-4, Bass Tilt, ZSU-23, Griffen 25, and the MTES-UV (the last 2 being SA-18 simulators).
### Mobile/Transportable EW Threat Systems Sites

<table>
<thead>
<tr>
<th>Site #</th>
<th>Site Name</th>
<th>Lat/Long</th>
<th>Grid</th>
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<tr>
<td>1</td>
<td>OP-2</td>
<td>34.39.45N 077 16.25W</td>
<td>18S TD 915375</td>
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<td>2</td>
<td>MOUT Facility</td>
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<td>18S TD 938380</td>
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<td>3</td>
<td>OP-1/CBC</td>
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<td>18S TD 941339</td>
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<td>4</td>
<td>TLZ Hawk</td>
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<td>5</td>
<td>OP-5</td>
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<td>18S TD 898345</td>
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<td>6</td>
<td>TLZ Falcon/Onslow Beach Road</td>
<td>34 34.86N 077 16.70W</td>
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<td>7</td>
<td>Mock Up Road</td>
<td>34 34.14N 077 16.69W</td>
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<td>8</td>
<td>SOTG Site/Onslow Beach</td>
<td>34 33.70N 077 17.00W</td>
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<td>9</td>
<td>TLZ Albatross</td>
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<td>10</td>
<td>TLZ Bluebird</td>
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<td>11</td>
<td>Moore Road HA Training Area</td>
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<td>12</td>
<td>ALZ Kingfisher(GSRA)</td>
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<td>Davis Tram Road(GSRA)</td>
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<td>14</td>
<td>Bridge Road (GSRA)</td>
<td>34 33.19N 077 31.36W</td>
<td>18S TD 685264</td>
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</tbody>
</table>

4. **Threat Emitter Sites.** The selected sites were optimized based on the type of training that could be supported. Sites 1, 2, and 3, respectively, are for unit level training for MCAS new River based squadrons; MEUEX/JTFEX training and anti-ship missile training for the ARG. Sites 4-14 were primarily selected to provide unit level training capabilities.
5. Defensive Measures Training

   a. All combat aircrews are required to undergo this training prior to being certified for combat or deployment. In addition, they also are required to maintain proficiency in conducting defensive measures utilizing chaff and flares.

   b. Chaff training is authorized only in the G-10 Impact Area with a SRR approval.

   c. Flare training is authorized if properly scheduled in RFMSS and the flares stay within the boundary of G-10 Impact Area at all times. Flare use is never authorized in G-10 Impact Area during Fire Condition 5 or higher.

   d. Training units must monitor wind speeds and directions to minimize flare debris migration off-base.

6. Mock Ups

   a. Mock ups, including multi-spectral cues and inflatable armor vehicle targets, provide low-cost, light weight, environmentally-friendly targets for various range applications. Due to costs of these targets, live firing will not be directed at them. However, they may be used to simulate a defensive position or provide a threat presence to ground personnel engaged in reconnaissance operations. Primarily they will be used in conjunction with electronic warfare and defensive measures training. Some mockups are resident at MCOLF Atlantic. Contact the MAEWR Mission Coordinators with Northrop Grumman Technical Services, MCAS Cherry Point at 252-466-2885/2823 or DSN 582-2885/2823at to schedule the use and re-location of mock-ups to Camp Lejeune. Mockups that are not available can be procured through the Navy.

   b. Multi-spectral cues include:

      (1) Visual 3-D representation (full scale).

      (2) Radar signature (representative radar cross section (RCS) with a copper base paint application.

      (3) Paint schemes: Solid (olive drab or desert sand) or camouflage (forest or desert).

      (4) Skid or trailer configurations for ease of movement.
c. Inflatable Armored Vehicle Targets include:

(1) Radar signature (representative radar cross section (RCS) with a copper base paint application.

(2) Camouflage paint: forest or desert

(3) Infra-red tape

7. Scheduling EW/DM Training

a. Using units are responsible for scheduling EW/DM training using the Range Facility Management Scheduling System (RFMSS) after making direct liaison with the Mission Coordinators at the MAEWR, Cherry Point N.C. Telephone DSN 582-2823 or DSN 582-2885.

b. Units are required to schedule the airspace and training areas needed in RFMSS. This will ensure no live fire is being conducted in the ground space.

c. At the discretion of the Range Control Officer, the ground space may be scheduled on a co-user basis depending on the type of EW/DM training being conducted.

d. Training events that may cause the closure of the Atlantic Intracoastal Waterway, or the N-1/BT-3 impact area must be scheduled at least 30 days in advance.

e. Upon completion of training, the using unit/aircraft will report to BLACKBURN the type of aircraft that received EW/DM training and the number of crew members that were aboard.

f. All Electronic Warfare Requests will be submitted via a Special Range Request to the Range Control Officer ten (10) working days before the scheduled training event.

8. Use of Pyrotechnics In Support of Aviation DM Training

a. The use of the GTR-18 (Smokey SAM) pyrotechnic simulator has been authorized for use aboard Camp Lejeune during the conduct of defensive measures training for combat aircrews. The GTR-18 (Smokey SAM) provides a visual cue to combat aircrews undergoing defensive measures training. Requests to use the GTR-18 (Smokey SAM) will be included in the special range request submitted to the Range Control Officer. At no time will
the GTR-18 (Smokey SAM) be utilized aboard Camp Lejeune without the express approval of the Range Control Officer.

(1) **Responsibility.** When conducting training with the GTR-18 (Smokey SAM) it shall be the responsibility of each commanding officer and the Branch Manager (SE-55) Naval Surface Warfare Center, Corona to ensure that only qualified and certified personnel operate the GTR-18 (Smokey SAM). The following safety requirements will be adhered to at all times. No deviations are authorized without the express approval of the Base Range Control Officer or Base Range Safety Officer.

(2) **Personnel Requirements.** A minimum of two and a maximum of four certified and qualified GTR-18 (Smokey SAM) operators for each GTR-18 (Smokey SAM) launch site.

(3) **Safety Requirements**

   (a) Smoking and flame producing devices are prohibited at the GTR-18 (Smokey SAM) launch site and within a 50-foot perimeter of the launch site.

   (b) Two 10-pound A/BC fire extinguishers will be at each GTR-18 (Smokey SAM) launch site.

   (c) Each operator will wear helmets, flak jacket, gloves, and safety glasses or face shields while at the GTR-18 (Smokey SAM) launch site.

   (d) Two-way radios to communicate with BLACKBURN.

   (e) One hospital corpsman at each launch site.

b. **Operating Procedures**

   (1) Prior to the launch of a GTR-18 (Smokey SAM) radio communications will be established with BLACKBURN. Once communications have been established, permission will be requested to go HOT. Smokey Sams will only be fired at aircraft that are briefed and part of an exercise or test.

   (2) The GTR-18 (Smokey SAM) launch tube(s), (LMU-23E (1-BAY) and LMU-24E (4-bay)), must not exceed 75 degrees from the deck for all launch evolutions.

   (3) The launcher rack will be set up at an appropriate site in terms of distance from towers, structures, and vehicles
(minimum 100 feet); adjust for quadrant azimuth and elevation angle in accordance with wind strength and direction. It is desired that the GTR-18 (Smokey SAM) have a trajectory elevation of 60-75 degrees and a trajectory azimuth away from the launch site (including wind effect of both).

(4) The GTR-18 (Smokey SAM) will be launched in such a manner as to obtain the best visual effect while minimizing foreign object damage to aircraft and personnel.

(5) The GTR-18 (Smokey SAM) will not be launched directly at an aircraft, vehicle, structure (permanent or temporary), or personnel. The flight path of a GTR-18 must be offset a minimum of 1,000 feet from any participating aircraft’s flight path.

(6) Once training is complete, BLACKBURN will be contacted via radio and permission to go cold will be requested. Once cold, the total number of rounds expended will be reported to BLACKBURN.

c. Emergency Procedures

(1) Should property damage or personnel injury occur, or serious safety hazards be identified, all GTR-18 (Smokey SAM) simulator operations will be halted and BLACKBURN notified immediately with the reason for halting training reported and permission to go COLD requested.

(2) Training will not resume until corrective action has been implemented and reported to BLACKBURN and permission to go HOT requested.

(3) In the event of a fire/accident, immediately report this information to BLACKBURN, fight with on-site extinguishers and try to contain the fire at the site.

(4) Evacuate injured and non-essential personnel to a minimum of 500 feet.

(5) If a GTR-18 rocket hang fire occurs, notify BLACKBURN and request Base EOD support.

(6) Unserviceable igniter rods for GTR-18 rockets will be replaced in their respective storage containers for later disposal by Base EOD.
d. Transportation and Temporary Storage. All vehicles, government owned or government furnished, transporting the GTR-18 (Smokey SAM) will be properly placarded with 1.3G explosive signs on all four sides of the vehicle and readily visible to traffic. Each vehicle will be inspected for road-worthiness prior to loading. Two 10-pound B/C fire extinguishers must be on board; one inside the cab and one mounted on the bed. Both fire extinguishers should be stored for easy access in the event of an emergency. The GTR-18 will not be transported in a closed vehicle unless separated from the passenger compartment by a permanent dividing wall. Passengers are prohibited from riding in the open bed of any vehicle transporting munitions.

(1) Drivers Licensing Requirements for Military Personnel. Military personnel will attend the explosive drivers course and have a valid government motor vehicle operators permit with an explosives endorsement.

(2) Drivers Licensing Requirements for Civilian Employees. For off base transportation of the GTR-18, civilian employees will possess a valid commercial drivers license with a hazardous material endorsement. For on base, they will attend explosives driver refresher training or attend the explosive drivers course and have a valid government motor vehicle operators permit.

(3) Government Contract Employees. For off base and on base transportation of the GTR-18 (Smokey SAM), government contract employees will possess a valid commercial drivers license with a hazardous materials endorsement.
APPENDIX M

ACRONYMS/DEFINITIONS

1. Acronyms

AAV    Assault Amphibian Vehicle
AAAV   Advance Assault Amphibian Vehicle
AAW    Anti-Air Warfare
ABV    Assault Breacher Vehicle
AC    Active Component
A/C    Aircraft
ACE    Aviation Combat Element
ACF    Air Contingency Forces
ACS    Atlantic Coastal Sector
AD    Air Defense
AIWW   Atlantic Intracoastal Waterway
ABN    Airborne
AESO   Ammunition Explosives Safety Officer
AFECC  Atlantic Fleet Exercise Coordination Center
AHSS   Automated Heat Stress System
ALO    Air Liaison Officer
ALSO   Administrative Laser Safety Officer
ALZ    Administrative Landing Zone
ANGLICO Air/Naval Gunfire Liaison Company
AOA    Amphibious Objective Area
AOI    Area of Interest
AOR    Area of Responsibility
ARG    Amphibious Ready Group
ARGEX  Amphibious Ready Group Exercise
ARTY   Artillery
ASE    Air Support Element
ASP    Ammunition Supply Point
AT    Antitank
AT    Anti-Terrorism
ATC    Air Traffic Control
ATF    Amphibious Task Force
ATFP   Anti-Terrorism Force Protection
ATGM   Anti-Tank Guided Missile
BDA    Battle Damage Assessment
BIP    Blow In Place
BRCO   Base Range Control Officer
BTRY   Battery
C2    Command and Control
CAS    Close Air Support
CASEVAC Casualty Evacuation (MEDEVAC)
CATFAE Catapult-Launched Fuel-Air Explosive
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>CAX</td>
<td>Combined Arms Exercise</td>
</tr>
<tr>
<td>CBC</td>
<td>Company Battle Course</td>
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<tr>
<td>CE</td>
<td>Command Element</td>
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<td>CEB</td>
<td>Combat Engineer Battalion</td>
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<td>CERTEX</td>
<td>Certification Exercise (MEU)</td>
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<td>CJTFEX</td>
<td>Combined Joint Task Force Exercise</td>
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<td>CMC</td>
<td>Commandant of the Marine Corps</td>
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<td>COB</td>
<td>Close of Business</td>
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<td>COMMARFOR</td>
<td>Commander, Marine Forces</td>
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<tr>
<td>COMMARCORSYSCOM</td>
<td>Commander, Marine Corps System Command</td>
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<tr>
<td>CP</td>
<td>Command Post</td>
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<td>CPX</td>
<td>Command Post Exercise</td>
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<td>CQB</td>
<td>Close Quarters Battle</td>
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<td>CRRC</td>
<td>Combat Rubber Reconnaissance Craft</td>
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<td>CSS</td>
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<td>Combat Service Support Detachments</td>
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<td>CTF (MOUT)</td>
<td>Collective Training Facility (MOUT)</td>
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<td>CVBG</td>
<td>Carrier Battle Group</td>
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<td>CWSS</td>
<td>Combat Water Safety Swimmer</td>
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<td>DASC</td>
<td>Direct Air Support Center (CHIEFTAIN)</td>
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<td>DA PAM</td>
<td>Department of Army Pamphlet</td>
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<td>DPC(E)</td>
<td>Deployment Processing Command (East)</td>
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<td>DU</td>
<td>Depleted Uranium</td>
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<td>Division-Wing Team</td>
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<td>EAF</td>
<td>Expeditionary Airfield/Expeditionary Air Facility</td>
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<td>ECM</td>
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<td>ECCM</td>
<td>Electronic Counter-Counter Measures</td>
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<td>EFV</td>
<td>Expeditionary Fighting Vehicle (EFV)</td>
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<td>EMP</td>
<td>Enhanced Marksmanship Program</td>
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<td>EOD</td>
<td>Explosive Ordnance Disposal</td>
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<td>ETA</td>
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<td>EW</td>
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<td>EWTGLANT</td>
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<td>FAA</td>
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<td>FAC</td>
<td>Forward Air Controller</td>
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<td>FAC(A)</td>
<td>Forward Air Controller Airborne</td>
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<tr>
<td>FACSFAC</td>
<td>Fleet Area Control and Surveillance Facility</td>
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FARP  Forward Arming and Refueling Point
FARRP  Forward Area Refuel/Rearm Point
FDC  Fire Direction Center
FEREIR  Field Exercise Request for Environmental Impact Review
FLEETEX  Fleet Exercise
FM  Field Manual
FMF  Fleet Marine Force
FMTU  Foreign Military Training Unit
FOB  Forward Operating Base
FP  Force Protection
FPC  Final Planning Conference
FSCC  Fire Support Coordination Center
FWCAS  Fixed Wing Close Air Support
FTX  Field Training Exercise
F/W  Fixed Wing
GCE  Ground Combat Element
GP  Gun Position
GPS/NAVSTAR  Global Positioning System/Navigation Satellite
GSRA  Greater Sandy Run Area
HA-HO  High Altitude - High Opening
HA-LO  High Altitude - Low Opening
HA-MO  High Altitude - Medium Opening
HAZMAT  Hazardous Materials
HE  High Explosive
HEAT  HMMWV Egress Assistance Trainer
HLZ  Helicopter Landing Zone
HMG  Heavy Machinegun
HQ  Headquarters
HRST  Helicopter Rope Suspension Training
ICM  Improved Conventional Munitions
IED  Improvised Explosive Device
IID  Improvised Incendiary Device
IP  Initial Point, Instructor Pilot
IPC  Initial Planning Conference
ITS  Individual Training Standards
JROD  Jet Remote Opening Device
JTAC  Joint Terminal Attack Controller
KD  Known Distance
LAR Bn  Light Armored Reconnaissance Battalion
LATAR  Land and Training Area Requirements
LAV  Light Armored Vehicle
LCAC  Landing Craft Air Cushioned
LIC  Low Intensity Conflict
LL  Land Line
LLL  Left Lateral Limit
LMG  Light Machinegun
LRSO  LASER Safety Range Officer
LSDZ  LASER Surface Danger Zone
MAET  Modular Amphibious Egress Trainer
MAC  MOUT Assault Course
MAGTF  Marine Air-Ground Task Force
MALs  Marine Aviation Logistics Squadron
MARSOC  Marine Corps Forces Special Operations Command
MBST  Marine Battle Skills Training (Common Skills)
MCES  Marine Corps Engineer School
MCITWS  Marine Corps Instructor Trainer Water Survival
MCIWS  Marine Corps Instructor of Water Survival
MCO  Marine Corps Order
MCRP  Marine Corps Reference Publication
MCWP  Marine Corps Warfighting Publication
MEB  Marine Expeditionary Brigade
MEDVAC  Medical Evacuation
MEF  Marine Expeditionary Force
METL  Mission Essential Task List
MEU  Marine Expeditionary Unit
MG  Machinegun
MHE  Material Handling Equipment
MIC  Mid-Intensity Conflict
MITS  Moving Infantry Targets
MCLIC  Mine Clearing Line Charge
MILES  Multiple Integrated Laser Engagement System
MLG  Marine Logistics Group
MMR  Military Munitions Rules
MOA  Memorandum of Agreement or Military Operational Airspace
MOOTW  Military Operations Other Than War
MOU  Memorandum of Understanding
MOUT  Military Operations in Urban Terrain
MP  Military Police or Mortar Position
MPF  Maritime Preposition Force
MPMG  Multi-Purpose Machinegun
MPS  Maritime Prepositioning Ship
MRE  Meal Ready to Eat
MSC  Major Subordinate Command
MSR  Main Supply Route
MTT  Mobile Training Team
NBC  Nuclear, Biological, and Chemical
NCO  Noncommissioned Officer
NFA  No Fire Area
NFZ  No Fire Zone
NGF  Naval Gunfire
NSFS  Naval Surface Fires Support
NLT  No Later Than
NLW  Non-Lethal Weapons
NM  Nautical Mile
NOAA  National Oceanographic and Atmospheric Administration
NOHD  Nominal Ocular Hazard Distance
NOTAM  Notice to Airman
NSN  National Stock Number
NSTAR  Non-Standard Training Area Request
NVG  Night Vision Goggle
OIC  Officer-in-Charge
OP  Observation Post
OPFOR  Opposing Forces
OPLANS  Operations Plans
ORM  Operational Risk Management
O&T  Operations and Training
OTH  Over-the-Horizon
PCP  Personnel Check Point
PLRS  Position Location and Reporting System
POI  Program of Instruction
POL  Petroleum, Oil, and Lubricants
POM  Program Objectives Memorandum
POW  Prisoner of War
POV  Privately Owned Vehicle
PSO  Position Safety Officer
RC  Reserve Components
RCA  Riot Control Agent
RCD  Range Control Division
RCO  Range Control Officer
RCW  Red-Cockaded Woodpecker
R/W  Rotary Wing Aircraft
RDD  Range Development Division
RCSS  Range Control Safety Specialist
REIR  Request for Environmental Review
RETS  Remote Engagement Target System
RFMSS  Range Facility Management Support System
RIO  Radio In/Out
RLL  Right Lateral Limit
ROIC  Range Officer In Charge
RP  Red-Phosphorus
RPV  Remotely Piloted Vehicle
RSO  Range Safety Officer
RWCAS  Rotary Wing Close Air Support
SACEX  Supporting Arms Capability Exercise
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<tr>
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<td>SATEX</td>
<td>Supporting Arms Training Exercise</td>
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<tr>
<td>SEAD</td>
<td>Suppression of Enemy Air Defense</td>
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<td>SDA</td>
<td>Secondary Danger Area</td>
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<td>SDZ</td>
<td>Surface Danger Zone</td>
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<td>Special Effects Small Arms Marking System</td>
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<td>UDP</td>
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WMD     Weapons of Mass Destruction
WP      White Phosphorus
WTBn    Weapons Training Battalion

2. Definitions

Administrative Area. An area assigned for administrative and logistical functions, such as housing, troop billets, offices, industrial areas, storage, and maintenance areas. Field training and live firing is not conducted in administrative areas.

Administrative Landing Zone (ALZ). A designated helicopter-landing zone, which provides major commands ready access to air transportation and medical evacuation. ALZs are designated by number.

Air Sentry. An individual designated by the officer in charge of firing to maintain surveillance of an assigned sector of airspace to warn of the approach of aircraft. In some cases, air sentries also observe navigable waters for the approach of vessels.

Approach and Retirement Route. A predestinated air traffic lane for helicopters, generally used in air or air/ground training exercises. These routes may be utilized by BLACKBURN, the DASC or a helicopter direction center to route helicopter traffic around potentially dangerous areas.

BLACKBURN. Radio call sign for Range Fire Desk on 34.70 FM, 233.8 UHF, and 119.5 VHF.

Blast Focus. The refraction patterns of shock waves through the earth's atmosphere.

CHIEFTAIN. The radio call sign for the DASC (when activated) for all aircraft (Radio 34.70 FM, 233.8 UHF, and 119.5 VHF).

Coastal Pilot. Regulations concerning federally controlled waterways from Cape Henry to Key West. Published by the U.S. Department of Commerce. It delegates to the Commanding Officer, MCB Camp Lejeune, enforcing agency power for waters in the "New River, N.C. and vicinity: Marine Corps Firing Ranges."

Common Impact Area. The impact area created when the surface danger zone of concurrently used ranges overlap.
Control Zone. An airspace of defined dimensions designated by appropriate authority, usually the FAA. The zone extends upward from the ground or water and includes one or more air zones, within which rules apply for the protection of air traffic.

Cook-Off. The detonation of any or all of the explosive components of a round chambered in a hot weapon, caused by the heat of the weapon.

Danger Area. A sea or water space in which hazards may exist to mariners. The New River and Atlantic Coast Sector areas are designated by Coast Pilot 4 as danger areas due to military training exercises conducted at Camp Lejeune.

De-armer (.50 CAL). A cartridge actuated tool unique to EOD, used principally for shearing, jamming purposes to defeat fuses or improvised explosive devices (IEDs) in a rapid manner. Uses either an electric or ball (minus the projectile) .50 caliber cartridge to fire either blast, steel shot, water or various slugs through a 12 inch barrel.

Demolitions. Explosive charges designed to add realism to training or to destroy material/unsafe ammunition.

Direct Air Support Center (DASC). A subordinate operational component of a tactical air control system designed for control and direction of close air support and other tactical air support operations, and normally collocated with fire-support coordination elements. Call sign "Chieftain."

Direct Fire Weapons. Weapons that deliver fire when the weapons are laid by sighting directly on the target using the weapons sighting equipment.

Disrupter. An explosive tool used from a robot or can be placed manually to defeat fuse/fuse components of an improvised explosive device (IED).

Drop Zone (DZ). A tactical landing zone in which personnel or cargo paradrops are authorized.

Dual Communications. Two means of communication, usually radio backed up by telephone, (either a MAG line or dial telephone). Required between a unit and "BLACKBURN" before any live fire training.
DUD. Any ammunition that, having been fired, placed, dropped or thrown, fails to function in the manner intended.

Emergency Disposal. The immediate disposal of hazardous munitions by detonation or burning at EOD Site #1, EOD Site #2, or the G-10/K-2 impact areas.

Exclusion Area. Those areas, by the very nature of the operation of hazards existing therein, i.e., the Ammunition Supply Point, the Field Ammunition Supply Dump when occupied, preclude their use for any type of troop/vehicle maneuver or tactical training. Training units and individuals will remain clear of these areas at all times. Access is limited to authorized personnel in the performance of official duties.

Field Training Facilities. Those areas designated for a specific type of training, normally not requiring the use of live ordnance. For example, dry net training facilities, the MOUT Collective Training Facility (CTF), and Combat Town are classified as field training facilities.

Fire and Maneuver Range. Ranges on which troop movement and live firing may be conducted simultaneously.

Firing Line. The area within which a single person fires aircraft, or vehicle-mounted weapon. It consists of a start-firing line, cease-firing/disarm line and left and right limits of fire.

Firing Line or Point. The location from which a weapon is fired at a target or impact area.

Flanking Fire. Live fire delivered against the flank of a target.

Flat Trajectory / High Velocity Weapons. Tank main guns, LAV main guns, EFV main gun, artillery when firing direct fire.

Food Plots. Food plots are cultivated sites within various maneuver/training areas. They are intended to assist in the preservation of natural wildlife. Accordingly, units engaged in field training exercises may enter, bivouac, and use a food plot, but will not cause any damage.

Forest Fire Danger Conditions. A restriction/condition placed on training exercises due to the possibility of forest fire. (Fire-Readiness Plan 1 to 8).
Forward Air Controller (FAC). An officer (aviator/pilot) member of the tactical air control party who, from a forward ground or airborne position, controls aircraft in close air support for ground troops.

Gun Position (GP). Pre-selected and surveyed positions from which artillery and mortars engage in high ordinate indirect firing exercises.

Hang-Fire. A delay in the functioning of ordnance. The duration of such delay is unpredictable and may extend from a fraction of a second to several hours.

Hazardous Area. Areas made dangerous to personnel by live firing, mines or dangerous contaminants. Specific authorization from Range Control must be obtained before entering such areas at Camp Lejeune.

High Ordinate Firing. Firing of projectiles above an altitude of 500 feet.

High Explosive Impact Area. Impact areas specifically designated for all types of ordnance, (dud-producing) such as, G-10, and K-2 high explosive impact areas. These areas are referred to as dedicated, or permanent impact areas. They must not be confused with the danger area forward of the live firing activity.

Impact Area. The area into which the fire of weapons is directed. It usually extends from the far boundary of the target line or area to the maximum range of the weapon and ammunition fired. It is bounded on the flanks by the right and left limits of fire established in the surface danger area diagram for each weapon.

Indirect Fire Weapons. Normally considered to be artillery and mortars.

Known Interference. Conditions affecting the safe conduct of live firing or training exercises.

Land Line (LL). A metallic line between two telephones or between telephones and a switchboard.

LASER Terms:
Area S: A 50-meter radius around the target from which all specular surfaces should be removed, covered, painted, or destroyed.

Area T: The area within an established laser surface danger zone measured from the laser device to “Area T” meters downrange where no object will be lased. Personnel should avoid direct exposure to unprotected skin up to “Area T” meters from the laser device.

Backstops: Opaque structures or terrain in the controlled area such as a hill, a dense tree line, or a windowless building that would completely obstruct any view beyond it and completely terminate a laser beam that may miss the target.

Buffer Zone: A safety margin on either side and above and below the approved target area, extending to a distance at which the beam is terminated by a backstop extending across the target zone, or when the Nominal Ocular Hazard Distance (NOHD) limit is reached. A vertical buffer zone covers the angular distances below the highest point on a backstop or above the non-lasing area. The laser horizontal buffer zone covers the angular distance to the left of the left most targets and the right of the right most targets.

Intrabeam Viewing: Looking directly at the source of the beam or reflected beam from within the beam.

LASER: The acronym LASER stands for Light Amplification by Stimulated Emission of Radiation. A device capable of producing a narrow beam of monochromatic light in which all the waves are in phases or are coherent.

Laser Range Safety Officer/Laser Range Safety Noncommissioned Officer (LRSO/LRSNCO): A designated officer, warrant officer or noncommissioned officer of the firing unit who is responsible for ensuring compliance with the MC Order on Lasers, Unit SOP and this SOP for laser operations and training.

LASER Range-Finder: A range-finder employing a laser device to emit a pulsed laser beam that is aimed at the target. The range is determined automatically by electronically measuring the length of time it takes for the light beam to travel from the laser to the target, be reflected from the target and return to the range-finder.
LASER Safety Eyewear: Protective eyewear designed specifically to permit the user to be exposed to either the direct or reflected laser beam from specific laser devices without eye injury.

LASER Surface Danger Zone (LSDZ): A V-shaped zone designed to contain the laser beam (while lasing) with buffer (safety zones on either side, and above and below the approved target area).

Nominal Ocular Hazard Distance (NOHD): The NOHD for direct intrabeam viewing is the minimum distance beyond which an unprotected person may stand in the beam and be exposed repeatedly without injury provided he or she does not look at the beam source with unfiltered magnifying optics.

Nominal Ocular Hazard Distance (NOHD)-Magnified (NOHD-MAG): The NOHD for intrabeam viewing through magnifying optics with an 80MM objective and 7 MM exit pupil.

Specular (mirror-like): A specular surface is one in which an individual can see his/her undistorted reflection. Examples of specular surfaces are; vehicle windows, vision blocks, searchlight cover glass, sheets of plastic, or mirrors and unpainted metal.

Live Fire Range. A range/ETA on which live fire exercises, including the use of some types of practice ammunition, may be conducted.

Magneto Line (MAG Line). A line from which field telephone equipment is operated from the field to a main switchboard in order to obtain dial capability.

Maneuver Area (MA). Training areas, designated alphabetically by double letters (AA, AB and CC) in which approved field training exercises using blank ammunition, certain pyrotechnics and limited demolitions may be conducted.

Misfire. A complete failure to fire which may be caused by a faulty firing mechanism or a defective element in the propellant charge.

Navigable Waters. Waters upon which navigation of vessels is possible, but not always permissible. Navigable waters in the Camp Lejeune complex are governed by Coast Pilot 4, which
delineates the circumstances and areas within which vessels may or may not navigate.

**NBC.** Nuclear, Biological, and Chemical.

**NBC Agents.** Devices, biological agents and chemicals, which may cause damage, incapacity, injury, sickness, and/or death.

**No Fire Zone (NFZ).** An area designated by the appropriate commander into which fires or effects are prohibited. Also may be called a No Fire Area (NFA).

**Notice to Airmen (NOTAM).** A notice containing information concerning the establishment, condition, or change in any aeronautical facility, service, procedures, or hazard, the timely knowledge of which is essential to personnel concerned with flight operations.

**Notice to Mariners.** A publication to mariners and vessels warning of conditions dangerous to navigation such as live firing or amphibious exercises.

**Observation Post (OP).** A point from which impacting projectiles may be observed.

**Overhead Fire.** The firing of projectiles over the heads of personnel or over areas in which the presence of personnel is suspected.

**Paradrop.** The controlled aerial delivery by parachute of personnel or equipment.

**Practice Range.** A range upon which only specified types of practice ammunition may be fired.

**Prohibited Area.** An area in which training is not authorized; i.e., the N-1/BT-3, G-10, and K-2 impact areas.

**Protected Area.** An area in which training normally is not authorized. Those areas placed off-limits for the protection of endangered animal and plant species, historical/archaeological sites, and those with environmental concerns, i.e., Red-cockaded Woodpecker habitat, Rough-leaved Loosestrife areas, and the beach sand dunes as described in Chapter 6 of this SOP.
Pyrotechnic. Non-injurious smoke or signals, flares (pop ups or hand held) or grenades. White phosphorous is not considered a pyrotechnic for the purpose of this SOP.

Quiet Hours. No artillery or mortar firing permitted during stated times.

Range. A training facility designated for live fire, practice firing of weapons, demolitions, or live fire and maneuver/movement exercises.

Range Control. The Base organization responsible for safely scheduling, coordinating, and controlling all ranges, training areas, air space and water space. Range Control maintains a staff (BLACKBURN) on communications watch during all live firing, paradrop, and fixed-wing/rotary-wing air exercises/operations.

Range Control Officer (RCO). The officer responsible for enforcing adherence to safety regulations, scheduling and assigning use of ground, air and sea space.

Range Control Fires Desk Operator. The government employee (GS, Civilian) assigned communications/fires desk tour during live firing, non-live fire training, paradrop, and rotary/fixed-wing exercises (call sign "BLACKBURN"). The direct representative of the MCB Range Control Officer.

Range Firing Warning and Airspace Utilization Order (Daily AMHS Message). Current listing of scheduled ranges, airspace, training/maneuver areas and additional notes.

Road Guard(s). An individual or individuals designated to maintain surveillance over an assigned locale to prohibit unauthorized entry into the surface danger area/hazard zone and to give the alarm in the event he detects such entry. Usually assigned in pairs by policy.

Range Officer in Charge of Firing (ROIC). Designated by the Commanding Officer of the training unit, the ROIC of firing assumes overall responsibility for all aspects of live fire, paradrop or air exercises.

Range Operator (RO). A contractor that provides a service on a specific range and its equipment.
Range Safety Officer (RSO). An officer or staff noncommissioned officer assigned by the ROIC to assist in enforcing all safety measures within the air/surface danger area.

Restricted Airspace. Hazardous airspace established by the Federal Aviation Administration. Permission must be granted to aircraft before traversing a restricted area during periods when the area is in use. Restricted areas are effective during various times and to various altitudes. Details as to boundaries, altitudes, time of use, and controlling agencies are published by the Federal Aviation Administration and may also be found on radio Facility Charts. Changes in a restricted area are published in Notices to Airmen (NOTAMs) and the "Airmen's Guide."

Restricted Area. A general definition applicable to areas in which controls are imposed over troop and vehicular movements due to the proximity of quarters, schools, recreational facilities, etc.

Rocket Wrench. An explosive actuated tool unique to EOD, which uses two M147 cartridges to remove hazardous fuses from projectiles, rockets and bombs by turning rapidly.

RSP. Render Safe Procedure for any ordnance or IED based on EOD 60 Series Publications or best-known avenue of attack to defeat an item devised by the Senior EOD Technician on site and recommendation to the On Scene Commander.

Special Electric Impulse .50 Caliber Cartridge. M174, .50 Caliber ball round, minus the projectile and set up to function electrically.

Surface Danger Zone (SDZ). An SDZ is generally composed of a firing line/area or gun position, an impact area, and a secondary danger area. An SDZ exists from the moment the projectile leaves the muzzle/launcher until impact. The SDZ will vary with each weapon. The impact area and associated secondary danger area are also considered as an SDZ. For further information on SDZs consult MCO 3570.1B/DA PAM 385-63.

Survey Control Point. A permanent or semi-permanent marker placed to denote a topographical reference point.

Tactical Landing Zone (TLZ). A predesignated/surveyed helicopter landing zone, usually named after a bird, which provides air and ground units a site for helicopter operations.
Temporary Interruption of the Atlantic Intracoastal Waterway (AIWW). Blocking traffic on the AIWW due to training exercises. A temporary interruption will not exceed one hour or must be in the broadcast notice to mariners for up to 4 hours at a time.

Toxic Agent. Poisonous agents that is capable of causing physiological injury.

Training Area (TA). An area designated alphabetically by letters within which authorized training/maneuver exercises using blank ammunition, certain pyrotechnics, and limited demolitions may be conducted.

Training Area Request (TAR). Request to use ranges, airspace, TLZs, ALZs, training/maneuver areas, adjacent waterways, etc. Submitted electronically or manually to Range Control.

Training Facility. A structure, range or area specifically designed for military training.

Unserviceable Ammunition. Ammunition beyond its life expectancy or which fails to respond as its design intended. It can include a single round or a complete ammunition lot.

Verona LOOP. Designated due to the proximity of the town of Verona. A complex of training facilities/training areas located west of New River.

Warning Area. Airspace similar to a restricted area, posing a potential hazard to flight or navigation. Penetration of a warning area during periods of activity may be extremely hazardous to the pilot, aircraft, and passengers. Warning areas are established to permit military maneuvers and firing in certain offshore areas as a necessary feature of combat training. Changes in warning areas are made in the same manner as changes to restricted areas.

Wet Bulb Globe Temperature Index (WBGTI). A rating of temperature and humidity as it affects personnel. Intensity of human exertion must be reduced as the WBGTI reaches specific levels.
APPENDIX N

LIST OF APPLICABLE REFERENCES

1. Below are other pertinent publications, manuals, and documents that will assist in the safe operation of all live fire ranges and training facilities located aboard MCB Camp Lejeune.

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FM 3-58.1 Camouflage
FM 3-34.310 Engineer Field Data
FM 3-34.400 General Engineering
FM 3-34.214 Explosives and Demolitions
FM 6-50 The Field Artillery Cannon Battery
FM 7-90 Tactical Employment of Mortars
FM 3-20.12 Tank Gunnery ( Abrams)
FM 3-20.21/MCWP 3-12.2 Heavy Brigade Combat Team (HBCT) Gunner with Change 1
FM 3-19.15 Civil Disturbance
FM 21-10 Field Hygiene and Sanitation
FM 4-25.11 First Aid
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FM 3-21.75 Combat Skills of the Soldier
FM 3-22.9 M16A1/M16A2 Rifle Marksmanship
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FM 3-22.23 Antipersonnel Mine, M18A1 and M18 (Claymore)
FM 3-23.25 Launcher and Cartridge, 84mm, AT-4
FM 3-23.35 Combat Training with Pistols and Revolvers
FM 3-06 Military Operations on Urbanized Terrain (MOUT)
FM 6-40/MCWP 3.16.4 Field Artillery Manual Cannon Gunnery
MCRP 3-01A Rifle Marksmanship
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FMFM 1-8 Ship to Shore Movement
FM 3-22.1 UAV Operations
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FMFRP 6-6-30 Observed Fires
MCRP 3-15.4 TOW Weapon System
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MCO 8400.6  Licensing Procedures for Ordnance Vehicles Operators
MCRP 3-0A  Unit Training Management Guide
MCRP 3-0B  How to Conduct Training
MCRP 3-01A  Rifle Marksmanship
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MCRP 3-15.2A  Mortars
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MCRP 3-16.8B  J-Fire Multi-service Procedures for the Joint Application of Fire Power
MCRP 3-31B  Amphibious Ship/Landing Craft Data Book
MCRP 40.3B  Radio Handbook
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MCWP 3-15.8  Tactical Techniques and Procedures For the Employment of Non-Lethal Wpns
MCWP 3-16.1  Marine Artillery Operations
MCWP 3-16.6  Supporting Arms Observer, Spotting And Control
MCWP 3-17  Engineer Operations
MCWP 3-21.1  Aviation Ground Support
MCWP 3-23  Assault Support
MCWP 3-25.5  Direct Air Support Center Handbook
MCWP 3-25.10 Low Altitude Air Defense Handbook
MCWP 3-35.3 Military Operations on Urban Terrain
MCWP 3-37 MAGTF NBC Defense Operation
MCWP 3-40.5 Electronic Warfare
MCWP 3-41.1 Fire Support in MAGTF Operations
MCWP 3-43.2 Mechanized Operations
MCWP 4-1 Logistics Operations
MCWP 4-11.6 Bulk Liquids Operation
MCWP 5-1 Marine Corps Planning Process
MIL-HDBK-828B Laser Range Safety
MIL-HDBK-1027/3B Range Facilities and Miscellaneous Training Facilities
NAVAIR 1345-2 SPIE Manual
NAVMC 11381 Expenditure Report
NAVMC 3500.87 Infantry Training and Readiness Manual
NAVSEA OP-5 Volume 1 Ammunition and Explosives Ashore Safety Regulation for Handling, Storing, Production, Renovation and Shipping
OPNAVINST 3770.2J Airspace Procedures and Planning Manual
OPNAVINST 5530.13B Department of the Navy Physical Security Instruction for Sensitive Conventional Arms, Ammunition, and Explosives (AA&E)
SECNAVINST 5100.14C Military Exempt Lasers
SPAWARINST 5100.12B Navy Laser Hazards Control Program
NAVSEA OP-5 Volume 1 Ammunition and Explosives Ashore Safety Regulation for Handling, Storing, Production, Renovation and Shipping
NAVSEA OP-5 Volume 1 Ammunition and Explosives Ashore Safety Regulation for Handling, Storing, Production, Renovation and Shipping
TB 9-1300-385 Munitions Restricted/Suspended (Jan 00)
TC 5-117 Combat Engineer Vehicle Operations
TC 25-1 Training Lands
TC 25-6 Force on Force Collective Training Using the Tactical Engagement Simulation Training System
TC 25-8 Training Ranges
TECOM SOUMs Training and Education Command Safety of Use Memorandums
TM 013750-13 Demolition Kit Breaching System (APOBS) DODIC MN79/MN84
TM 11906A-OR M32A1 Multi-Shot Grenade Launcher
TM 02498A-10/1 Machinegun, .50Cal, M2, HB
TM 05538C-10/1A Rifle 5.56mm, M16A2
TM 05539C-10/1 Sniper Rifle, 7.62mm, M40A1
TM 08594A-10/1B  LAV 25 Turret, 25mm
TM 08670B-10/1A  Machinegun, 7.62mm, M240G
TM 08671A-10/1A  Squad Automatic Weapon (M249SAW)
TM 08673A-10/1A  MK 153 (SMAW), 83mm
TM 09629A-10/1  SASR, M82A2/A82A3
TM 09922A-10/1  Mortar 81mm M252
TM 9-1010-223-10  60mm Mortar M224
TM 9-1010-221-10  40mm, M203 Grenade Launcher
TM 9-1315-886-12  Launcher and Cartridge 84mm AT-4
TM 9-1330-200-12  Operators and Organizational Maintenance Manual For Grenades
TM 9-1330-200-34  Direct Support and General Support Maintenance Manual for Grenades
TM 9-1300-206  Ammunition and Explosive Standards
TM 9-1370-207-10  Operators Manual for Pyrotechnic Simulators
TM-11-5855-312-10  PAS-13, Thermal Sight for M240G/M249
TM 43-0001-27 Army Ammunition Data Sheets Small Caliber Ammunition FSC 1305, 29 April 1994
TM 43-0001-28 Army Ammunition Data Sheets for Artillery Ammunition: Guns, Howitzers, Mortars, Recoilless Rifles, Grenade Launchers, and Artillery Fuzes (FSC 1310,1315,1320,1390)
TM 1005A-10/1A  Machinegun 40mm, KK19, MOD 3
TM 10012A-10/1  Carbine, 5.56 mm, M-4, M4A1
TM 10470A-12&P1A  PEQ-2A, Aiming Device
TM 10407C-or1-May 2010 M777A2 155mm Howitzer.
33 CFR 334  Navigation and Navigable Water Special Polices
33 CFR 440  New River and Vicinity MC Firing Ranges

Camp Lejeune Military Installation Map, V742S Edition 3-NGA WGS 84/NAD 83

Environmental Handbook for Trainers (June 2010)

Quick Look Environmental (Latest Version)

2. Most of the above publications, manuals, and documents can be found on the following web pages/sites:
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APPENDIX O

RANGE CONTROL PHONE NUMBERS

1. Range Control Headquarters

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SR-6 Classroom 449-5020
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SR-7 Tower 449-6098
SR-8 Tower 449-4786
SR-10 Tower 449-5902
SR-10 Classroom 449-5901
SR-12 HSTL Complex TBD

Note: Phone numbers are subject to change and addition ranges could be added. For additional information contact Range Control.