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MARINE CORPS INSTALLATIONS EAST-MARINE CORPS BASE
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MCIEAST-MCB CAMLEJO 3570.1B
G-3/5
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MARINE CORPS INSTALLATIONS EAST-MARINE CORPS BASE CAMP LEJEUNE ORDER 3570.1B

From: Commanding General
To: Distribution List

Subj: MARINE CORPS BASE, CAMP LEJEUNE RANGE CONTROL STANDING OPERATING PROCEDURES (SHORT TITLE: RANGE CONTROL SOP)

Ref: (a) MCO 3570.1C/DA PAM 385-63
(b) MCIEAST-MCB CAMLEJ 1700.6B
(c) SECNAVINST 5510.34B
(d) NDP-1
(e) MCO 5510.20B
(f) MCO 3500.27C
(g) MCO 5100.29C
(h) SECNAVINST 5100.10K
(i) NAVMC Directive 5100.8
(j) DOD 4160.21-M, Ch 3 "Defense Disposition Material Manual," Oct 2, 2019
(k) MCIEAST-MCB CAMLEJO 8020.1A
(l) MCO 8025.1E
(m) NAVMC 10155
(n) MCO 5104.1C
(o) Military Handbook 828C
(p) MCO 8020.10
(q) MCIEAST-MCB CAMLEJO 3440.6G
(r) ALMAR 010-01 of 12 May 08
(s) MCO P5090.2A Ch 3
(t) MCIEAST-MCB CAMLEJO 5090.11A
(u) MCIEAST-MCB CAMLEJO 5090.8A
(v) MCIEAST-MCB CAMLEJO 5090.5
(w) 40 CFR 266.202
(x) MCIEAST-MCB CAMLEJO 5090.9
(y) MCIEAST-MCB CAMLEJO 5090.111
(z) 14 CFR 91.209
(aa) MCBul 3710 of 18 Apr 17
(ab) MCIEAST-MCB CAMLEJO 3550.10
(ac) MCO 3400.3H
(ad) MCIEAST-MCB CAMLEJO 5090.115A
(ae) 2d Marine Division Training SOP P1540.28J
(af) NAVSEA OP. 5, Vol.1, Seventh Rev.
(ag) MCO 5530.14A
(ah) NAVSEA SW020-AG-SAF-010
(ai) NAVSEA OP 3565, Vol. I and II
(aj) NAVAIR 16-1-529 Vol. 2, Rev. 18

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

(ak) MCIEAST-MCB CAMLEJO 8020.2A
(al) MCO 3550.9A
(am) FM 3-22-68
(an) TM 43-0001-28
(ao) TM-086-55A-10A
(ap) TC 3-23.30
(aq) TM 3-22.31 Ch 1
(ar) FM 3-22.27 Ch 1
(as) JtRegtO P3570.1F, Marine Corps Artillery Safety SOP
(at) TC 3-09.81
(au) NAVMC 3500.7C
(av) CG MCB CAMLEJ Decision Memo 01-39 of 26 Apr 01
(aw) Joint CAS Publication JP 3-09.3, "Close Air Support," June, 10 2019
(ax) TM 3-34.82/MCRP 3-17.7L
(ay) NAVSEA SW060-AA-MMA-010
(az) TC 3-22.23
(ba) RTAM SOUM 2-10
(bb) BUMEDINST 6470.19A
(bc) BUMEDINST 6470.23
(bd) SECNAVINST 5100.1E
(be) Joint Publication 3-09.1, "Joint Tactics, Techniques, and Procedures for Lasers," May 28, 1999
(bf) OPNAVINST 5100.27B/MCO 5104.1C
(bg) 21 CFR 1040 21, Performance Standard for Light Emitting Products
(bh) United States Coast Pilot 4 (USCP 4)
(bi) 33 CFR 334.440
(bj) USN Fleet Exercise Publication 5B Series
(bk) Allied Tactical Publication 4E-Naval Gunfire Procedures
(bl) United States Navy SW 323-AB-ORD-020 Rev 2
(bm) NAVORD PUB TW024-AA-ORD-010, Ammunition (Serviceable, Suspended, and Limited Use)
(bn) DODI 6055.01, "DoD Safety and Occupational Health (SOH) Program," October 14, 2014 Ch 2
(bo) MCRP 5-12.1, Risk Management
(bp) MCO 3120.11A
(bq) MCWP 3-15.7, Static Line Parachuting Techniques and Training
(br) MCIEAST-MCB CAMLEJO 8020.1
(bs) MCIEAST-MCB CAMLEJO 3710.30A

Encl: (1) Range Control Order/SOP

Reports Required:
I. Class V (W) Expenditure Report (NAVMC Form 11381). par. 5g(2)(x) Chap. 1
II. Serious Incident Report EXEMPT; Event/Incident (OPREP-3). par. 5f(4) Chap. 1
III. Casualty Report DD-3040-2; Personnel Casualty Report (PCR). par. 5f(4) Chap. 1

1. Situation. The Commanding General, Marine Corps Installations East-Marine Corps Base Camp Lejeune (MCIEAST-MCB CAMLEJ) is required by reference (a) to publish a directive covering the requirements, instructions, and procedures governing the use of all training facilities, live-fire ranges, airspace, ground maneuver areas, and water areas within and adjacent to MCIEAST-MCB CAMLEJ. All facilities referenced in this Order are associated directly with live-fire ranges, training areas, and training facilities and do not include academic or applied instruction facilities within established cantonment areas.

2. Cancellation. MCIEAST-MCB CAMLEJO 3570.1A.

3. Mission

a. The Range Control Branch (RCB) controls all training ranges, facilities, and maneuver areas aboard Camp Lejeune for use by operational forces, Training and Education Command (TECOM) formal schools, other Department of Defense (DoD) services, and authorized Federal, state, and local agencies to ensure safe and efficient use.

b. Summary of Revision. This Order contains substantial changes in content and format and shall be reviewed by all units and commands assigned to, or stationed at, Camp Lejeune.

4. Execution

a. Commander's Intent. The intent of this Order is to provide specific guidance, information, and operating procedures for the safe and efficient use of all training facilities, live-fire ranges, airspace, ground maneuver areas, and water areas in order to preserve life, protect equipment, and minimize impacts to natural resources. All commands/units shall ensure strict compliance with the instructions contained herein.

b. Tasks. Organizational unit commanders training aboard Camp Lejeune are to be guided by reference (a) and this Order. All units are encouraged to submit recommendations concerning training improvements, updates or changes to this Order to the CG MCIEAST-MCB CAMLEJ (G-3/5 RCB) through written communication. The RCB will release numbered Range Advisory Messages to clarify or update this Order and the associated Range Cards as necessary.

c. Coordinating Instructions

(1) Coordinating Instructions: In the event the instructions contained in this document conflict with those issued by higher authority; higher authority shall always take precedence. The CG MCIEAST-MCB CAMLEJ will be notified of such conflicts and questions of interpretation will be referred to the Branch Head, RCB/Range Control Officer (RCO) for resolution.

(2) Punitive Effect. Violations of this Order may be punishable in accordance with the Uniform Code of Military Justice (UCMJ) 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.

5. Administration and Logistics

a. This Order has been reviewed, coordinated, and approved by the CGs of II Marine Expeditionary Force (II MEF), 2d Marine Division (2d MarDiv), 2d Marine Aircraft Wing (2d MAW), 2d Marine Logistics Group (2d MLG), the Commander, U.S. Marine Corps Forces, Special Operations Command (MARSOC), as well as the Commanding Officers (COs) of the United States Coast Guard (USCG), Joint Maritime Training Center (JMTC), U.S. Navy Center for Security Forces Learning Site, Marine Corps Air Station (MCAS) New River, School of Infantry-East (SOI-E), Marine Corps Engineer School (MCES) and Marine Corps Combat Service Support Schools (MCCSSS), other MCIEAST-MCB CAMLEJ General and Special Staff Departments, and the Range and Training Area Management (RTAM) Branch (C465), TECOM, Quantico, VA.

b. Information contained in this Order may be disclosed as approved by the MCIEAST-MCB CAMLEJ Designated Disclosure Authority. Disclosure must be in accordance with the policies, and procedures of current regulations, references (c), (d), and (e). MCIEAST-MCB CAMLEJ 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 Order and the including Part II, Chapter 8 of reference (c).

c. Units and base organizations will notify Range Control /BLACKBURN of all potential hazards within the training complex in order to effect proper corrective actions.

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, ground maneuver training areas, and water areas controlled by the CG MCIEAST-MCB CAMLEJ.

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

N. E. DAVIS
Chief of Staff

DISTRIBUTION: A/C (plus MCAS NR, MCAS CHERPT, H&S Bn MCIEAST-MCB, and WTBn, JMTC USCG, and all TECOM Schools.

RECORD OF CHANGES

Log completed change action as indicated to this order.

Change Number	Date of Change	Date Entered	Signature of Person Incorporated Change

Note: This listing would also include Range Control Advisory Messages.

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Chapter 1

General Instructions

1. Purpose and Scope

a. This Order prescribes the regulations, general information, and precautions required when using any training area, range, training facility under the jurisdiction of MCIEAST-MCB CAMLEJ, hereafter referred to as the “training complex”. Facilities located within the established cantonment areas of MCB CAMLEJ are not subject to the provisions of this Order.

b. The primary purpose of this Order is to maximize safe, efficient management, and realistic training opportunities and provide specific information, guidance, and policy for the use of the training complex. Nothing contained in these regulations will be construed as permitting live-fire, or other high-risk training activity/events that endangers life, property, and/or equipment. Local Standing Operating Procedures (SOPs) and range policies will reinforce the current edition of reference (a).

c. Safety regulations, as prescribed by this Order and the current edition of reference (a) with all published/approved changes are applicable to the firing of approved weapons of the United States (U.S.) military, foreign, and civilian-issued weapons if approved by special range request, and the use of live ammunition, simunitions, non-lethal weapon devices, energy producing weapons/equipment (lasers), pyrotechnics, blank ammunition, training devices, and explosives. Where conflicts occur with instructions contained in references such as Marine Corps Orders (MCO), Field Manuals (FMs), Technical Manuals (TMs), Training Circulars (TCs), Marine Corps Manuals (MCMs, MCDPs, MCRPs), TECOM RTAM Safety of use Memorandums (SOUMs), ammunition AINs/NARs and unit SOPs; the provisions of the current edition of reference (a) will take precedence.

d. Policies and procedures established in this Order are based on combat, operational, and training experiences, as well as safety considerations specified in reference (a). They have been developed to allow the efficient use of RTAs and training facilities and to achieve realistic combat training while maintaining an acceptable level of risk by the commander. Training casualties are unacceptable. Safety considerations, leadership, supervision, and common sense are paramount.

e. Risk Management (RM) is required to avoid unnecessary risk. Successful implementation of the RM process will increase mission effectiveness while minimizing unnecessary loss of assets, both personnel, and material, per reference (f).

f. OICs/RSOs/Commanders will brief all personnel concerning the danger of dud/UXO ammunition, off-limits areas, environmental issues, and other pertinent range restrictions, possible hazardous areas

/situations, and general/range safety requirements. See the Range Control Web Page or RFMSS dashboard for latest information or advisory messages.

2. Applicability

a. This Range Control Order (Short Title: RC SOP) and the latest version of Range Cards applies to all units, persons or organizations (hereafter referred to as “users”) using Camp Lejeune RTAs or facilities.

b. In addition to the regulations stated in this Order, all users must abide by the Special Instructions outlined in the current individual range cards. Range Cards are a direct extension of this order, and are located at Range Control, as well as the Camp Lejeune Range Control Website.

3. Abbreviations and Definitions. A list of abbreviations and definitions used throughout this Order can be found in Appendix A.

4. Camp Lejeune Overview

a. MCIEAST-MCB CAMLEJ commands and controls assigned Marine Corps installations in order to support the operating forces, tenant commands, military personnel and their families. MCIEAST-MCB CAMLEJ also operates a training base that promotes the combat readiness of the operating forces and the missions of other tenant commands by providing training venues, facilities, services, and support in order to be responsive to the needs of Marines, Sailors, and their families.

b. Camp Lejeune is the largest USMC expeditionary training base on the east coast of the U.S., with approximately 44,000 Marines and Sailors serving in the assigned major commands aboard the installation. Camp Lejeune geographically encompasses the onshore, near shore, and surf areas adjacent to the Atlantic Ocean, the New River, and the complex’s boundaries. The Range and Training Complex includes:

(1) 11.5 miles of ocean-side coastline, including 1.3 miles of amphibious landing beach, 1.3 miles of recreational beach, 5.8 miles of impact area beach, 11 miles of the AIWW, 100 miles of the New River shoreline and 3 miles of special use area.

(2) 203 square miles of land area with about 92,934 acres of usable training area.

(3) 100 live-fire ranges/92 training areas. The number of live fire ranges aboard Camp Lejeune are subject to change as new live fire ranges are opened and older live fire ranges are closed.

(4) A MOUT Complex with 33 concrete block buildings, and Urban Training Facility (UTF), Mobile MOUT Complex with 71 metal structures, with 5 live fire containers and one OP. Combat Town has 14 wooden buildings and 48 metal structures and one OP. The Enhanced MOUT (E-MOUT) has 72 concrete buildings, a control tower, UTF, classrooms, restrooms with atmospherics/props. There are two smaller MOUT sites located at Camp Devil Dog and Camp Geiger.

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

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

(7) Three dudded impact areas (G-10, K-2, and N-1/BT-3) that support munitions from 9mm/5.56 mm ammunition to 155mm delivered by direct fire, indirect fire, fixed-wing close air support (CAS), rotary-wing CAS, and Naval Gunfire. Camp Lejeune no longer allows dud producing ordnance to be fired or dropped into the N-1/BT-3/Brown’s Island Impact Area.

(8) 47 Tactical Landing Zones (TLZs), 21 Administrative Landing Zones (ALZs), 12 ground and 2 water PDZs, 27 GPs, 8 MPs, 18 Unmanned Aerial System (UAS) restricted operating zones (ROZs) and 12 OPs.

(9) A Landing Helicopter Deck (LHD) training site for helicopter and tiltrotor pilot training, two Air Field Seizure (AFS) Facilities (AFS Complex North and AFS Complex South) with a mock airport/FOB and two runways contained at Outlying Field (OLF) Camp Davis (Camp Davis South/North Runways).

c. The topography lacks hilly or mountainous terrain, but the TA is densely vegetated with hardwood/pine forest, heavy undergrowth, pocosin swamps and wetland areas. The vegetation, climate, growing season, and high water table combine to present several unique training, safety, and environmental 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 40 to 50 inches (in.), and snow/ice, 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. Camp Lejeune is susceptible to tropical storms and tornados throughout the year, and hurricanes from June through November. The average annual temperature is near 62 degrees Fahrenheit (°F). The average high temperature in July is 90 degrees. The average low temperature in January is 32 degrees. Humidity plays a major factor during the hot summer months, increasing

the temperature by 5-10°F. The weather is not suitable for flight operations approximately 40 days per year due to ceiling and visibility issues.

(1) Training/Maneuver Areas. Camp Lejeune has 92 designated training/maneuver areas in and around the live-fire ranges and impact areas. Scheduling of some TAs can be affected (a conflict) by live-fire operations on the ranges. TAs are designated alphabetically from "AA" to "SW". 85 of the 92 TAs are designated as tactical maneuver areas; one area (EB) is designated separately for amphibious exercise support and beach training. TA EC is the recreational portion of Onslow Beach and typically not scheduled for military training unless pre-arranged and approved by the AC/S G-3/5 MCIEAST-MCB. Training Areas must be scheduled in RFMSS for all activities being conducted in that Training Area.

(2) Impact Areas. There are three dedicated impact areas aboard Camp Lejeune: G-10, K-2, and N-1/BT-3.

(a) G-10 Impact Area Ranges. G-10 is a high-hazard mpact area, located east of the New River, supports fixed-wing/rotary-wing air-to-ground operations, helicopter live-fire gunnery exercises, mortar, and field artillery indirect firing, naval gunfire, infantry weapons, and infantry rocket and missile live-fire evolutions. Laser designators can be used within the G-10 Impact Area. Currently fourteen ranges, eight mortar positions that encircle the G-10 Impact Area (see Range Cards and Table 5-1 of this Order for a complete/current list of ranges within the G-10 Range complex).

(b) K-2 Impact Area Ranges. K-2, a high-hazard impact area, located on the western banks of the New River, supports infantry weapon training (5.56mm and below), mortar live-fire, field artillery indirect fire, and infantry rocket/M203/M32/M320/MK-19 training and supports rotary wing air operations. The K-2 Impact Area has 16 live-fire ranges oriented around its perimeter (see Range Cards and Table 5-1 of this Order for a complete list of ranges within the K Range complex). The ranges can support multiple weapon systems. Close to the K-2 Impact Area are several other ranges to include K-510 hand grenade range and Engineer TA (ETA-5) that support limited demolition and light breacher training. The K-2 ranges do not support 7.62mm or .50 cal machinegun or any sniper rifle training events.

(c) N-1/BT-3. N-1/BT-3, located on the southeast corner of Camp Lejeune is a live-fire range that can support air-to-ground weapons, ground-to-air Stinger and Avenger live-fire at E-1 range, field artillery direct fires at G-7 range, riverine/small boat training at H-1 range, helicopter gunnery exercises which will include limited training practice (TP) Hellfire Missile live-fire and limited training practice (TP) Joint Direct Attack Munitions (Inert) being delivered by fixed-wing aircraft. The H range, (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. Camp Lejeune no longer allows dud producing ordnance to be fired or dropped into the N-1/BT-3 Impact Area/Brown's Island complex. Exception to this policy/rule is the Stinger Missile (E-1) and direct fire artillery (G-7) scheduled events.

(3) Engineer Training Areas. There are 14 live fire ETAs aboard Camp Lejeune: ETA 1, 2, 2LC, 4, 5, 7, 7A, 7B, 7C, 7D, 8, 8A, 9, and 10. The primary function of the ETAs is to provide operational engineering units and schools with facilities to conduct engineer demolition/explosives training. Alternative uses of the ETAs include as an infiltration course at ETA-1, a mechanized assault course and breaching operations range at ETA-2, execution of live-fire breaching exercises and a Close Quarters Battle (CQB) area at ETA-5. The Net Explosive Weight (NEW) authorized per shot, depends on the assigned /scheduled ETA as delineated within this Order and the applicable Range Card. Camp Lejeune also has two separate Explosive Ordnance Disposal (EOD) ranges (EOD-2 and EOD-3). ETA-6 is a Combat Vehicle Operators Training (CVOT) Confidence Course and is not a live ETA. Camp Lejeune also has two engineer heavy equipment TAs referred to as Mainside ETA (ETA-MCBCL) and New River Air Station ETA (ETA-MCASNR), which support heavy equipment operator training. ETA-4 will also support inert MICLICs and live APOBS.

(4) MOUT Facilities and MOUT Assault Courses (MACs). The MOUT complex is located off Lyman Road in the eastern part of Camp Lejeune (see Range Cards). The MOUT Lejeune facility has concrete block buildings to support training for combat in an urban environment. Close to the MOUT Facility there are seven live-fire assault courses, MAC 1-7, maintained for individual, fire team, and squad level urban live-fire training. These ranges provide the opportunity to shoot 9mm/.40/.45 cal pistols, service rifles, M203/M32/M320 (TP Only) and Military 12 gauge shotgun ammunition and non-lethal ammunition.

(a) MAC-1: Urban Quick Kill Range, used for basic room entry and clearing. Electronic targets are included on this range.

(b) MAC-2: Search and Kill Range, used for search and clearance operations. Electronic targets are included on this range.

(c) MAC-3: Live-Fire Grenade House, used for live-fire room clearing. MAC-3 is authorized for live fragmentation grenades and training practice hand grenades (M67/M69) if a formal Special Range Request (SRR) is submitted as per this Order/Range Card.

(d) MAC-4: Cover and Clear Range, Primarily a fire team MOUT/urban battle drill facility.

(e) MAC-5: Dodge City, Basic squad MOUT range.

(f) MAC-6: Combat Marksmanship Program (CMP) and BZO /Zeroing range. Electronic targets are included on this range. MAC-6 will support a wide range of 12 Gauge Shotgun and M203 Non-Lethal ammunition/training requirements.

(g) MAC 7: Urban M203/M32/M320 40mm Training Practice Ammunition (TP Ammunition Only).

(h) Mobile MOUT: 71 metal type structures including five live-fire shoot houses, laid out to resemble a Middle Eastern village including a market area, tunnels, walls, and courtyards, with a FOB and Vehicle Check Point (VCP)/Vehicle Entry Point (VEP) nearby and an OP. A three-story Urban Training facility (UTF) is located in proximity to the Mobile MOUT/MOUT Complex and supports training for a wide range of MOUT type training skills.

(i) Combat Town: Located off Sneads Ferry Road or Marines Road. 14 older wooden structures, 48 metal structures with courtyard walls/gates and an OP.

(j) The Enhanced MOUT (E-MOUT): Located next to the MOUT Complex. 72 buildings, control tower, UTF, heads, classroom with atmospheric/props.

(k) FOB Hawk: Located close to TLZ Hawk, east of Combat Town. Includes a Vehicle Check Point (VCP)/Vehicle Entry Point (VEP)/Personnel Check Point (PCP) to support company size units working in or around Combat Town or adjacent training areas.

(5) Greater Sandy Run Area (GSRA) Ranges. GSRA, a dedicated impact area, supports six GSRA ranges located on the western side of Camp Lejeune (see Appendix C and Range Cards). These ranges primarily support Tanks, Light Armored Vehicles (LAV), Amphibious Assault Vehicles (AAV), and live fire infantry platoon training or below.

(a) SR-6 range is an infantry platoon battle course (IPBC) that supports live fire, and fire and maneuver requirements.

(b) SR-7 is utilized as the LAV/AAV crew qualification range, LAV/AAV/wheeled vehicle live fire multipurpose mechanized assault range and rotary wing aerial gunnery range. OP-9 can be used as an elevated live-fire sniper position in conjunction with SR-7.

(c) SR-8 is a multi-purpose machinegun range (MPMG) and sniper range that supports the M249 LMG/M27/M38 IAR, M240B, and the M-2 .50 cal. along with the presently issued military sniper rifles. This range has 179 Stationary Infantry Targets (SITS) in 10 firing lanes along with three Moving Infantry Targets (MITS).

(d) SR-9 Infantry Platoon Battle Course (IPBC)/Combined Arms Range (CAR) on the far western side of the GSRA supports a large number of training requirements at the Squad/Platoon level events. OP-10 can be used as an elevated live-fire sniper position in conjunction with SR-9. SR-9 can also be used as a rotary wing aerial gunnery range. SR-9 is not authorized for tracked vehicles.

(e) SR-10 serves as the Tank Crew Qualification range, supporting individual and tank platoon crew qualifications through Gunnery Table 12. This range also supports other tracked and wheeled vehicle live fire requirements. SR-10 can also be used as a rotary wing aerial gunnery range.

(f) SR-11 is a baffled pistol range located on the SR-10 range complex and supports individual pistol qualifications.

(g) The Camp Davis Airfield Seizure Facility (AFS) South and Airfield Seizure Facility (AFS) North are located in the southern GSRA.

1. Airfield Seizure Facility (AFS) North complex 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. See the current Range Cards for additional information on this training site.

2. Airfield Seizure Facility (AFS) South Complex with 15 structures for training requirements/skill sets near the Camp Davis South Runway. See the current Range Cards for additional information on this training site.

3. GSRA Forward Operating Base (GSRA FOB): Located in the SJ training area GSRA. Includes a Vehicle Check Point (VCP) /Vehicle Entry Point (VEP)/Personnel Check Point (PCP) to support company size units working in or around the GSRA.

(6) Stone Bay Ranges. Stone Bay Rifle Ranges are located aboard Camp Lejeune on the western side of the New River, off of Highway 210. Stone Bay has three (3) 50-target known distance rifle ranges (A, B, and C ranges), two contractor supported pistol ranges, Hathcock Sniper range (1000-yard sniper range), Dodge City (Urban Sniper range) and the contractor supported multipurpose range with 32 firing lanes and 3 moving target systems. These ranges are under the direct control of the Commanding Officer, Weapons Training Battalion (WTBn). The CO, WTBn maintains and operates the pistol and rifle ranges for annual marksmanship qualification/re-qualification training and familiarization firing to support the operating forces. Eight additional ranges at Stone Bay are within the Expeditionary Operations Training Group (EOTG) compound, including one and three-story urban shoot houses, breacher pit/facilities, non-lethal range, Square Bay pistol and rifle range, and a Helicopter Rope Suspension Training

(HRST) facility that supports wall climbing/fast roping/rappelling training. See the current Range Cards for locations and all listed restrictions.

(7) Area F and R Ranges. There are eight live-fire ranges and one fast-roping/rappelling tower (F-17), one Leadership Reaction Course (LRC) within the F Areas located in the northeastern part of 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 7.62mm/F-18 .50 cal.

(a) Ranges F-2 and F-4 are small arms live-fire ranges.

(b) Range F-5 is an automated range that supports live-fire and maneuver training. F-2 and F-5 can be combined together for live fire/movement/maneuver by scheduling F-25T in RFMSS.

(c) Range F-6 is a standard hand grenade range with practice grenade assault course/distance and accuracy course.

(d) Also near the F-6 Hand Grenade Range is the F-6 LRC.

(e) Range F-11A is a service rifle “Zero” range and F-11B supports pistol qualification. F-11A is used by MCCS on weedends and holidays for recreational civilian handguns only activities.

(f) The F-18 range complex supports field firing for 5.56mm weapons, 7.62mm, and .50 cal machineguns. Additionaly, it can be used as a non-lethal range and limited fire and movement/maneuver events.

(g) Range F-17 is not for live-fire training; it is a fast roping, climbing, and rappelling HRST training tower.

(h) Range R-100 Skeet/Trap and Archery that support Marine Corps Community Services (MCCS) events only. This range is not authorized for military shotgun training or any other military weapons/ammunition.

(8) Area G Ranges. There are fourteen (14) live-fire ranges within the G Areas located in the eastern part of Camp Lejeune around the G-10 Impact Area. The live-fire ranges include ranges G-3, G-3 TOW, G-6, G-7, G-19A, G-19B, G-21, G-27, G-27A, G-28, G-29A, G-29B, G-29C and G-30/G-30A. See the current Range Cards for locations, additional details, and all listed restrictions.

(9) Area D Ranges. There are three contractor supported live-fire ranges within the Area D TAs: D-29A, D-29B, and D-30 (In-Active Range). These are standard military issued pistol qualification ranges located along Julian C. Smith Road.

(10) Area I Range. Range I-1, is a contractor supported pistol qualification for the Courthouse Bay area. That also supports limited rifle and shotgun training.

(11) 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 Areas.

(12) OPs, Range Towers, and Sniper Towers. There are 13 OPs, 20 Range Towers, and one Forest Fire/Observation Tower at Camp Lejeune (See Table 5-3). Combat Town (OP-15) and the Mobile MOUT (OP-16) have OPs to support military operations in those scheduled areas. 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, and live-fire and maneuver events in the GSRA. The towers at the MOUT Complex, Stone Bay Dodge City, SR-7, SR-8, SR-9, G-21, and G-27 support elevated sniper live-fire training. OP-12 will provide observation into the K-2 Impact Area in order to support indirect artillery and mortar live fire.

(13) Helicopter Landing Zones (HLZs). Camp Lejeune has two types of HLZs: Tactical Landing Zones (TLZs) and Administrative Landing Zones (ALZs). There are currently 48 TLZs within Camp Lejeune’s boundaries and 21 numerically identified ALZs (See Chapter 4, Table 4-5 for locations).

(14) Drop Zones (DZs). DZs are TLZs designated for parachute operations. Camp Lejeune has 11 Parachute Drop Zones (PDZs) and 2 additional Water DZs (WDZs). See Chapter 4, Table 4-7 for locations.

(15) Special Use Airspace (SUA). Camp Lejeune has eight (8) specific SUA segments designated for control and utilization. See Figure 1-1 and Chapter 4 of this order for more details. All restricted airspace is activated as needed in order to support safe range operations.

(a) Restricted Area (Airspace) R-5303A: Surface to 6,999 ft. Restricted Area (Airspace) R-5303B: Surface 7,000 to 9,999 ft. Restricted Area (Airspace) R-5303C: Surface 10,000 to 17,999 ft.

(b) Restricted Area (Airspace) R-5304A: Surface to 6,999 ft Restricted Area (Airspace) R-5304B: Surface 7,000 to 9,999 ft. Restricted Area (Airspace) R-5304C: Surface 10,000 to 17,999 ft.

(c) Restricted Area (Airspace) R-5306E: Surface to 17,999 ft.

(d) Restricted Area (Airspace) R-5306D: Surface to 17,999 ft.

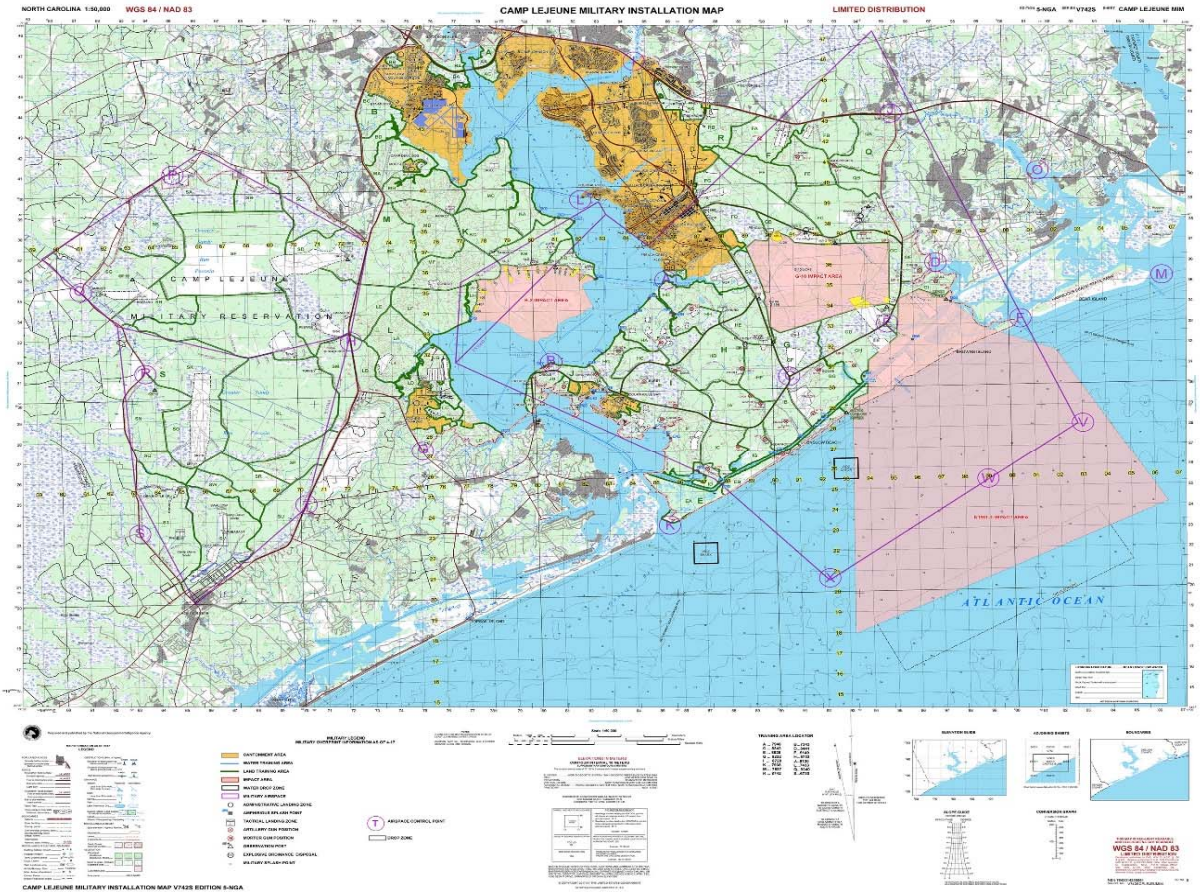


Figure 1-1.--Camp Lejeune Range Complex

(15) Targets. Automated target ranges aboard Camp Lejeune equipped with the Remote Engagement Target System (RETS) include all Pistol Ranges, F-5, K-402, K-408, K-501, K-503, K-502, K-509, L-5, MAC-1, MAC-2, MAC-6, G-21, G-27, SR-6, SR-7, SR-8, SR-9, and SR-10. See the current Range Cards for all locations and additional information. These RETS ranges offer feedback-automated pop-up, stationary, and moving reactionary targets, which can be used for infantry and armor. The RETS system offers computer-driven, programmed, tactical scenarios or can be operated in a manual mode, with group or individual targets raised on-command. Some of the ranges listed above will also provide small arms sound and muzzle flash simulators to enhance realism. Additionaly, there are Portable Infantry Targets (PITs) at SR-11; all other automated pistol ranges are programmable computer controlled, pneumatic, blading targets. WTBn has two pistol ranges with automated targets. The G-10, K-2, and N-1/BT-3 Impact Areas have a wide variety of armored vehicle targets in the range box to support direct and indirect live-fire. A current list of locations and type of targets is available on the Range Control website.

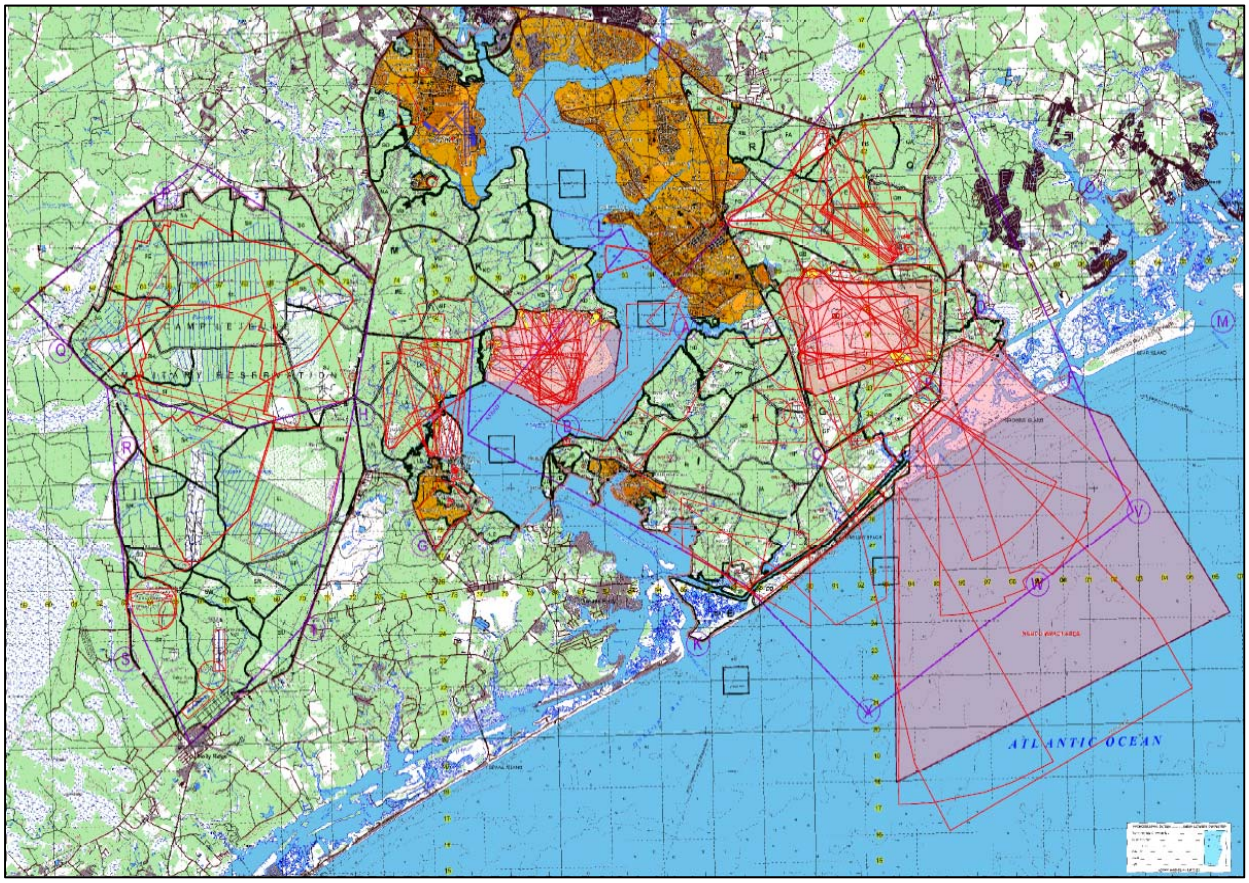


Figure 1-2.--Live-Fire Ranges and Surface Danger Zones (SDZ)

5. Responsibilities

a. Branch Head, Range Control Branch (RCB)

(1) Responsible to MCIEAST-MCB CAMLEJ (RTAM Division MCIEAST-MCB G-3/5) for scheduling, controlling, and coordination of all training activities conducted within the Camp Lejeune training complex. Ensure the safety and deconfliction of all operations and training within the Camp Lejeune training complex. Supervise, manage, and coordinate operations within RCB to accomplish assigned missions, duties, and tasks as required.

(2) Supervises, coordinates, and manages the following RCB sections/departments and assigned resources:

(a) Base EOD Team

(b) Navy Boat Crew

(c) MOUT Complex Staff

(d) Fire Desk Operators (BLACKBURN)

(e) Range Operations

(f) Range Safety

(g) Range Scheduling

(h) Range Inspectors (Vipers)

(i) Training Tanks

(j) Information System and Technology (IT)/GIS Section

b. Range Control Officer (RCO)

(1) Designated by the CG MCIEAST-MCB CAMLEJ in writing. Responsible for executing and enforcing those regulations relative to the land, sea, and airspace within the Camp Lejeune training complex at all times.

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

c. Fire Desk Operators (FDO) (BLACKBURN)

(1) The Fire Desk, call sign BLACKBURN, is manned 24 hours per day, seven days per week unless published otherwise via message to monitor and deconflict training, advise aircraft/UASs operating in the restricted airspace, provide safety guidance, and provide emergency assistance to all units conducting training aboard Camp Lejeune as directed/required.

(2) BLACKBURN is the primary point of contact (POC) for all current operations at Camp Lejeune.

(3) BLACKBURN is the primary means of providing MEDEVAC /CASEVAC assistance to units on RTAs or at any training facilities within the training complex. All injuries must be reported to BLACKBURN, even if no assistance is needed or required such as a unit using its own safety vehicle for a minor situation.

d. Commanding Officer (CO) of Using Unit

(1) Ensures compliance with this Order, the current edition of reference (a), applicable ammunition, weapons, and equipment MCOs, MCBuls, TMs, FMs, TCs, and Marine Corps Warfighting Publications (MCWPs), Marine Corps Reference Publications (MCRPs) and all other applicable SOPs/Range Cards/safety of use messages (SOUMs), ammunition AINs/NARs for safe training and firing for each weapon system, and

explosives/demolitions to be used by the command/unit. Ensures all Marines/Sailors have received the required training on the weapon systems/ammunition to be employed and that subordinate leaders involved in the training have a working knowledge of, and comply with, this Order and other references as required.

(2) Conducts RM assessment for all training being conducted. Reviews and signs an RM worksheet for the RTA, training facility, or any high-risk training event. Develops control measures and safety procedures for all phases of training. See Appendix D, RM for detailed additional information.

(3) Establishes and maintains a safety training/certification program to train and qualify all personnel assigned to the command in safety procedures for their specific area of responsibility /assignments/weapons/ammunition/special activities. Personnel who have not completed the certification will not be appointed as OICs/RSOs or RLSOs.

(4) Per references (g), (h), and (i), ensures incident reports are filed using Web-Enabled Safety System. Enterprise Safety Applications Management Systems is a web-enabled system that facilitates the filing of incident reports. When Operational Situational Serious Incident Reports (OPREP-3 SIRs) or Personnel Casualty Reports (PCRs) are sent via message traffic, the CG MCIEAST-MCB CAMLEJ must be informed on all message traffic for that incident.

(5) Designates a OIC, RSO, LRSO, and Position Safety Officers (PSOs)/Assistant RSOs (ARSOs) (if required) for each RTA or training facility as delineated in this chapter. The OIC, RSO or the assigned corpsman will not have any assigned additional duties other than the safe operation of that assigned RTA or training facilities.

(6) Develop, continuously update and retain a by-name roster per ref (a) and (al) which:

(a) Identifies members of the command who are OIC/RSO/ RLSO certified per weapon system, and;

(b) Identifies members of the command who are OIC/RSO/ RLSO certified per specialty, including, but not limited to:

1. Diving Supervisors, Certified Master Divers, DZ Safety Officers (DZSO), Jumpmasters, Parachute Malfunction Officer, Helo CAST Masters, Safety Insert Officers (SIOs), Forward Air Control (FACs)/Joint Terminal Attack Controller (JTACs), Naval Gunfire Liaison Officers, Shore Fire Control Party, HRST/HST qualified personnel, Breachers, Marine Corps Instructor of Water Survival (MCIWS), Marine Corps Instructor Trainer of Water Survival (MCITWS), HEAT Instructors, Laser Range Safety (LRSO), Breachers, all CBRNE 5711/5769/5702 Marines

regardless of rank, and CVOT instructors, UAS (UAS ROIC/Mission Commander/UAS Operators) or any other specialties regardless of rank.

(7) In lieu of providing Range Control with a by-name OIC/RSO roster, submit one signed, command certification letter to Range Control annually per Appendix H format. This annual letter will be submitted at the beginning of each fiscal year. The letter states that OIC/RSOs assigned within his/her unit are qualified per applicable references and:

(a) Are competent and current in the required certification and properly instructed/trained in the performance of their duties of the assigned tasks/responsibilities as an OIC/RSO/ RLSO.

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

(c) Have completed the Marine Net, Distance Learning Course “Range Safety” (RTAMRSOCAA) and attended the MCIEAST-MCB CAMLEJ OIC/RSO Range Safety Officer’s Course.

(8) Designate the appropriate uniform and personal protective equipment (PPE) if not prescribed by a higher authority.

(9) 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 references (j) and (k) and disposed of properly.

e. Officer-in-Charge (OIC)/Range Safety Officer (RSO)

(1) Qualifications: OIC/RSO must be certified in the commanders certification letter and meet the following qualifications:

(a) Have completed the Marine Net, Distance Learning Course “Range Safety Course, Title RTAMRSOCAA which is valid for three (3) years from date of completion.

(b) Have attend the MCIEAST-MCB CAMLEJ OIC/RSO Information Safety Brief conducted every Friday morning at Range Control, Building 1043, Duncan Street unless the federal holiday is on a Friday. Students will bring a hard copy/paper copy of the Marine Net “Range Safety” diploma to the brief. This brief goes from 0730-1130 in the Range Control building. Building/Doors to the Classroom open at 0630 for check-in and class starts at 0730.

(c) Has a current Camp Lejeune OIC/RSO card. The OIC/RSO card is valid for (3) three years and must be renewed by completion of process outlined above.

(2) OIC Duties: The OIC must be a commissioned officer, warrant officer, or staff noncommissioned officer (SNCO) (E-7 or above for dud-producing ammunition and fire and movement training events such as CMP). The OIC is the only person that can sign for a live-fire range, high-risk training event or a training facility. Civilian Contractors cannot serve as the OIC. The OIC shall:

(a) Ensure the overall safe conduct of all training and proper use of the installation/training complex. OIC is a supervisory position. OIC will not participate in the training event. **OIC will have no other duties/assignments or fire any weapon while acting as the OIC**. OIC must be physically present at the training event at all times.

(b) Report to Range Control (Building 1043 on Duncan Street) up to ten (10) working days prior to the scheduled training event but no later than 1200 one (1) working day prior to check-out the RTAs and facilities and receive the associated range safety equipment.

(c) Receive a range safety briefing from the installation range control organization on the use of the assigned training complex. Only the OIC can receive the brief at the time of sign out.

(d) OIC must have this Order, the applicable Range Card, a valid Camp Lejeune OIC/RSO Card, signed RM worksheet, and a SRR/ESRR (if applicable) onsite when training.

(e) Ensure required communications are established with BLACKBURN and maintained at all times. Ensure receipt of final clearance to conduct live-fire or training from BLACKBURN.

(f) Ensure the RSO has been certified in writing by the CO for the weapon(s) or weapon systems to be used on the range.

(g) Ensure all personnel have a working knowledge of the weapon systems and ammunition being employed and wear the appropriate personal protective equipment (PPE).

(h) Ensure proper supervision of personnel performing immediate action, misfire, hang-fire, and cook-off procedures. The OIC will contact BLACKBURN for guidance on proper handling of arms, ammunition, and explosives (AA&E) after a malfunction/dud/misfire. Malfunctioned or misfired AA&E will not be returned to the Base ASP unless it is determined to be safe for handling, storage, and transportation by unit ammo technician and/or EOD.

(i) Ensure all weapons and ammunition malfunctions, duds, and accidents are reported to Blackburn and other higher headquarters

as required/directed and the MCIEAST-MCB CAMLEJ ESO as directed, per references (l) and (m), and other applicable orders/messages.

(j) Ensure safe laser operations and laser safety per references (n) and (o) and this Order when conducting all laser training.

(k) Ensure properly equipped medical support (Corpsman /Medic or contracted emergency medical technician (EMT)) are on site for all live fire and high risk training events. Contracted EMTs must be certified in writing and approved by the Installation Commander. A government safety vehicle/driver must be present on the RTA or training facility.

(l) 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. The using unit must maintain security at all times when dealing with all AA&E.

(m) Maintain records of total number of personnel trained; ammunition expended by Department of Defense Identification Code (DODIC); and report this information to BLACKBURN at the conclusion of each day’s training.

(n) Refer to Appendix G and O for OIC and RSO requirements to support a Combined Arms/Tactical Air Control Party (TACP) shoot.

(o) Ensure all safety control measures for the Surface Danger Zone (SDZ)/Weapons Danger Zone (WDZ)/target area (Impact Area) based on weapon system and ammunition used are in place, enforced, and supervised to prohibit entry by unauthorized personnel/vehicles.

(p) Ensure coordination and approval has been gained from the RCB for all civilian personnel to include contractors that will be entering the RTAs and training facilities.

(q) Brief the RSO on the duties to be performed in support of the training event. Receive a brief from the RSO on the safety of the RTA or facility and the readiness to commence live-fire operations /training prior to the start of all live firing.

(r) Comply with all Camp Lejeune’s environmental regulations/orders/policies and the current edition/version of the Environmental Handbook for Trainers/Camp Lejeune “Quick Look” Environmental Guide.

(s) Ensure a thorough inspection of all vehicles, personnel, and weapons is conducted to prevent unauthorized /inadvertant removal of ammunition prior to leaving the RTA or training facility.

(t) Ensure the unit has detailed safety checks in place and ensure proper supervision whenever using blank ammunition and live ammunition during the same scheduled training event/time period to prevent unintended use.

(u) Implement RM for all phases of the training being conducted on RTAs and training facilities.

(v) Inventory and sign for all ammunition, explosives, training devices and assigned DODICs on the NAVMC 11381 Expenditure Report. Ensure that the Class V (W) Expenditure Report (NAVMC Form 11381) is completed at the range per reference (p), signed by the OIC, and turned in within 48 hours to the unit S-4/G-4 Ammunition Section.

(w) Ensure the training area/range is adequately policed, inspected, and approved by a Range Inspector. The OIC/RSO will receive a range inspection card upon passing the inspection. Return all safety equipment/binder/keys within 24 hours/next business day to Range Control upon completion of the training event and submit any range maintenance issues to Range Control.

(3) RSO Duties: The RSO must be a commissioned officer, warrant officer/chief warrant officer, SNCO, or NCO (Sgt/PO2). Certified civilian contractors or Civil Service employees that are GS-5 or above may perform duties as an RSO. Certified civilian contractors require a written request by the unit CO and approved by the Range Control Officer. **RSO duties/responsibilities will not be delegated to other personnel**. The RSO is appointed by the OIC to assist in maintaining safe supervision of the entire training event and all safety requirements.

(a) The RSO is a safety supervisory position only. The RSO is responsible to the OIC for the enforcement of all applicable range safety for that range, weapon system, ammunition, or high-risk training event. The RSO will ensure a copy of this Order, the current Range Card, and RM worksheet are maintained and available on the range at all times. The RSO must be physically present at the training event at all times.

(b) **RSOs shall have no other additional duties/assignments or fire any weapon while performing the duties as the assigned 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 to ensure safety.

(c) Receive a range safety briefing from the installation range control organization on the use of the assigned training complex. Only the OIC/RSO can receive this brief.

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

(e) Ensure that only the authorized ammunition, weapons, and explosives listed in the Range Control SOP Order/Range Card, to include proper charge/increments, explosive weight limits (NEW), fuses, and fuse settings, are used. Ensure that firing data and weapons systems are within prescribed safety limits and are verified/checked.

(f) Ensure that the SDZ and WDZ remain clear of all unauthorized personnel, vehicles, and any aircraft prior to and during firing. Ensure road guards, gate guards, tower and air sentries are properly positioned, equipped, and briefed on their duties and assignments. Ensure that all barriers, gates, and signs are checked and secured if appliciable. RSO will ensure proper communications are established and maintained with the road guards and tower sentries at all times.

(g) Ensure personnel within designated hazard areas wear the proper PPE during all live-fire operations as required. Units conducting small arms, standard BZO/FAM firing from a static position are not required to wear helmets and body armor.

(h) Obtain authorization from BLACKBURN to commence training and live-fire operations. The RSO, along with the OIC, shall ensure that the unit monitors the BLACKBURN safety net **AT ALL TIMES**. BLACKBURN is net control via 34.70 FM. The frequency for air operations is 233.8 UHF and retrans frequency in the GSRA is 40.10 FM and 38.85 on the east side of New River. 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 re-established. Cellular telephones are authorized as an alternate means of communications to BLACKBURN.

(i) Prior to commencing live-fire operations, conduct final coordination with OIC to include a summary of checks, inspections, and other required actions that the RSO must complete. Verify that required dual communications has been established and a **“HOT Status”** has been received from BLACKBURN.

(j) Order immediate **“CEASE-FIRE or CHECK-FIRE”** when any unsafe condition occurs or as directed by BLACKBURN.

(k) Report all accidents, weapons/ammunition malfunctions /defects, and any MEDEVAC/CASEVAC to the OIC 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**.

1. 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 RTA or training facility. The OIC or RSO will report the incident/accident immediately to BLACKBURN.

2. Immediately report locations of all smoke sightings/forest fires/grass fires (grid/RTA) and wind direction, to BLACKBURN and standby for guidance from BLACKBURN and the Fire and Emergency Service Division (FESD).

(l) Submit UXO/dud reports (location by grid and type of UXO/dud or UXO/duds) as per unit SOP and this Order. All ammunition malfunctions/defects must be reported to BLACKBURN.

(m) Ensure no pyrotechnics such as smoke/CS/pop-ups, and other flares, training devices are released or fired at any time without proper clearance from BLACKBURN.

(n) Ensure all tactical vehicles are parked in designated parking areas only. Ensure only POVs with a valid Range Control POV pass are on the range if POVs are authorized at all. Vehicles will not be parked on access roads, tank trails, or near the RTAs or training facilities not scheduled by that unit. Vehicles will not park on the shoulders, or main thoroughfares, areas that have grass, seeded or otherwise planted/re-planted areas such as forestry sections/food plots. Privately-Owned Vehicles (POVs) are not authorized on RTAs or training facilities unless issued a Range Control POV Pass by the Range Control Operations section.

(o) Conduct an inspection of all personnel, weapons, vehicles, and equipment to ensure that no unauthorized brass, live-fire ammunition, or other training devices leave the range.

(p) Upon completion of all live-fire, verify to the OIC that all weapons and weapon systems are checked, clear, and safe before allowing the removal of any weapons/ammunition from the firing area.

(q) Call BLACKBURN upon completion of live-fire to report number of rounds fired by DODIC, type of ammunition fired, and total number of personnel trained.

(r) The OIC or RSO will be the last to leave the RTA /facility following completion of training, ensuring the range is clear of all personnel and equipment, is properly policed, and was inspected and cleared by a range inspector. The RSO will ensure all lights, air conditioners/heaters are turned off and all windows/doors are shut/locked and checked before securing from the range. **DO NOT LEAVE, BURY OR BURN ANY TRASH/DUNNAGE**. The OIC/RSO will receive a

range inspection card upon passing the inspection. Return the inspection card and all safety equipment/binder/keys within 24 hours to Range Control upon completion of the live-fire event and submit any range maintenance issues to Range Control.

(4) RLSO Duties: During Light Amplification Stimulated Emission Radiation (LASER) Class 1 to Class 4 operations aboard CLNC, the OIC or RSO must be certified as a Range LASER Safety Officer (RLSO). The RLSO that has completed the required training may also serve as the RSO or the OIC if properly trained and certified by the unit commander. RLSOs must complete all Camp Lejeune OIC/RSO qualifications and complete the Marine Net Laser Safety Officer Course (RLSO) Course Number RTAMLRSOAA by providing a copy of the completion diploma/certificate and the back of the Camp Lejeune OIC/RSO card is signed a member of the Range Control Staff.

(a) Ensure all unit personnel employing 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 Chapter 7 of this Order and references (n) and (o).

(c) Ensure the laser system is approved by the Laser Safety Review Board (LSRB) to be used aboard Camp Lejeune. Observe horizontal and vertical safety limits for the laser range being used.

(d) Cease Laser Operations immediately if communication or positive control of the laser beam is lost or if an aircraft is within your zone of action.

6. Safety/Risk Management (RM)

a. Safety is the responsibility of every individual at all times while conducting training. Risk Management (RM) and safety must be part of the detailed 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 a “CEASE-FIRE” or “Stop Training”.

b. RM. The RM process as defined in reference (f) will be used to assess/manage risks during training. Units using ranges will employ RM procedures to identify operational hazards and implement appropriate controls in order to minimize training mission risks. Formal RM documentation is required on all live-fire ranges, live-fire maneuver exercises, large training exercises, and for any request for deviation, special range request/letter of agreement from this Order. An RM worksheet will be completed/signed and on-site from training units prior to training.

c. Safety Briefs. The following information will be addressed in a safety brief given by the OIC/RSO prior to conducting training in the RTAs located in the Camp Lejeune Range Complex:

(1) UXO and EOD

(2) Range Safety/Laser Safety

(3) Ammunition Handling and Accountability

(4) Restricted Areas (i.e., graves, construction sites, closed roads/routes, known hazardous areas/situations, etc.). Unit and Base organizations will notify Range Control/BLACKBURN of potential hazards in the training complex caused by weather or maintenance issues.

(5) OIC/RSO will include Safety of Use Message(s) (SOUMs), Notice(s) of Ammunition Reclassification (NAR), Ammunition Information Notice(s) (AIN), and Cleared for Overhead Fire supplement(s) if applicable to the range safety briefs. This is to ensure all personnel conducting and participating in live-fire training or other high risk events are fully aware of any potential hazards related to the AA&E being utilized.

7. Training Accidents and Incident Reporting

a. Camp Lejeune Reporting. Any unit operating in the Camp Lejeune RTAs involved in any accident or incident will immediately report the situation to BLACKBURN. In the event of serious injury or death, units will preserve the scene of the accident until released by the investigating officer or the unit CO.

b. Parent Command Reporting. Reports submitted under this paragraph are not substitutes for reports required by appropriate directives, nor do they constitute notification of a unit’s chain of command. Reports submitted per directives, to include notification within the unit’s chain of command, shall include the CG, MCIEAST-MCB CAMLEJ as an information addressee.

c. Reportable Incidents. Examples of accidents or incidents requiring a report to BLACKBURN are:

(1) Aircraft accidents and both tactical vehicle and POV accidents within the training complex;

(2) Unintentional jettison of any material from an aircraft

(3) All MEDEVACs/CASEVACs

(4) Forest fire/smoke in and on the RTAs of all types

(5) Any explosive mishap, to include duds and/or malfunctions

(6) Any rounds (Ammunition) out of safe/impact area

(7) Missing, lost, found or stolen munitions/weapons/gear

(8) Injuries from minor to death

(9) Anything that is liable to create interest or inquiries from the local civilian community

(10) Lost personnel

(11) Weapons/ammunition/tactical vehicle mishap/malfunctions

(12) Possible hazardous areas/hazardous situations.

(13) Lost or crashed UASs within the training complex.

(14) Incidents/situations as directed by Chain of Command.

8. Lost Personnel

a. Any lost/missing Marine, Sailor, Soldier, Airman, Coast Guard person, hunter/hunters, or any other person aboard Camp Lejeune must be reported to BLACKBURN immediately.

(1) The following information must be reported.

(a) Name, rank, unit, and description

(b) Date, time, location (Grid/TA) last seen

(c) Physical and medical status (injured/uninjured) of Marine/Sailor/person;

(d) Type of training being conducted at the time of disappearance

(e) Known sensitive items being carried by the Marine/Sailor/person like weapons, night vision devices, etc.

(f) Request for assistance (PMO, FESD, CLEO, etc.)

(g) Follow-up information as required.

(2) The lost Marine/Sailor/person’s unit is responsible for conducting the search and notifying BLACKBURN once the Marine/Sailor /person is found.

c. The unit will conduct initial search, ensuring the location where the individual was last seen is protected.

d. Any SAR effort which requires entry into RTAs will be coordinated through BLACKBURN.

e. If the unit is unable to locate the missing person and requires assistance, contact BLACKBURN.

9. Missing, Lost, Stolen, or Recovered (MLSR) Government Property Reporting. Report any MLSR Government property to BLACKBURN immediately.

10. Deviations

a. Requests for deviations from this Order and the current reference (a) may be granted based on critical mission requirements and will be considered on a case-by-case basis. Deviations are limited to:

(1) Reducing SDZ, laser SDZ, and WDZ dimensions when terrain, artificial barriers, or other compensating factors make smaller danger zones safe.

(2) Modifying prescribed firing procedures appropriate for a state of training of participating personnel to increase training realism.

(3) Allowing personnel not authorized by Chapter 3 of reference (a) within the danger zone, unless prohibited.

(4) Requesting a rank deviation from Appendix G of this Order such as a SSgt being a OIC on a dud producing range.

b. Deviation requests must be signed by the unit’s CO (not “By direction” or “Acting”) and must be endorsed by a (O-6) Colonel or higher in the unit’s chain of command prior to submission to the CG, MCIEAST-MCB CAMLEJ (G-3/5) at least 30 days in advance of scheduled training and in accordance with reference (a). Deviations must be updated and renewed annually if the requirement remains in effect.

c. Completed, reviewed, and signed RM Worksheets shall accompany all deviations and any Special Range Requests (SRR) or E-Mail Special Range Request (ESRR).

d. Requests for a waiver of Range Cards and this Order will be considered a formal SRR or ESRR. Procedures for obtaining a SRR/ESRR are discussed/listed in this Order, Appendix F. Units should check with Range Control to determine the correct routing/course of action.

11. Medical Evacuation/Casualty Evacuation Procedures

a. General

(1) MEDEVAC refers to U.S. Army, Navy, Marine Corps, Air Force, and USCG patient movement using designated tactical or logistical aircraft, boats, ships, and other watercraft temporarily equipped and staffed with medical attendants for enroute care.

(2) CASEVAC is the unregulated movement of casualties that includes movement to and between medical treatment facilities.

(a) Ground transportation by FESD ambulance is the primary means of emergency MEDEVAC/CASEVAC (i.e. Priority and Urgent). BLACKBURN shall be notified immediately of all MEDEVACs/CASEVACs.

(b) The designated, government safety vehicle with driver is the primary means of non-emergency MEDEVAC.

(c) Other Government vehicles may be used to transport routine injuries to local medical clinics in order to allow the safety vehicle to remain on-scene. BLACKBURN must be notified when any personnel are removed from the RTA for medical treatment. BLACKBURN will determine if training may continue.

(3) If assistance is requested, Range Control will contact Emergency Consolidated Communication Center (ECCC 911), who will dispatch the appropriate emergency medical response. The FESD Incident Commander will be in command of the incident.

(4) All training/firing injuries that occur within RTAs or training facilities controlled by Blackburn requiring MEDEVAC/CASEVACs shall be reported directly to BLACKBURN by the unit/command, even if the unit uses its own assets to conduct the evacuation. It is critical that 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 prior to mishap/Judge Advocate General (JAG) investigations. These procedures also apply to all contractors/civilians aboard Camp Lejeune who are injured in RTAs or training facilities.

(5) The responsibility for determining the necessity for a MEDEVAC/CASEVAC rests with the OIC, RSO, or the on-site Commander based on the advice from the medical personnel present. The method of evacuation shall be determined by the OIC/RSO/Unit CO/On-site Commander. Once FESD has arrived on scene of requested MEDEVAC/CASEVAC, the FESD Onscene Incident Commander will determine and direct all emergency response and patient transports forward. Evacuation of all casualties will be accomplished as expeditiously as

possible, consistent with the safety and the medical status of the casualty.

(6) RED SIGNALS (SMOKE, PYROTECHNICS) are reserved for use during actual emergencies only. Any unit or aircraft observing a red signal shall immediately report it to BLACKBURN. Red signal devices being used for training must be pre-coordinated and approved by BLACKBURN before being used.

(7) Trauma patients will be transported to the most appropriate trauma center per FESD policies and protocols. If medical control/advice is requested or required, medical personnel should contact the Senior Emergency Medicine Medical Officer at Naval Medical Center Camp Lejeune. Primary POC is the Medical Control Line: (910) 450-2990, alternate POC is Emergency Department charge nurse: (910) 450-4840.

(8) There are no standby MEDEVAC/CASEVAC aircraft stationed at Camp Lejeune/New River. The primary means of MEDEVAC/CASEVAC is the government safety vehicle for non-emergency MEDEVACs.

b. Categories of MEDEVAC/CASEVAC

(1) Urgent (Life Threatening). Emergency patients for whom speedy evacuation is necessary to save life or limb, to prevent complication of serious illness or to avoid permanent disability.

(2) Priority (Non-Life Threatening). Patients who require specialized treatment not available locally and who are liable to suffer unnecessary pain or disability unless evacuated with the least possible delay.

(3) Routine (Minor Injuries). Patients whose immediate treatment requirements are available locally, but would definitely benefit by ambulance evacuation.

(4) Mass Casualty. A mass casualty is a series of injuries with multiple priority and urgent medical patients.

c. MEDEVAC/CASEVAC Assistance Procedures

(1) In the event of MEDEVAC/CASEVAC, the OIC/RSO or the onsite commander shall immediately contact and remain in constant communication with BLACKBURN until directed otherwise. The OIC/RSO shall pass the following information to BLACKBURN:

(a) Category of MEDEVAC/CASEVAC request. Competent medical personnel, the senior Marine (OIC/RSO, or the onsite Commander) shall determine the category of the medical condition.

(b) Air or Ground Transportation

(c) Number of Patients

(d) 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.

(e) Location of patient(s): grid coordinate, main roads, prominent terrain feature, prominent man-made feature, live-fire range number, or TA letters.

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

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

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

(i) Other information as required, to include factors which may generate public interest, if any.

(2) Primary means of reporting this information shall be telephone. If a telephone is not available, it will be transmitted to BLACKBURN via radio. OIC/RSO shall speak directly to BLACKBURN with all pertinent information. Routine radio traffic for all RTAs and training facilities will be suspended until the MEDEVAC/CASEVAC situation is resolved.

(3) Ground transport is the primary MEDEVAC/CASEVAC means at MCIEAST-MCB CAMLEJ. Units shall provide guides for the ambulance from a main service road to the exact location on the ground. Competent medical personnel, the senior Marine (OIC/RSO, or the onsite Commander) may authorize transportation of the patient to the nearest paved hard-surface road if such action does not further complicate the patient’s condition. If the unit is training within the GSRA training complex, Highway 17 or Highway 50 shall be used. FESD will be the responsible organization to establish a landing zone in the event of an air MEDEVAC.

(4) Regardless of the situation, emergency response aircraft (Military or Civilian) entering the restricted airspace shall contact BLACKBURN. If there is an “on scene commander” aircraft, he/she will communicate with the MEDEVAC/CASEVAC aircraft (on BLACKBURN’s frequencies 233.8 UHF, 119.5 VHF, or 34.70 FM) and maintain separation.

(5) 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 PAO, which will release any required official statement. If an OPREP-3 SIR or PCR is released by a command/unit the command/unit must ensure the CG MCIEAST-MCB CAMLEJ is included as an informational addressee on the message/report.

12. Casualty Procedures for Diving, Internal Passenger Helicopter Aircrew Breathing Device (IPHABD), and Underwater Egress Trainer (UET) Accidents

a. Prior to scheduling or conducting any training that uses compressed air, IPHABD and UET (Helo Dunker) operations, coordination with the Master Diver at 2d Reconnaissance Battalion (2d Recon Bn) Dive Locker, (910) 450-7710/7742 or Marine Raider Regiment (MRR/MARSOC) chamber, (910) 440-1290/1291 is required. Availability of their recompression chambers a minimum of 30 days prior to the planned evolution is required. This is to ensure proper preparation and assignment of personnel necessary to operate the Recompression Chamber if needed. Scheduling is subject to 2d Recon Bn and MRR/MARSOC operational commitments. 2d Recon Bn should be contacted as the primary, MRR/MARSOC as the secondary. If 2d Recon Bn or MRR chambers are not available, MCIEAST-MCB CAMLEJ (911) Emergency Consolidated Communication Center (ECCC) will coordinate recompression chamber use with Duke University Medical Center by calling (919) 684-6726.

b. Contact ECCC by calling 911 to request an ambulance for all diving accidents and pool casualties. While awaiting response, the Diving Supervisor or senior diving EMT will notify BLACKBURN and identify and evaluate the patient for turn over to the Base EMT. If casualty is verified to be that of a diving nature (AGE, DCS Type I, or DCS Type II), the patient should be taken directly to the primary or secondary Recompression Chamber after positive notification has been made with the Chamber Supervisor. Area 2, Area 5, Courthouse Bay, and UET Training Tanks all have red “direct hot line” connected directly to the ECCC to request immediate medical support in case of emergencies at those locations.

13. Forest Fire Danger Plans and Ratings

a. General. All brush, woods, forest, and range fires, regardless of size or location aboard MCIEAST-MCB CAMLEJ, shall be immediately reported to BLACKBURN (34.70 MHZ or (910) 451-3064/4449) and BLACKBURN will notify the FESD. At no time will a unit place Marines/Sailors/others in danger or harm’s way in an effort to fight fires. Units must go into a **CHECK FIRE/CEASE FIRE** immediately and report the direction the smoke may be traveling from possible wild fires to BLACKBURN. All units assigned to Camp Lejeune during peak fire season/high fire condition shall have an evacuation route and plan in place.

b. Fire Danger Planning and Fire Danger Plans. Each March /September, MCIEAST-MCB CAMLEJ, RCB will publish the fire danger plan message to remind all units/commands of their responsibilities during the dry and forest fire season. Fire Danger planning establishes training restrictions and preparation commensurate with the wild fire danger by establishing forest fire danger plan ratings as follows:

(1) Fire Danger Plan 1. Fire danger is **low**. No restrictions on authorized RTAs and training facilities. Normal safety precautions will be followed.

(2) Fire Danger Plan 2. Fire danger is **moderate**. No restrictions on authorized RTAs and training facilities. 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.

(3) Fire Danger Plan 3. Fire danger is **high**. The use of certain ranges, training facilities, and TAs may be curtailed at the discretion of the CG MCIEAST-MCB CAMLEJ. 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 Danger Plan 4. Fire danger is **very high**. The use of certain RTAs, training facilities, will be evaluated by CG, MCIEAST-MCB CAMLEJ G-3/5 on a case by case basis and may be curtailed at the discretion of the CG, MCIEAST-MCB CAMLEJ. Pyrotechnic/smoke /incendiary/white and red phosphorous/illumination type ammunition will be restricted to the G-10, K-2, and N-1/BT-3 Impact Areas only. Tracer ammunition (All Calibers) is restricted to the G-10, K-2, and N-1/BT-3 Impact Areas only. Exceptions to the above such as the use of tracer ammunition in the GSRA will be considered on a case by case basis. Warming fires, when specifically authorized and approved, will be used only in designated places and only under supervision of a SNCO or officer at all times.

(5) Fire Danger Plan 5. Fire danger is **Extreme**. All tracer/pyrotechnic/smoke/incendiary/white and red phosphorous /illumination type ammunition will be restricted to the G-10, K-2, and N-1/BT-3 Impact Areas only. 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 areas that have been fireproofed for at least a 50 ft. diameter circle around each generator. Warming /camp fires are not authorized. Additional restrictions may be directed by the MCIEAST-MCB CAMLEJ command to include, but are not limited to; Use of tracer ammunition, any activity likely to start forest fires, only allowing ball ammunition, fragmentation grenades on grenade ranges, demolition materials on assigned ETAs, high explosives artillery and mortar ammunition on designated ranges/impact areas.

MV-22 aircrews will minimize time on deck and excute “Extended Ground Loitering Pocedures” in accordance with “Naval Air Training and Operating Procedures Standardization” when applicable, in order to mitigate potential for fire hazard. Additionally ceasing all training with removal of troops from the field.

Note: During any fire danger condition, CG, MCIEAST-MCB CAMLEJ, may impose additional control measures and exceptions as necessary.

14. Destructive Weather Warnings and Conditions

a. General. Storms are a potential and continuous threat to naval shipping, aircraft, military training, on all military installations. Adequate and timely warning, coupled with prompt and effective actions by all unit COs, will reduce loss of life and damage to property due to destructive weather conditions. BLACKBURN will notify all training units within the training complex of impending destructive weather. For additional/detail information on destructive weather see the current edition of reference (q). Definitions and terms used in this Order are standard throughout the DoD and the National Weather Service (NWS) and are authorized for use in official messages, records, correspondence, and dealings with other government agencies or individuals.

b. Scope. Destructive or severe weather can occur at any time. Analysis of meteorological and oceanographic data for this area indicates that the most serious damage comes from storms of tropical origin, such as tropical cyclones and tropical storms where winds of destructive force are sustained for long periods of time. Storms of non-tropical origin (gales, thunderstorms, tornadoes) are of shorter duration and generally localized in nature. The annual Atlantic Hurricane Season for the MCIEAST-MCB CAMLEJ area is from 1 June through 30 November. The period of 1 December through 15 March has been established as the snow and ice storm season for coastal southeastern North Carolina.

15. Conditions of Readiness

a. General. Conditions of Readiness (Weather Related) are set using the applicable term indicating wind force (e.g., thunderstorm Condition II) and/or a specified range of wind speeds (e.g., winds of 35 to 40 knots). Unless specifically stated otherwise, conditions of readiness are based on sustained winds. Additional weather-related conditions of readiness, warnings, or advisories (e.g., Destructive Weather/Thunderstorm/Severe Thunderstorm/Tornado Condition II) are also utilized to avoid or minimize loss of life, injury, and/or damage to property.

b. Non-Tropical Conditions of Readiness. The following conditions of readiness are established for non-tropical storm systems.

(1) Wind, Thunderstorm, Severe Thunderstorm, or Tornado Condition II. Condition II is set when conditions favorable for the development of severe winds, thunderstorms, severe thunderstorms or tornados exist in the Camp Lejeune area. Condition II generally corresponds to the NWS's Watch condition. Like the NWS's watch condition, Condition II is usually issued for duration of between four and eight hours.

(2) Wind, Thunderstorm, Severe Thunderstorm, or Tornado Condition I. Condition I is set when severe winds, thunderstorms, severe thunderstorms, or tornados exist in the Camp Lejeune area. Condition I generally corresponds to the NWS's Warning condition. Like the NWS's Warning condition, Condition I is usually issued for a duration of one hour.

(3) Winter Storm Condition II. Condition II is set when an ice or snow storm is forecast for the Camp Lejeune area within 24 hours. Condition II generally corresponds to the NWS's warning and advisory conditions.

(4) Winter Storm Condition I. Condition I is set when an ice or snow storm is expected to affect the Camp Lejeune area within six hours and lasts until the storm passes and the road conditions are deemed to be safe enough to allow cautious travel. Condition I generally corresponds to the NWS's Warning condition.

c. The Decision to Set Conditions and Notification

(1) Wind, Thunderstorm, Severe Thunderstorm, or Tornado Conditions. The decision to set a non-tropical wind, thunderstorm, or tornado condition is made automatically when certain conditions are identified as existing by the NWS or Regional Meteorological and Oceanographic Center (RMC). When the NWS sets a Wind, Thunderstorm, Severe Thunderstorm, or Tornado Watch, MCB CAMLEJ automatically assumes Wind, Thunderstorm, Severe Thunderstorm, or Tornado Condition II. When the NWS sets a Wind, Thunderstorm, Severe Thunderstorm, or Tornado Warning, MCB CAMLEJ automatically assumes Wind, Thunderstorm, Severe Thunderstorm, or Tornado Condition I. The RMC will broadcast the existence of NWS Watch and Warning conditions via its telephone notification system. Range Control Branch (RCB) is responsible for passing these conditions and warnings to units training in the the Camp Lejeune training complex.

(2) Winter Storm Conditions. The decision to set Winter Storm Conditions is made by the CG or his authorized representative. The MCIEAST-MCB CAMLEJ (G-3/5) will monitor forecasts, solicit staff input, and make recommendations to the CG MCIEAST-MCB CAMLEJ during the lead up to the storm to ensure decisions are based on the most up-to-date weather information and as complete an understanding of ongoing operations onboard the Installation as is possible. The

MCIEAST-MCB CAMLEJ (G-3/5) will broadcast the setting of Winter Storm Conditions using Non-Secure Internet Protocol Router, Omni-directional telephone network (OMNI), and mass notification/media.

d. Non-Tropical Conditions of Readiness Tasks

(1) Wind, Thunderstorm, Severe Thunderstorm or Tornado Condition II Tasks

(a) Disseminate the setting of Wind, Thunderstorm, Severe Thunderstorm, or Tornado Condition II.

(b) Prepare to stop field training, assume appropriate protective posture, and take available shelter in place.

(2) Wind, Thunderstorm, Severe Thunderstorm, or Tornado Condition I Tasks

(a) Disseminate the setting of Wind, Thunderstorm, Severe Thunderstorm, or Tornado Condition I.

(b) Stop field training, assume protective posture in place immediately and wait for the storm to pass.

(c) After the storm has passed, remain alert for downed power lines, trees, debris in roadways, flood areas, and other impediments that may obstruct traffic flow. Report utility outages, road hazards, and range/training area hazards as they occur.

(3) Winter Storm Condition II Tasks

(a) Disseminate the setting of Winter Storm Condition II.

(b) All commands and activities prepare to secure non-essential field training. Identify to the MCIEAST-MCB CAMLEJ AC/S, G-3/5 any mission critical training or operations that need to receive support during the storm or that need special priority for rescheduling following the storm.

(4) Winter Storm Condition I Tasks

(a) Disseminate the setting of Winter Storm Condition I.

(b) Secure from non-essential field training when directed by MCIEAST-MCB G-3/5. BLACKBURN will pass instructions to all units within the training complex. All units must report to BLACKBURN once all personnel, military gear, and vehicles are removed from the field.

(c) All personnel remain alert for downed power lines, trees, debris in roadways, flood areas, and other impediments that may obstruct traffic flow. Report phone and utility outages as they occur

to the Public Works Senior Watch Officer, ECC via 911 as the situation requires.

16. Vehicle Restrictions Due to Wind and Ice/Snow. The AIWW Bridge to Onslow Beach will be secured to vehicle traffic when sustained wind speeds exceed 39 knots (45 mph) or above. Additionally, vehicle movement is restricted as follows: Non-tactical vehicles are permitted prior to winds reaching 44 knots (51 mph); 45 to 87 knots (52-100 mph), tactical vehicles only; greater than 88 knots (101 mph), tactical vehicles only when responding to a life or death situation. Bridges and overpasses may be closed due to the accumulation of ice or snow that renders them unsafe in the judgment of the PMO and AC/S G-3/5.

17. Tropical Storm Conditions of Readiness. Due to the severe nature and duration of tropical cyclones (storms and/or hurricanes), Tropical Cyclone Conditions (TCCs) are set by the CG to prepare for an approaching storm. The proper execution of tasks at each TCC ensures that a progressive state of readiness is assumed by the Installation, its component's, and tenants. TCCs could impact training and operations here at Camp Lejeune and unit could/would be directed to depart the field as directed by MCIEAST-MCB CAMLEJ (G-3/5) per reference (q). TCCs are as follows.

a. TCC V. The potential for the occurrence of destructive weather is elevated but no specific system threatens the area. TCC V indicates a seasonal destructive weather readiness level, i.e., Atlantic Hurricane Season (1 June to 30 November) is in progress.

b. TCC IV, 72 Hours. A specific destructive weather system with sustained winds of 50 knots (58 mph) or greater is forecast to affect the area within 72 hours.

c. TCC III, 48 Hours. A specific destructive weather system with sustained winds of 50 knots (58 mph) or greater is forecast to affect the area within 48 hours.

d. TCC II, 24 Hours. A specific destructive weather system with sustained winds of 50 knots (58 mph) or greater is forecast to affect the area within 24 hours.

e. TCC I, 12 Hours. A specific destructive weather system with sustained winds of 50 knots (58 mph) or greater is forecast to affect the area within 12 hours.

f. TCC IC, Six Hours. A specific destructive weather system with sustained winds of 50 knots (58 mph) or greater is forecast to affect the area within six hours.

g. TCC IE. The area is currently experiencing a specific destructive weather system with sustained winds of 50 knots (58 mph) or greater.

h. TCC I, Recovery (TCC IR). The destructive weather system has passed the area, but safety and storm hazards remain. All orders, restrictions, and guidance established in previous TCCs remain in effect.

18. Wet Bulb Globe Temperature Index

a. Wet Bulb Globe Temperature Index (WBGTI) information can be found on the Automated Heat Sensor System (AHSS) web page (https://ahss.mcieast.usmc.mil), the Camp Lejeune website (https://ahss.mcieast.usmc.mil/Default.aspx), and the Marine Corps Base Automated Information System at (910) 451-1717. WBGTI readings may also 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°F, heavy exercises for personnel not acclimated shall be conducted with caution and under constant supervision.

(2) Yellow Flag. When the WBGTI reads from 85 to 87.9°F, strenuous exercises, such as marching at standard cadence, shall be suspended for troops who are not acclimated in their first two or three weeks. Outdoor classes in direct sun shall be avoided.

(3) Red Flag. When the WBGTI reads from 88 to 89.9°F, all physical training (PT) shall be halted for those troops who have not become thoroughly acclimated by at least 12 weeks of living and working in the area. Those Marines who are thoroughly acclimated may carry on limited activity not to exceed six hours per day.

(4) Black Flag. When the WBGTI exceeds 90°F, all nonessential physical activity will be halted for all units. The WBGTI readings are relayed hourly via radio to training units by BLACKBURN when the reading exceeds 90°F.

(5) Administrative Black Flag. A condition created when the Medical Facility cannot handle anymore patients or all emergency vehicles (ambulances) are off station. All training is suspended and will not resume until authorized by the RCO.

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

a. Civilians e.g. non-uniformed government employees, non-appropriated fund employees, guests, non-official contractors, and

civilian instructors are not authorized to be on any RTA, live fire range, waterway, or training facility unless explicitly approved by the unit's chain of command and Range Control by formal letter or in some case by ESRR with proper endorsement by the unit's chain of command for the special event. Range and Maintenance Contractors, Role Player, and other approved construction crews that are properly escorted if required that work directly with MCB CLNC are authorized as part of the contract/agreements. Requests for military dependents or civilians to participate in, or observing military training such as a "John/Jane Wayne Day" or "A Day in Their Boots" on a RTA or training facility aboard Camp Lejeune shall be submitted as a formal SRR from the command. The SRR may be signed "By direction". SRR's must be endorsed via the chain of command to the CG MCIEAST-MCB CAMLEJ (G-3/5) at least 30 working days in advance of the event. References (a) and (r) are the primary references.

b. Once approved, civilians, may be authorized to observe training by the Range Control Officer. Requests will be forwarded by E-Mail Special Range Request (ESRR). See Appendix F for specific instructions. Civilian observers must sign a Waiver of Liability before the event. A copy of the signed waiver of liability must be onsite while training is being conducted and kept on file for a minimum of three years by the command/unit. A sample of a Waiver of Liability can be found in Appendix E and on the Range Control website.

c. Once approved, civilians may be authorized to fire small arms and participate in training. They are specifically not authorized to fire any crew served weapons (i.e., M240B, MK-19, and M-2 .50 cal. machineguns, rockets/missiles, mortars, artillery howitzers), demolitions, participate in Force on Force, SESAMS or Fire and Movement type events. Civilians under the age of 18 years old may not participate in any live-fire, obstacle course, Combat Fitness Test, Marine Corps Martial Arts Program, wall climbing, fast roping, rappelling events or other high-risk training events.

d. Special Events (e.g., Capabilities Exercise [CAPEX]) and other assigned events as directed by the CG MCIEAST-MCB CAMLEJ for observation by dependents/civilians will be coordinated by special bulletin/message from the MCIEAST-MCB CAMLEJ (G-3/5).

20. Quiet Hours. Quiet hours will be in effect from 0001-0600 Monday through Saturday and 0001-1200 on 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 training devices that create loud noises such as the artillery simulators, GG-20 as examples.

a. SR-7 is not authorized to go "HOT" from 0001-1200 on Sundays and must go "COLD" at 2359 each night with all weapon systems /ammunition to include all small arms.

b. SR-10 is not authorized to go “HOT” from 0001-1200 on Sundays with the tank 120mm main gun/25mm/40mm and Training Practice TOW Missiles but is authorized for firing small arms .50 cal or below.

c. All demolition/explosive training will cease one hour prior to sunset unless approved by Range Control via a formal SRR/ESRR for small charges normally 1 Pound NEW or less up to 2359.

d. Requests to fire restricted weapon systems, demolition/ explosives and some pyrotechnics during quiet hours as listed above must be endorsed by the unit’s chain of command and forwarded to the CG MCIEAST-MCB CAMLEJ (G-3/5) via the Branch Head, RCB for approval at least 30 working days in advance.

e. 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 CG MCIEAST-MCB CAMLEJ (G-3/5). MCIEAST-MCB CAMLEJ (G-3/5) will release a naval message stating the Quiet Hours to be observed and ranges/GPs to be impacted that will be placed into “CHECK-FIRE” for the time period of the special event.

f. For additional guidance on Quiet Hours contact the MCIEAST-MCB CAMLEJ (G-3/5) Operations Department or the Range Control Branch (RCB).

21. Privately-Owned Vehicles, Weapons, and Alcohol

a. POVs

(1) Privately owned recreational vehicles, such as three and four-wheeled (ATVs), all-terrain vehicles, motorcross dirt bikes or trail/mountain bikes, bicycles of all types, dune buggies, go-carts, and any civilian regular four-wheeled vehicles are not authorized within any RTA or other training facilities.

(2) Range Control will provide Range Control POV passes to the owner of the POV on a case-by-case basis to support day-to-day activities/operations on a limited time period for SNCOs and above. E-5 and below must be escorted by a SNCO or above to sign out a Range Control POV pass unless pre-arrange with Range Control via E-Mail. Civilian contractors providing support to the operating forces must be escorted by the hosting unit to sign out a Range Control POV Pass unless pre-arranged with Range Control via e-mail/phone. Units are authorized to sign out a block of Range Control POV passes if pre-arranged and a listing of owners of the POV, rank, type of vehicle, tag number and state assigned, location(s) and dates needed that is provided to Range Control at least 24/48 hours in advance. Appendix K of this SOP will be used as a quick reference/guide for POV Parking within the Camp Lejeune training complex.

(3) 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. POVs cannot park within 100 meters of the firing line or on any live fire range, MP, GP where dud-producing ammunition is fired or stored. POVs are not authorized at Onslow Beach (Entire EB Training Area), ETA-2, Combat Town, TLZ Hawk, TLZ Falcon, Hawk FOB, and all MOUT sites. Units that have government arranged civilian rental vehicles as support vehicles must have a Range Control POV Pass issued, signed for, and properly displayed.

(4) Special events (i.e., CAPEX, Certification Exercise) POV use/parking instructions are published by special bulletin.

(5) Units that require the inclusion of POVs in their training to add realism, large events, etc., shall contact Range Control for special approval prior to the training event. Range Control POV passes must be issued and a POV Waiver of Liability and Assumption of Risk must be filled out and signed by the vehicle operator/owner.

b. Privately-Owned Weapons

(1) Privately-owned weapons are not authorized on any live-fire range except for designated/approved (MCCS) recreational firing events. Privately owned weapons are not authorized in any TAs unless associated with a scheduled hunting event within that approved TA.

(2) Firing of Privately Owned Weapons

(a) The firing of privately owned weapons and ammunition is considered recreational firing event and will be treated like any other live fire event at Camp Lejeune. Recreational firing on any military range requires approval from the Range Control Officer (RCO) unless it is a MCCS scheduled event. Recreational firing on any military range aboard Camp Lejeune requires an E-Mail Special Range Request (ESRR) with a listing of weapons types/caliber at least 10 working days before the date of the scheduled special event for approval by the RCO or a formal/approved Memorandum of Agreement (MOA) by all parties. The requesting unit must schedule the event in RFMSS as a recreational live fire event (Civilain Pistol/Rifle/Shotgun) and the range scheduled must support (SDZ) that caliber of civilian weapon /ammunition being fired, unit must provide a OIC/RSO/Corpsman/Safety Vehicle with Driver which must be in a military uniform for easy identification and the event must be signed for by the OIC.

(b) The following requirements apply for the use of recreational (Non-Hunting) privately owned weapons:

1. The owner of privately owned weapon (Handguns, Rifles, Shotguns, and Muzzle Loaders) will complete/conduct an

inspection of that weapon/ammunition to ensure it is functional and safe to operate/fire.

2. An Indentification Agreement and Waiver Liability (Appendix E) will be signed by the individual(s) requesting recreational firing.

3. The caliber of the weapon and the type of ammunition will not exceed specified range restrictions for that scheduled in RFMSS live fire range. The shooter will provide their own serviceable ammunition which must be declared safe and authorized for that range by the RCO/Unit OIC.

4. The firing of such weapons will not interfere with scheduled military training. Military training will always take priority over any recreational firing/event.

5. Military training and recreational firing will not take place on the same range at the same time.

c. Drugs and Alcohol.

(1) Drugs and alcohol to include mind altering prescription or non-prescription drugs of any kind are not authorized on any RTA or training facility.

(2) Consumption of alcohol during special military functions like Warrior Nights/Field Mess Night requires a formal SRR to the CG MCIEAST-MCB CAMLEJ (G-3/5) at least 30 working days in advance of the event.

(3) Events involving underage alcohol consumption with the training complex requires a separate formal letter to be routed via the S-1/G-1 for CG MCIEAST approval per ref (b) and a copy provided to Range Control.

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

a. Mailing address:
Commanding General
Attn: Range Control Branch (RCB) Building 1043 Duncan Street
MCIEAST-MCB CAMLEJ G-3/5
PSC Box 20005
Camp Lejeune, NC 28542-0005

b. Plain language message address:
CG MCIEAST-MCB CAMLEJ G3-5

c. E-Mail addresses:

(1) BLACKBURN: blackburnduty@usmc.mil

(2) Range Scheduling: lejeunerangescheduling@usmc.mil

d. Websites:

(1) MCIEAST-MCB Range Control Website. To access the Range Control CG MCIEAST-MCB CAMLEJ G THREE G FIVE Website, navigate to the Camp Lejeune official website at https://eis.usmc.mil/sites/mcbrcd/default.aspx (CAC Required) when asked for certificate, use the "Authentication" Certificate only.

(2) AHSS Website: https://ahss.mcieast.usmc.mil

(3) Weather Buoys: https://www.ndbc.noaa.gov/

e. Phone numbers (Commercial Area Code 910/DSN prefix 751). Table 1-1 contains various POCs at Camp Lejeune.

POC	PHONE NUMBER (910)
Branch Head, Range Control Branch	451-3932
Range Control Officer	451-1235
Range Control Operations Officer	451-1236
Range Safety Specialist	451-1240
Range Control Operations Chief	451-5803
Range Control IT Specialist	450-7966
Range Control Scheduling	451-3065/3066/4478/4274
FAX, Scheduling	449-9304
BLACKBURN/Fire Desk	451-3064/4449
Navy Boat Crew	451-5046/9577
Base EOD	449-0558/0334
MOUT Staff	451-2364/0752/0508/0753
Training Tank, Area 5	451-2027
Training Tank, Courthouse Bay	440-6005
GSRA, SR-46 (Range Control West)	449-6228/6205/6341/6324
FAX, GSRA	449-6227
WTBn S-3 Stone Bay	450-2918
HSTL Complex, GSRA, SR-12	449-4407/4405
Infantry Immersion Trainer	451-4282
Training Support Center TECOM Systems Support Officers	450-8014 450-8004

Table 1-1--Camp Lejeune POCs

Note: Phone numbers are subject to change. For additional information contact Range Control.

23. Applicable Map Sheet

a. All grid coordinates listed in this Order are referenced to apply to the current Camp Lejeune Military Installation Map, 1:50,000, WGS 84/NAD 83, Edition 5-NGA, Series V742S; sheet Camp Lejeune MIM, NSN 7643014255064 NGA Reference Number V742SCPLEJEUMIM. For information on the most current MIM, contact the RTAM Operations Officer.

b. Recommendations/changes to the Camp Lejeune Military Installation Map should be made to the Branch Head, RCB or the Branch Head, RDB, or the Director, Range and Training Area Management (RTAM).

c. Geographical Data. The GIS is an important asset available to trainers at all levels. Maps of all types and scales are available through the IGIR. Personnel authorized to train aboard Camp Lejeune may access the IGIR website at: https:www.geofieast.usmc .mil/pages/default.asp. The layers of data available in map format are extensive and include aerial photography. GIS products are “For Official Use Only.” For printed products such as maps, aerial photos etc., contact the GIS office, phone number (910) 451-9016, or the RSS at (910) 451-1240.

Chapter 2

Environmental Procedures

1. Purpose. The purpose of this Chapter is to inform trainers/commanders/units about their responsibility to protect the natural environment, stressing the important role each individual plays in ensuring no net loss in the capability of military installation lands to support unit training requirements. Ever increasing demands on training areas, and live fire ranges that support the readiness of military forces, require a strong commitment by all hands to protect and conserve natural and cultural resources found on the installation. Compliance with federal and state laws, regulations, and USMC policies related to integrating natural and cultural resource management with the military mission will sustain for future training use, healthy, natural, ecosystems. The information in this chapter incorporates sound environmental practices, and establishes procedures to ensure continued, proactive compliance with programs established for the management and protection of natural and cultural resources on military installations. These environmental management procedures will promote measures that prevent pollution, minimize waste, promote recycling, and protect and enhance our natural resources.

2. General. Everyone has a responsibility to preserve our natural resources. The following guidelines support the best utilization of MCIEAST-MCB CAMLEJ RTAs 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 ways to train and preserve the environment can be found in the current version of the “The Environmental Handbook for Trainers” and the “Quick Look Environmental Guide” and reference (s). These handbooks/guides are excellent sources of information and are issued by RCB and the Base Environmental Management Division (EMD).

3. Laws, Policies, and Plans

a. In an effort to preserve the environment, all users of Marine Corps Base, Camp Lejeune are required to comply with all federal environmental statutes, regulations, executive orders, and relevant local directives.

b. Any violation of the environmental laws can incur civil and criminal fines and/or incarceration.

4. Environmental Assessment. The National Environmental Policy Act (NEPA) requires that careful consideration 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. 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 shall consult the appropriate directives and then contact Range Control. For more information about environmental assessments contact the EMD, NEPA Section at (910) 451-4542.

5. Environmental Impact Review

a. Some training exercises on the ranges and TAs of MCIEAST-MCB CAMLEJ, require the submittal of a **Field Exercise Request for Environmental Impact Review (FEREIR)**. A blank version of the FEREIR is available online at: https://www.lejeune.marines.mil/Offices-Staff/Environmental-Mgmt/ Find "NEPA Documents and Forms" on the right and click "Field Exercise REIR" or by emailing Lejeune_REIR@usmc.mil. 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, digging, field mess, field showers, 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 field exercise. Any units that cannot access the website to download the form can e-mail Lejeune REIR@usmc.mil and request a FEREIR form via e-mail.

b. EMD will contact the responsible Officer-in-Charge/Unit Representative if any topics require clarification or additional information. A field visit/site survey by the EMD may be necessary. By signing the completed FEREIR the responsible unit representative must implement and comply with all remarks/stipulations developed by EMD for the specific exercise. These stipulations will be explained on the FEREIR form.

c. Exercises in garrison areas such as the cantonment areas (e.g. setting up tents, antennas, generators, lights, digging or ground disturbing activities, etc., in the unit's motor pool, in an open area between buildings or on grass/parking areas in garrison) require the submittal of a FEREIR if any answers on the FEREIR form are "Yes".

d. Contact Range Control at (910) 451-1240/1236 for guidance or direction.

6. Protected Species

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

(1) Red-Cockaded Woodpecker (RCW);

(2) Green Sea Turtle;

(3) Loggerhead Sea Turtle;

(4) Red Knot (Shorebird);

(5) Piping Plover;

(6) American Alligator;

(7) Rough-Leaf Loosestrife;

(8) Seabeach Amaranth;

(9) Eastern Black Rail

b. The waters off of Camp Lejeune provide seasonal habitat for several federally-listed species, including two species of sturgeon, leatherback sea turtles, and marine mammals, such as the West Indian manatee, and the Right Whale. Guidelines for boating and training use of the N-1/BT-3 Impact Area, Ranges E-1, G-7, and H-Range are given in Chapter 8 and the Range Cards.

c. Unit Commanders, Officers-in-Charge (OICs), Unit SNCOs/NCOs, OICs/RSOs, ECCs and ECOs will ensure strict compliance with applicable regulations regarding these protected species, as listed in reference (t) and this Order.

d. Site-specific information can be obtained from the MCIEAST-MCB CAMLEJ Environmental Conservation (ECON) Branch, EMD, at (910) 451-5063.

7. Endangered and Protected Animals

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

b. Some RCW nesting areas (i.e. cavity tree clusters) are marked with buffers (marked RCW clusters) within which certain training activities are restricted. Buffer Zones extend **200 feet** out from each cluster of cavity trees and 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

Camp Lejeune is demarking some RCW cluster areas in order to provide expanded training opportunity. Training restrictions directly related to RCW only apply within RCW clusters marked with white paint.

(1) In marked RCW clusters, cavity trees are marked with blue-white-blue painted bands. Units must be fully aware of this distinction; **some activities are allowed within the marked RCW clusters but cannot be conducted within 50 feet of the cavity tree. Table 2-1 can be used as a reference/guide.**

(2) Violators, and those in their chain of command, can be prosecuted under federal or state law for willful noncompliance. Prohibited actions under Public Law 93-205, Endangered Species Act of 1973, MCIEAST-MCB CAMLEJ/Base orders concerning the RCW and marked buffer zones include the following activities:

(a) Cutting or damaging of pine trees greater than 4 inches in diameter. Intentional cutting or damaging pine trees of any size should be avoided including driving through young, planted pine forests. Damage to RCW cavity trees, including: attaching wires, trip flares, or other devices.

(b) Digging fighting holes within 50 feet of the cavity tree. Heavy digging (mechanical), or establishing vehicle fighting positions, tank ditches, trench lines, fighting holes, or deliberate defensive positions.

(c) Firing of artillery/mortars within RCW buffer zone.

(d) Bivouacking in marked RCW clusters.

(e) Establishment of command posts or any defensive fighting positions occupied for longer than two hours within the RCW buffer zone.

(f) "Tree topping" antennas, girdling pine trees with communications wire, burying cable or climbing pine trees with tree gaffs within marked RCW clusters.

(g) Use of generators or portable lighting systems within marked RCW clusters.

(h) CS, Riot Control Agents (RCA), smoke pots, or High-Capacity (HC) smoke will not be initiated or set up within the buffer zone. Smoke generators and smoke pots will not be used within 200

feet of marked cavity tree. The smoke may drift through the marked RCW clusters.

(i) Establishing camouflage netting within marked RCW clusters.

(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 RCW, the destruction of its eggs, the destruction of its nesting sites, or the attempt to engage in such conduct. Any such event shall be reported to Range Control and the EMD.

TRAINING ACTIVITY WITHIN THE COLONY MARKED BUFFER ZONES	YES/NO
MANEUVER/BIVOUAC	
Hasty Defense, Hand Digging, only two (2) Hours Max, 18 inches or less	Yes
Hasty Defense, Mechanized Infantry/Armor 24 Hours	No
Deliberate Defense, Light Infantry 48 Hours	No
Deliberate Defense, Mechanized Infantry/Armor	No
Establish Command Post, Light Infantry 36 Hours	No
Establish Command Post, Mechanized Infantry/Armor 36 Hours	No
Assembly Area Operations, Light Infantry/Mech Infantry/Armor	No
Establish CS/CSS Sites	No
Establish Signal Sites	No
Foot Transit Through The Colony/Marked RCW Clusters	Yes
Wheeled Vehicle Transit Through The Colony/Marked RCW Clusters	Yes
Armored Vehicles Transit Through The Colony/Marked RCW Clusters “Includes tracked and light armored type wheeled vehicles” (Note 1)	Yes
Cutting Natural Camouflage, Hardwood Only	Yes
Establish Camouflage Netting	No
Vehicle Maintenance For No More Than two Hours	Yes
WEAPONS FIRING	
7.62 And Below Blank Firing	Yes
.50 Cal Blank Firing	No
Artillery/Mortar Firing Point/Position	No
MLRS/HIMARS Rocket Firing Position	No
All Others	No
NOISE	
Generators/Flood Lights/Portable Lights	No
Artillery/Hand Grenade Simulators	Yes
Hoffman Type Devices	Yes
PYROTECHNICS/SMOKE	
CS/Riot Agents	No

Smoke, Haze Operations Only, Generators Or Pots (Note 2)	Yes
Smoke Grenades	Yes
Incendiary Devices To Include Trip Flares	No
Star Clusters/Parachute Flares	Yes
HC Smoke Of Any Type	No
DIGGING	
Tank Ditches	No
Hasty Individual Fighting Positions, Hand Digging Only, Filled After Use (18 in. or less)	Yes
Deliberate Individual Fighting Positions	No
Crew-Served Weapons Fighting Positions	No
Vehicle Fighting Positions	No
Other Survivability/Force Protection Positions	No

Table 2-1--Training Activity within Marked RCW Clusters

Note 1. Vehicles will not get any closer than 50 feet of a marked cavity tree unless on existing roads, trails, or firebreaks.

Note 2. Smoke generators and smoke pots will not be set up within 200 feet of a marked cavity tree, but the smoke may drift through the 200 foot cluster buffer.

(3) The following actions are authorized in marked RCW clusters:

(a) Foot transit or patrolling through marked RCW clusters.

(b) Vehicular transit through the marked RCW clusters with wheeled and tracked vehicles **(No closer than 50 feet to any cavity tree within a marked cluster)**.

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

(d) Cutting hardwood foliage (arm diameter or smaller) is permissible for camouflage and concealment. Pine trees should not be cut down and used for camouflage.

(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).

c. Sea Turtles. Utilization of Onslow Beach from the sand dunes seaward is subject to the following restrictions during the sea turtle nesting season, 1 May through 31 October. EMD will be allowed access

to beach training area each morning and hourly during nighttime training between 1 May to 31 October. During the nesting season:

(1) Amphibious landing/training is authorized from grid point 908-268 southwest to grid point 883-251. Additionally, tracked vehicles are authorized in a 65-meter wide ingress/egress corridor (splash point trail) at 878-248. All other areas of Onslow Beach are subject to below listed restrictions during turtle nesting season.

(2) Night landing exercises shall be reduced to the minimum level necessary.

(3) Night lighting on the beaches shall be kept to a minimum or eliminated, if possible.

(4) Vehicular traffic on the beaches is restricted to the tidal zone except within the identified operating area.

(5) EMD must be notified immediately at (910) 451-5063 upon discovery of any sea turtle nest that has not been marked/protected to ensure its successful relocation.

(6) It is unlawful to take, transport, or possess any protected sea turtle or the parts, eggs, nests, or nest site to include protective cages and signs.

(7) Any night training exercises occurring on Onslow Beach between 1 May and 31 October will be coordinated through EMD via Range Control.

(8) Digging, excavating, or building tank traps on the beach is prohibited.

(9) All Beachmaster camps shall be located off the beach itself. Lighting shall be the minimal necessary to comply with safety requirements and training needs.

(10) If equipment is to remain on the beach overnight in the North Tower area, or north of the amphibious landing beach, no element placed parallel to the surf will exceed eight feet in length and sandbags or other solid barriers will surround the object to prevent entanglement of nesting female turtles.

(11) Any bunkers excavated for aerial bombing simulators will be covered with plywood and sandbags if left overnight.

(12) Egress from the beach to the road behind the sand dunes shall be at designated egress routes. Vehicular traffic is prohibited on the sand dunes at all times.

(13) Tampering with sea turtle nests and protective cages is prohibited. A wire cage surrounds all known nests with signs posted reading:

LOGGERHEAD TURTLE NEST
DO NOT DISTURB
or
ENDANGERED SPECIES NEST
DO NOT DISTURB

(14) During the sea turtle nesting season (May 1-October 31), use of the E-1 training area will be subject to the following protective measures for nesting female and hatchling sea turtles: Specific measures must be implemented to prevent disturbance to nesting females or hatchlings. These include the following:

(a) Sandbag walls will be placed around any vehicle or equipment left on the beach overnight.

(b) Vehicle traffic, at less than 10 mph, will be restricted to below the high tide line.

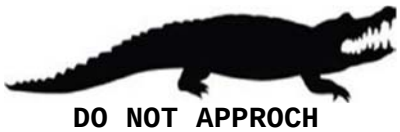
(c) The training unit will be responsible for smoothing the beach and removing debris once the exercise has concluded.

(d) 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) Turtle nests will be removed from this area by EMD.

d. American Alligator. The American alligator is considered recovered, but is still listed as threatened due to similarity of appearance to the American crocodile. It is illegal to feed, harm, harass or poach an alligator in North Carolina. While they rarely pose a threat to humans, alligators can become an issue when people either intentionally or unintentionally feed them Camp Lejeune wetlands provide a suitable habitat for alligators in both fresh and salt-water estuarine areas. Precautions shall 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:

AMERICAN ALLIGATOR



DO NOT APPROCH
DO NOT FEED

DO NOT DISTURB

e. Manatees. Manatees have occasionally been sighted in the waters adjacent to Camp Lejeune. 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 shall be alert for possible manatee encounters. If a manatee is sighted, immediately slow to a no-wake speed. Allow sufficient room for the manatee to safely pass and maneuver cautiously away from the encounter area. Do not approach the manatee. Report all sightings to the EMD at (910) 451-5063.

f. 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 EA Training Area are closed to vehicle traffic with signs reading:

COLONIAL WATERBIRD AND
SHORE BIRD
NESTING AREA
VEHICLES PROHIBITED

g. Bald Eagle

(1) The bald eagle is no longer listed by the U.S. Fish and Wildlife Service as threatened or endangered. There are currently six active bald eagle nests on Camp Lejeune. The nests are located at the following grid points:

(a) Sneads Creek Nest – 803-297

(b) Traps Bay Nest – 857-274

(c) TLZ Eagle Nest – 783-415

(d) G-10 (MP-6) Nest – 952-354

(e) Freeman Creek Nest – 924-324

(f) Hospital Point – 834-395

(2) In accordance with Camp Lejeune’s permit under the Bald Eagle and Golden Eagle Protection Act, no training activities, either on foot and/or in wheeled and tracked vehicles may occur within 100 feet of any active bald eagle nest (1 October to 15 May or until the eaglet(s) fledge, which may be before or after 15 May). This restriction does not apply to established roads that are currently

being used. Any blank ammunition and/or artillery fire must be directed away from any bald eagle nest. 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, not yet documented. Bald Eagle sighting occurring from January – June shall be reported to EMD personnel at (910) 451-5063.

h. Eastern Diamondback Rattlesnake and other Snakes. Eastern Diamondback Rattlesnakes are a state-listed endangered species and are protected by North Carolina law. Do not harass or kill any snakes. Note that the vast majority of snakes seen on Camp Lejeune are non-venomous/non-poisonous.

i. Marine Mammals. The waters surrounding Camp Lejeune are inhabited by marine mammals, including dolphins, whales, and porpoise. 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 N-1/BT-3 Impact Areas, Ranges E-1, H-1, G-7, precautions shall be taken to avoid harm to marine mammals.

(1) Prior to commencing live-fire exercises in the N-1/BT-3 Impact Area, an air sweep must be conducted to ensure there are no marine mammals and sea turtles (in addition to civilian boats) in the impact area.

(a) If a marine mammal or sea turtle is spotted in the N-1/BT-3 Impact Area, or in the SDZ/WDZ of the weapons being fired or dropped, all live-fire operations shall be halted. Firing cannot commence until the marine mammal clears the impact area.

(b) Lookouts with binoculars/night vision devices will be placed in the Bear and North Onslow Towers for safety purposes. These lookouts, as detailed in the range cards, shall maintain a marine mammal watch and will “CHECK-FIRE” the range should any marine mammal be detected in the impact area.

(c) All marine mammal sightings associated with range sweeps shall be documented by noting date, time, number, species, location, and direction. Any action taken related to suspension of training activities will be noted. If no marine mammal or other protected species (e.g., sea turtles) are sighted, a negative report shall be submitted with all of the above information except species data. If a whale or other marine mammal is spotted within the SDZ/WDZ of the weapons being fired or dropped all live-fire operations shall be halted. Live-fire will not resume until the marine mammal or sea turtle clears the impact area.

(d) N-1/BT-3 Impact Area, G-7, and H-1, are the only ranges from which training practice projectiles may be fired resulting in impacts within 200 meters of the AIWW.

(e) 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.

(2) Operating Procedures and Collision Avoidance

(a) While in transit, or when whales have been sighted, vessels will, use caution, and proceed at a “safe speed” and take proper and effective action to avoid a collision with any marine animal.

(b) Vessels will maneuver to keep at least 1,500 feet. (460 meters) away from any observed whale and avoid approaching whales head-on.

(c) Where feasible and consistent with mission and safety, vessels will avoid closing to within 200 yards (183 meters) of sea turtles and marine mammals other than whales.

8. Endangered Plants

a. Two Federally-protected and two other “species of concern” are found aboard Camp Lejeune. It is unlawful to remove or possess federally-listed plants. Cutting, digging up, maliciously damaging or destroying federally-listed plants or species of concern is a violation of the laws/regulations protecting these species.

b. Rough-Leaf 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 signs reading "Restricted Area Endangered Species Site." The restricted area will extend 100 ft. from the outermost plant. The following restrictions protecting the Rough-Leaved Loosestrife apply:

(1) No off-trail vehicle use.

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

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

(4) No bivouacking or extended occupation (2 hours or less).

c. Seabeach Amaranth. A federally-listed threatened plant found in the beach over wash 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.

d. Venus Flytrap. The Venus Flytrap is a rare and easily identifiable state-protected species. Digging up or poaching Venus Flytraps is prohibited and carries a serious fine per plant.

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

9. 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:

a. The use of any vehicle off designated roads/tank trails.

b. Any earth disturbing activity such as excavating or digging fighting holes/fighting positions.

c. Bivouacking and the establishment of command posts.

10. Land and Wildlife Resource Issues

a. Land Use

(1) Range Control will notify trainers of any TAs temporarily closed for soil conservation and erosion repair. These areas will also be posted with signs, fences, or barricades. Personnel shall stay out of these areas.

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

b. Wildlife Resource Use

(1) Camp Lejeune supports a variety of recreational activities in areas not scheduled for training use. These activities include

fishing, hunting, trapping, fire wood cutting, shell gathering, scouting, and bird watching.

(2) RCB provides a list of all unscheduled TAs to the Conservation Law Enforcement Officer (CLEO) for recreational use such as hunting. When conducting training, units must ensure they stay within the areas they have scheduled in RFMSS to ensure the safe deconfliction of their training with recreational activities.

(3) Training units must avoid wildlife food plots (small, tilled/planted clearings marked with signs). Units must also avoid the mowed, maintained shorelines around managed fishing ponds.

c. GSRA Wetland Mitigation Bank: No tactical vehicles or any type of ground disturbance is permitted within the GSRA Wetland Mitigation Bank boundaries located within the ST and SV training areas. 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.

11. Generators and Fuel Storage Areas

a. When an expeditionary refueling point is established, all fuel containers, hoses, nozzles, and connections will have temporary containment systems in place and will be inspected daily, using the "Daily Above Ground Storage Tank/Container Storage Area Inspection Log" to detect fuel leakage. Fuel Tanker vehicles shall be parked in such a manner as to avoid the possibility of spilled fuel entering natural or man-made drainage systems. Tanker vehicles will have spill containment under them while staged. Refueling operators will stay with the vehicle during the entire field exercise. Spill kits will be located next to the secondary containment. Permanent secondary containment structures are provided at some of the training areas.

b. Generators and floodlights will be placed in secondary containment. The secondary containment will be set up properly, so as to contain any spill that might occur. Spill kits will be located next to the spill containment site. Generator sites that are operational during the night will be checked hourly for fuel leaks.

c. Accumulated, used, absorbent pads will be collected in properly marked containers.

12. Spill Prevention, Containment, and Clean Up

a. Prevention of oil and HAZMAT spills and the resulting environmental damage is the responsibility of all commanders.

b. Personnel onsite shall attempt to contain the spill by using spill equipment or by erecting a sand/earthen dam around the perimeter of the spill to prevent the spill from entering bodies of water or a storm drain.

c. Spill Notification. The OIC/RSO/Unit Commander will call 911 /FESD first and notify BLACKBURN second.

d. Keep unnecessary/unauthorized personnel out of the spill area.

e. The unit will provide personnel and equipment to support spill containment and clean up. Contaminated spill pads will be collected and placed in properly marked containers with a lid (i.e. yellow overpacks) for turn-in to the EMD Resource Conservation and Recovery Section (RCRS).

f. Leaking Equipment. Any vehicle, generator, or other equipment identified as leaking anti-freeze or other petroleum oils, transmission fluid, hydraulic fluid, fuels, or lubricants (POL) will be immediately removed from service and the TA. All releases of POL/HM/HW within the training complex shall be called in to the FESD at 911 and followed by notification to BLACKBURN. Place drip pan or other catch basin under the leaking equipment until it can be removed from the TA. Units will capture incidental leaks by placing absorbent matting under the area of discharge. Unit personnel are responsible for notifying the Unit ECO and transportation of the contaminated matting to the EMD RCRS at Building 977, (910) 451-1482.

g. When there is a spill, digging shall not occur until advised to do so by the unit HAZMAT representative. The EMD will evaluate the spill site to determine if soil shall be dug up or biologically remediated in place.

13. Off-Road Vehicle Movement

a. 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”. Personnel on foot shall 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 TAs, i.e., TLZs accessible by tank trails, free play tracked vehicle TAs designated by Range Control and RTAM Division (ETA-2/IF TA, Combat Town/TLZ Hawk/HF TA).

c. Tracked vehicles are to avoid wetlands and marked RCW areas.

d. Trench systems and tank traps are authorized in designated free play tracked vehicle areas after approval by Range Control and the EMD.

e. Trees will not be knocked down by any military vehicle unless approved by RTAM Division, RCB, and EMD in writing. This does not apply to the designated areas within the “Tactical Vehicle Maneuvering Areas” (TVMAs) of the GSRA.

f. 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.

14. Fighting/Mortar Positions

a. Fighting holes (One/Two Man) are authorized in scheduled training area and authorized mortar positions without additional permission. Trench systems, tank traps, hull-down positions for tanks and artillery, and other fighting positions are an important part of training and are authorized at ETA-2/GP-23. However, all of the aforementioned must be refilled and leveled out after 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. Digging In

(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 cut tank traps, dig fighting holes, or create obstacles in TLZs/GPs designated re-forested areas. Digging mortar pits is authorized on official MPs. Digging within 50 feet of the treeline in any TLZ would be allowed if approved by Base EMD and Range Control.

c. Groundwater-monitoring wells are located throughout the TAs and may be encountered during training. If a monitoring well is inadvertently damaged, immediately contact BLACKBURN and the EMD EQB at (910) 451-5068 for further instructions.

d. Excavating or digging within the marked boundary of an archeological site is prohibited unless expressly approved by the Archaeologist at (910) 451-7230/5063.

15. Laying Cable and Field Wire: Use of communication wire and concertina/barbed wire is essential during training, but when these

wires are left behind, they become hazards. When using cable and field wire during training, units must:

a. 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.

b. Double check to ensure all trip wires, especially those connected to pyrotechnic training devices have been recovered. It is the using unit's responsibility to remove training devices such as flash bangs and trip flares from the TA. These items must be turned in as required.

16. Cutting Brush and Trees

a. When cutting brush and hardwoods for camouflage, do not cut or knock down any standing trees. Do not cut any hardwood tree limbs larger than the diameter of your arm. Cutting or damaging of pine trees of any size is prohibited anywhere on-base, except by permission of EMD, or in cases of a hazard to human safety.

b. Units are prohibited from cutting trees by explosive methods or chainsaws without a SRR and FEREIR. Tree cutting requests must be submitted to the EMD (via a FEREIR), and must indicate the number, size, and physical location of the trees except in the TVMAs of GSRA.

17. Archeological Sites

a. Many archeological sites are located throughout the TAs of Camp Lejeune. Reference (u) 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 OF THE CG MCIEAST-MCB CAMLEJ

or

SENSITIVE CULTURAL AREA
RESTRICTED ACTIVITY
NO DIGGING
NO TRACKED VEHICLES OFF of
DESIGNATED TANK TRAILS
Reference: Base Order 5090.8
Call EMD/ECON at (910) 451-5063/7230
for further information

b. 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.

c. 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 cultural resources.

(3) Operations or projects on or around marked sites require approval from the Archeologist. For clarification of training impact adjacent to these areas, contact the EMD at (910) 451-5063/7230.

d. If human remains are discovered in any RTA or facility, immediately stop all ground disturbing activities to avoid further disinterment. Notify BLACKBURN/Range Control as required.

e. The collection of archeological material (i.e., stone tools, pottery, and bones) is prohibited on Onslow Beach by reference (u).

18. Field Waste Disposal

a. Field mess facilities generate four types of waste: liquid, garbage, rubbish, and human waste. Disposal of this waste must not create conditions that endanger personnel health. The OIC/RSO has a responsibility to supervise and inspect RTAs and training facilities to ensure they are policed properly and field liquid waste disposed of properly by the following means:

(1) Via the Camp Lejeune Waste Water Treatment Plant (WWTP) free of charge. Collect all gray water in tanks or bladders and contact the WWTP staff at (910) 451-7190, extension (ext.) 231, ext. 232 ext. 224, or the 24-hour operator at ext. 225 for coordination. The unit must arrange for hauling to the disposal point.

(2) Utilize one of the existing leach fields at TLZ Bluebird (Grid 870-264), TLZ Canary (Grid 849-283) or Mile Hammock Bay (Grid 865-263). Monitor the flow into the leach field to avoid overspill. Do not dispose any type of hazardous liquids into the leach field.

(3) Collect all gray water in tanks or bladders and contract for disposal with a portable toilet service.

(4) Construct a soakage trench if the site conditions allow for proper treatment of the wastes. Coordinate with the EMD for authorized disposal of grey water wastes via soakage trenches at (910) 451-5063.

(a) 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 one 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.

(b) A grease trap must be placed between the field mess or shower unit and the soakage trench as per reference (v). (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.

(c) 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.

(d) Closing the soakage trench:

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

2. Mound the trench with at least one ft. of compacted dirt.

3. Spray the mound with an approved residual insecticide.

4. Call Preventive Medicine Unit, Naval Medical Center Camp Lejeune, at (910) 451-5707, to inspect soakage trenches before use and after closing.

b. Garbage. Garbage is solid/semi-solid wet waste resulting from shower units, food preparation, cooking, and serving as per reference (w). 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 such as Meals Ready-to-Eat (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 the 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 based on what they have scheduled in RFMSS.

c. Rubbish/Trash. Commanders of using units are responsible for policing up all trash on Camp Lejeune's RTAs and training facilities that are used by that unit. Obliterate all marking on A&E material prior to turn in QRP, DLA or landfill.

d. Human Waste. Bivouac sites established for longer than three days require sanitary chemical toilets. Requests are submitted through normal unit logistics channels for portable toilets. For planning purposes one portable toilet (Port-a-Johns) 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 the EMD for site evaluation and consult local preventative medicine units for guidance on using slit trenches and four holers. "Cat Holes" are permissible in remote TAs but are not authorized in RCW areas and wetlands. Units must ensure human waste sites are closed properly and all holes are filled in.

e. Solid Waste Management

(1) Due to animals and wind, which will scatter trash creating an additional police problem, stockpiling refuse for later removal is not authorized. Open burning of solid waste as a method of disposal is prohibited.

(2) Unused MRE heaters will be turned-in to the EMD RCRS during the units next Curbside appointment.

19. HAZMAT, HAZMAT Spills, and Spoil Areas

a. HAZMAT. Spills of HAZMAT, fuels, and POLs of any quantity on land and water must be reported promptly to the ECCC by telephoning 911 first and then Range Control (BLACKBURN on 34.70 MHz or (910) 451-3064). After reporting the spill, the unit responsible will follow guidance received from the FESD or senior onsite EMD representative,

assist in clean-up of the spill and management of the recovered product/contaminated soil. Contaminated soil must be dug up by the spilling unit and placed in an approved container with a lid (i.e. yellow overpacks). Unit personnel are responsible for notifying the Unit ECO and transportation of the contaminated soil to the EMD RCRS at Building 977, (910) 451-1482. In the event that the contaminated soil is taken back to the unit the ECO will turn-in the contaminated soil during the units next Curbside appointment. Unit personnel will coordinate with their Unit ECO and will be responsible for the transportation of the contaminated soils to the Camp Lejeune Hazardous Material/Hazardous Waste Consolidation Site at Building 977/S-962, (910) 451-1482. Higher authority must arrange contract spill response for any spills that could potentially impact the Atlantic Ocean, AIWW, New River, or salt marshes.

b. Unserviceable Batteries. Properly manage batteries according to existing environmental standard operation procedures. ECOs may coordinate with EMD RCRS at (910) 451-1482 for turn-in of all communication batteries directly from field operations. Batteries shall not be buried in the RTSs.

c. Fuel Storage Restrictions. Units wishing to establish tactical fuel farms must submit a FEREIR to the EMD NEPA Section. Range Control and the EMD must approve locations for tactical fuel farms. Use of containers with a 55 gallon or greater capacity must be coordinated with the Environmental Compliance Branch Military Liaison at (910) 451-9660/9115 and must be placed within a secondary containment berm. Each storage or use area must be marked, per reference (x), have a current and properly posted spill plan, have appropriate spill response, and communication equipment immediately available at the site. A complete list of requirements will be provided by the EMD. Contaminated oil, fuel, and anti-freeze shall be stored in properly marked containers and returned to the unit motor pool or the unit must have coordinated with EMD RCRS at (910) 451-5264/3124/5478 for removal from the field.

d. Spoil Areas. The spoil containment berm located from Grid 8677-2616 to 8674-2619 to 8647-2638 to 8680-6393 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 875-350) contains dredging spoil from the French Creek area. It is also a hazard area and is off-limits.

20. Beach Operations

a. Any marine environment is fragile and caution is required to ensure that the balance of nature is not disturbed. Camp Lejeune,

with its ocean beaches, AIWW, inlets, marshes, and bays is no exception.

b. Camp Lejeune's ocean beaches are important training and recreation assets. Preservation of breaches requires the following measures:

(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 indicated by poles marked with black and yellow striped signs.

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

(4) Leave the sand fences alone, as 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) Removing any beach sand for other activities is not authorized.

(9) The OIC 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.

c. Rules regarding recreational vehicle use of the beach are covered in reference (y), Use of Off-Road Recreational Vehicles (ORRVs). Copies of the Order may be obtained by calling the Environmental Conservation Branch at (910) 451-5063 or it can be found on the MCIEAST-MCB CAMLEJ Adjutant website at: http://www.mcieast.marines.mil/StaffOffices/Adjutant.aspx. Beach permits and stickers are required prior to driving ORRVs on the beach. These can be obtained at the CLEO at (910) 451-2196 or at the Onslow Beach Caretaker's (MCCS) office at (910) 450-7502.

d. As the hydrography of Onslow Beach continues to change and adequate beach landing zones migrate, training exercises may be conducted anywhere on Onslow Beach, but are generally restricted to the area from 879247 Northeast to 910270. Exercises in the EC Area require a minimum of 180 days notice if MCCS operations may be impacted. The RCO 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 (EA Training Area). Is available from November-March, when more maneuver or landing area is required.

(2) Special-use Area #2 (E-1 Training Area). The area 500m northeast of Onslow Beach North Tower is available for live-fire exercises (Stinger/Avenger shoots, etc.) following coordination with Range Control.

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.

f. There are two beach access points for ORRVs: (Grid 901264) and (Grid 883-251), per reference (y).

Chapter 3

Scheduling

1. General

a. Range Control Scheduling. The Range Control Scheduling Office (located at Range Control, Building 1043, Room 110 on Duncan Street) is the office responsible for processing all requests for use of RTAs, and training facilities submitted via the Range Facility Management Support System (RFMSS). Hours of operation are 0730-1600 Monday thuough Thursday and 0730-1500 on Fridays. The scheduling department is closed on weekends and holidays. All tenant and non-tenant commands training aboard Camp Lejeune must have RFMSS accounts. The scheduling office reviews, approves, or disapproves all training requests through RFMSS. The Range Scheduling Office is the primary scheduling and approval agency for all training aboard Camp Lejeune with the following exceptions:

(1) The rifle and pistol ranges located at the Stone Bay Rifle Range Complex (SBRC) are scheduled through the CO, Weapons Training Battalion, Stone Bay (S-3). The telephone number is (910) 440-2917/2918/2687 and FAX (910) 440-2642. Weapons Training Bn will forward all coordinating e-mails/names (OIC/RSO) to Range Control Scheduling section.

(2) All EOTG Ranges within the EOTG Complex must be scheduled in RFMSS by the S-3 EOTG II MEF only. To request use of EOTG ranges a Training Area Request (TAR) requests must be coordinated through the OIC, EOTG (S-3) at telephone number: (910) 440-2982/2676/2871 and FAX (910) 440-2983 directly. EOTG will forward all coordinating e-mails names (OIC/RSO) to Range Control Scheduling.

(3) All ranges within the MARSOC Complex must be scheduled in RFMSS by the MRTC S-3. To request use of MARSOC ranges a Training Area Request (TAR) will be submitted to the Marine Raider Training Center (MRTC) S-3 Operations Training Specialist at (910) 440-1188 or the Training and Operations Planner at (910) 440-1187. MRTC will input the request into RFMSS and notify the requesting unit’s S-3 of the scheduling of the range and the RCNI number once the request is approved by the range control scheduling section. MRTC will forward all coordinating e-mails/names (OIC/RSO) to the Range Control Scheduling section.

(4) Only the Range Control MOUT Staff will schedule MOUT facilities within RFMSS, which includes: Lejeune MOUT, Enhanced MOUT (E-MOUT), Mobile MOUT, Farm House, Mobile MOUT Live Fire, MOUT Sniper Tower, MOUT UTFs, MOUT Tunnel Complex, MOUT Hotel, Forward Operation Base Hawk (FOB Hawk), FOB MOUT Lejeune, MOUT Live Fire Shoot Houses, Combat Town, TLZ Raven, TLZ Pigeon, and ALZ-28. Units desiring to

train in any of the MOUT facilities shall contact the MOUT staff at (910) 451-2364/0752. All MOUT Facilities must be scheduled in RFMSS and signed for at Range Control.

(5) Using Units will schedule the use of the Lejeune and Geiger Gas Chambers via RFMSS. Units desiring to use the Gas Chambers will be required to have the proper number of 5702s/5769s/5711s SSgt or above with a current OIC/RSO card to conduct CS training. All 5702s/5769s/5711s must be listed on the Unit's Command Certification Letter as CBRNE military occupation specialties (MOS) regardless of rank.

(6) Training Tank Staff will schedule use of the Area 5 training tank at 451-2027/Building 540 and Courthouse Bay Training tank at 440-6005/Building BB330.

(7) MAET (Modular Amphibious Egress Trainer) can be scheduled by contacting the Support Coordinator, MAET at (910) 451-4963 Building 234.

(8) Ground Training Simulators located at Building 1046 SimCenter Road will be scheduled by contacting the support staff at (910) 451-7699. These include the HEAT, ISMT, MET, SAVT, CCS, ODS, and like type systems located at MCAS New River.

(9) The Indoor and Outdoor Infantry Immersion Trainer (IIT) will be scheduled by the Support Staff at (910) 451-4282 at Building 904.

b. All scheduled training is published via AHMS/Naval message in the Range Firing Warning and Airspace Utilization Order (RFWO) and is posted on the Range Control website. The RFWO is transmitted one working day prior to the scheduled event or the last working day prior to the two day weekends and federal holiday periods. Only the events promulgated in the RFWO message are authorized in the RTAs and training facilities. Only the RCO and RCOO are authorized to change the RFWO after it is transmitted/published. Short notice contingencies will be addressed on a case-by-case basis after notification by the unit's higher headquarters.

c. RFMSS. In accordance with reference (a), RFMSS is the centerpiece of range management and scheduling and is the approved USMC RTA scheduling and management tool. This system provides a standard, integrated, web-based program that installation RTA management personnel can use to schedule training live fire ranges, training areas and training facilities for users and manage USMC RTA property usage. RFMSS supports all major range management processes, to include unit/organization RTA requests, subsequent Range Control approval/disapproval action, and the automation of range fire desk operations. Units can view the two week calendar, identify conflicts,

known restrictions, and specific requirements as well as priority user for all RTAs and training facilities.

(1) RFMSS Requests. The scheduling office utilizes RFMSS to schedule, identify conflicts, track, and report utilization of all RTAs, training facilities, and all ammunition expenditure by DODIC, airspace, and sea space aboard Camp Lejeune. RFMSS requests will be accepted no later than two working days (48 hours) prior to the first day of the scheduled training event.

(2) Unit Responsibilities. RFMSS terminals are normally located in all requesting unit operations and training S-3/G-3/G-7 sections. Using units must have primary and alternate trained RFMSS clerks. Range Control Schedulers will also provide other support and will entertain all reasonable questions, but **will not** schedule events for units or commands.

(3) RFMSS Training. Range Control conducts basic RFMSS training once a month. Information regarding class schedule and location will posted on the RFMSS Dashboard. The key to successful training at Camp Lejeune is proper unit training management, planning early, properly deconflicting all known conflicts, timely scheduling in RFMSS by the using units and following up all RFMSS Requests.

2. General Scheduling Information

a. Requests for RTAs and training facilities will be submitted to Range Control, per the procedures stated below:

b. 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 Camp Lejeune, unless otherwise directed.

c. All Reserve Units regardless of branch/service and Army National Guard Units must submit scheduling requests for the use of the Camp Lejeune Range Complex through the Deployment Processing Command/Reserve Support Unit-East (DPC/RSU-E), Force Headquarters Group (FHG), Marine Corps Forces Reserve via a Feasibility of Support (FOS) message through AMHS/Naval message. The DPC/RSU-E Operations section is located in Building 313 and the telephone number is (910) 451-2740/0547 or DSN: 751. All administrative procedures, RTA regulations, and scheduling priorities in this Order/Range Cards will apply.

d. Other civilian and military services, organizations, and external agencies such as other active duty military services, Federal, state, and local agencies must request approval to train aboard Camp Lejeune from MCIEAST-MCB CAMLEJ G-3/5 via a formal

Feasibility of Support message to **Command, Marine Corps Installations Command (COMMCICOM) whose plain language address (PLA) is COMMCICOM G-3-5-7 and CC the CG MCIEAST-MCB CAMLEJ G-3-5**. If military personnel or equipment support is requested, it must also be sent to Commander, Marine Forces Command PLA is COMMARFORCOM G-3-5-7 and CC the CG, II MEF G-37. The request must include the type of training to be conducted, listing all required RTAs and training facilities, restricted airspace, adjacent waters and any logistics support needed. Upon approval, a "Liaison Officer" from that unit will be assigned to MCIEAST-MCB CAMLEJ (G-3/5) and Range Control. The "Liaison Officer" from the requesting organization or agency will provide direct liaison between the requesting unit of the agency, Camp Lejeune, and other tenant commands as required. All administrative procedures, RTA and training facility regulations, and scheduling priorities are contained in this Order. TA Requests (TARs) from visiting commands will not have priority over tenant commands unless directed by higher headquarters.

3. Scheduling

a. Units may schedule live-fire ranges, training areas, or any other training facilities up to 90 days in advance of the planned training activity. Certain organizations and events are approved for additional lead time per HHQ direction:

(1) Major joint or combined exercises (120+ days)

(2) USMC formal MOS-producing schools (120 days)

(3) Other Services, tenant formal schools (115+ days)

(4) Pre-deployment training/contingency training (90 days)

(5) Special training approved by CG, MCI-EAST; and testing, research, development activities (90 days)

(6) Normal unit training (90 days)

(7) Sports and recreational activities (90 days)

b. In general, RTAs and training facilities may be requested as late as 1200 two working days (at least 48 hours or more) prior to the planned use.

c. The following must be scheduled at least 14 days prior to use to allow publication of a Notice to Mariners (NOTMAR) and complete coordination with external agencies, per the Code of Federal Regulations:

(1) Ranges impacted by the AIWW, the N-1/BT-3 Impact Area, and training or operations in the Atlantic Ocean Sector, to include Onslow Bay.

(2) Military dive/Self-Contained Underwater Breathing Apparatus (SCUBA), open water swims, helo casting, and CAS (into the N-1/BT-3 ranges) operations/training.

d. Refer to the Chapter 3, Section 8 (NOTAM) for Parachute Operation (PARAOPS) requirements.

e. Requests to use artillery gun and mortar positions (MPs), for which an approved Surface Danger Zone (SDZ) is not on file with Range Control, or to establish new positions, must include a survey data card computed by the 10th Marines Regimental survey section. All SDZs will be constructed in conjunction with range control staff. Requests and accompanied survey results will be submitted to the Branch Head /Range Control Officer, RCB at least 10 working days in advance of the first day of training.

f. During hunting seasons, all unscheduled TAs are opened to the CLEO for hunting. “Recreational Sheets” listing the open hunting areas (TAs not scheduled) are sent to the different agencies aboard Camp Lejeune the day prior.

g. Cancellations will be made via an Electronic Training Area Request (ETAR). Every effort must be made to ensure cancellations are made in a timely manner.

h. A no show is a failure by the unit to occupy a scheduled RTA or submit a cancellation within 24 hours. Units that cancel scheduled RTAs or training facilities must notify Range Control Scheduling Department during normal working hours with a ETAR or BLACKBURN after working hours of the cancellation.

i. A unit must occupy a contractor-supported range with a responsible unit representative (not necessarily the OIC/RSO) within one hour of scheduled "HOT" time or the range will be cancelled for that day.

j. A request for an extension may be granted if notified within the designated time requirements. During normal working hours Range Control requires at least a two hour notification. Extensions can be granted after normal working hours, weekends, and holidays after BLACKBURN receives authorization by the approving authority. A contractor must be present at all times during scheduled live-fire on contractor-supported ranges unless pre-arranged with the scheduling department and updated in RFMSS.

k. Refer to Chapter 6 for Base EOD support requirements.

l. RTAs and facilities may be used by more than one unit, on the same day if scheduled properly and deconflicted by time or space, by either unit. Co-use is encouraged when the following coordination, restrictions, and conditions are met:

(1) Co-using unit will contact the original requesting unit and coordinate use of a RTA or facility. Original requesting unit will send an e-mail to Lejeune 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. The original scheduled unit will provide the OIC/RSO and the Co-using unit or units on that scheduled range will also have its own OIC/RSO/ Corpsman and be communicating with BLACKBURN.

(2) MOUT facilities have restrictions emplaced on them for both single and multiple units conducting training based on the number of Marines, vehicles to be used, training activities, and training requirements. MOUT facilities are deconflicted by event, area needed, or the number of building/structures to be used so that multiple units can use the limited resources. These facilities are deconflicted and scheduled by the MOUT staff based on the training unit requirements.

m. The scheduling of a TA(s) within RFMSS will not include any of the other training facilities that may be located within the borders of that TA, such as MOUTs, FOBs, AFS Sites, TLZs, parachute PDZs, GPs, MPs, OPs, or live-fire ranges. Each facility within a training area must be scheduled and signed for separately.

n. For events that include both air and ground support personnel when there will be personnel on the ground supporting in a TLZ (externals, SPIE, rappelling, troop lift, hoisting operations, UAS Operations, etc.), the TLZs must be scheduled and signed for prior to training being conducted. If the ground unit is being supported, they will schedule and sign for the TLZ. If the ground unit is supporting rotary-wing aircraft operations, the squadron conducting the event will schedule and make comments in RFMSS listing the supporting ground unit, supporting squadron, and who will sign for the TLZ.

o. All live-fire ranges aboard Camp Lejeune must be closed at regular intervals for EOD sweeps/range maintenance/range development in order to reduce UXO hazards and to conduct regular range maintenance and re-targeting projects. Priority and timing of closures will be determined by the Range Control and Range Development Branches. Closures will be scheduled in RFMSS and annotated in the RFWO and coordinated at the quarterly Range Deconfliction Meetings.

p. Unique training activities that will receive a training priority (110 days) from the unit’s assigned higher headquarters (II MEF/MARSOC) via formal correspondence and approved by the CG MCIEAST-

MCB CAMLEJ (AC/S, G-3/5) and the RCO such as unit assigned MCCREs. Range Control Scheduling will approve RFMSS requests based on sound business and economy of management practices considering the type of training events requested/scheduled and the type of range being requested/scheduled. This will ensure limited resources (live fire ranges) are used properly.

q. All hike routes will be submitted to the Range Control Operations Officer or the Range Control Operations Chief at least two working days (48 Hours) in advance of the conditioning hike/force march to ensure proper scheduling of the TAs and roadways. If the unit is conducting a hike within a lettered TA the unit must schedule the TA/TAs in RFMSS. Units will include a map overlay and must fill-in and sign the Range Control Hike Checklist. A copy of this checklist is available on the Range Control website. All hikes must be conducted at least 6 feet off any paved road and not to disrupt the normal flow of traffic. If the hike starts and ends in the cantonment areas the Hike Checklist/Overlay goes to Base Operations only.

r. Unit training priority assignments are listed below. These range priority assignments do not preclude other units from requesting and using the range when it is not used by the priority unit. The list below is subject to change.

(1) Engineer Training Area (ETA) ETA-9 and ETA-10. 2d CEB, 2d Mar Div if scheduled within 120 days to 59 days.

(2) Range ETA-1, ETA-7, ETA-7A, ETA-7B, ETA-7C, ETA-7D and ETA-8/ETA-8A. MCES if scheduled within 120 days to 59 days.

(3) TLZs Albatross, Condor, Kite, and Phoenix. 2d MAW (Marine Aircraft Group (MAG-29) for HST Operations (External Operations). All other operations must be approved by the S-3 MAG-29.

(4) Camp Davis Runways (North/South), TLZ Duck, TLZ Swallow, TLZ Phoenix and TLZ/PDZ Pheasant. 2d MAW (MAG-29) has priority when scheduled in RFMSS.

(5) SR-10. 2d AAV Bn/2d LAR Bn have priority during scheduled semi-annual gunnery re-qualifications when scheduled in RFMSS.

(6) SR-7. 2d AAV Bn/2d LAR Bn has priority during scheduled semi-annual gunnery re-qualifications when scheduled in RFMSS.

(7) TLZ Vulture, SRR-227 Square Bay Pistol/Rifle Range, Non-Lethal Range, Breacher Facilities/Breacher Pit, RR-249 Shoothouse, RR-243 UTF, SRR-211 EOTG Vertical Training Facility/Tower, SRR-230 Murphy’s Mountain and SRR-230 Rollins Peak. EOTG, II MEF has scheduling priority of the above listed ranges/training facilities

when scheduled in RFMSS. All other units or organizations desiring to use these ranges/facilities will coordinate with EOTG S-3 for the scheduling these ranges.

(8) Ranges/Training Facilities within the MARSOC Complex/Compound. MARSOC units only, unless approved by MARSOC G-3, G-7, and Marine Raider Training Center (MRTC) S-3 Operations Training Specialist.

(9) ALZs have been designated to specific units or Area Commanders and must be approved by that area commander for use. (See Chapter 4 for more details.)

(10) EOD-2 and EOD-3. EOD units desiring to use EOD-2/EOD-3 will coordinate directly with and get obtain from MCIEAST-MCB CAMLEJ EOD (Base EOD) before allowing it to be scheduled in RFMSS.

(11) SOI East has priority over Camp Geiger MOUT, Camp Devil Dog MOUT, Verona Loop bivouac sites (VL-2 and VL-4). All other units must obtain SOI East permission to schedule these facilities/sites.

4. Special Range Request

a. Any deviations/changes from established RTAs, live fire range, training facilities, training events or approved training scenarios identified in this Order or in the current version of the Range Cards requires a SRR. Some minor/low risk training events are coordinated /approved via e-mails special range request (ESRR) to the RSS such as adding additional DODICs/Weapon System to a range. See Appendix F of this Order for more details regarding the creation and submission of SRRs as required.

b. All SRRs must be submitted to Range Control, via the RCO, 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 Bn/Squadron Commander to the RCO requesting a specific/limited/detail deviation/waiver. SRRs can be signed “By direction” and must be endorsed by the Bn/Squadron S-3.

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

(3) The planned Scheme of Maneuver (SOM).

(4) The weapons/ammunition by DODIC to be used.

(5) Any SDZs/WDZs necessary.

(6) Other information as required based on the planned event.

5. Non-Standard Training Area Requests

a. Non-Standard TA Requests (NSTAR) must be submitted to CG, MCIEAST-MCB CAMLEJ (AC/S, G-3/5) and must be endorsed by the unit's chain of command when a unit desires to train in an area or areas that is/are not designated as a RTA or training facility assigned to Range Control. Examples of such areas include cantonment areas which are highlighted in yellow on the Camp Lejeune Special Map and include Mainside, Courthouse Bay, Camp Johnson, Camp Geiger, Stone Bay/EOTG /MARSOC Complexes, Industrial Area, Hadnot Point (Mainside), French Creek, MCAS New River, family housing areas, and other areas. Although generally discouraged, requests to conduct field training within the cantonment area shall be forwarded to the CG MCIEAST-MCB CAMLEJ (AC/S G-3/5), for consideration and determination.

b. NSTARs must be submitted to MCIEAST-MCB CAMLEJ (G-3/5 Operations and Plans), at least 30 working days prior to commencement of training. NSTARs require extensive coordination with MCIEAST-MCB CAMLEJ staff sections and tenant organizations depending on the training event. Late NSTARs will not normally be accepted. NSTARs that require use of A&E must be reviewed by the MCIEAST-MCB CAMLEJ ESO prior to approval.

c. NSTAR Request Format. Requests must include:

(1) Purpose of Request.

(2) Detailed Concept of Operations Narrative.

(3) Detailed Scheme of Maneuver (SOM).

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

(5) Detailed Timeline of Training Events.

(6) Risk Assessment, including a signed RM Worksheet.

(7) Weapons and ammunition to be used if required.

(8) Individual and unit equipment to be used.

(9) Map Sheet/Layout outlining the exercise area if required.

(10) Any environmental requirements or coordination as required or directed as per Chapter 2 of this SOP. Using Units may be required to submit a FEREIR to MCIEAST-MCB CAMLEJ EMD.

(11) Unit POC, including full name, rank, billet, phone number, and e-mail address is required.

f. The requesting unit shall be prepared to brief the unit's NSTAR concept and details to the MCIEAST-MCB CAMLEJ staff sections at a coordination meeting prior to the training event if requested by the AC/S G-3/5.

g. The CG MCIEAST-MCB CAMLEJ is the final approving authority for all NSTARs. MCIEAST-MCB G-3/5 is the cognizant staff section. An action officer will be assigned, and a message released authorizing the event. Direct all NSTAR questions/issues to the MCIEAST-MCB CAMLEJ (G-3/5 Operations and Plans Division) at (910) 451-0375/451-8905. Direct Liaison Authority with other MCIEAST-MCB CAMLEJ organizations or staff sections shall not be assumed and must be requested. The MCIEAST-MCB CAMLEJ (G-3/5) will publish approval /disapproval/modification of all NSTARs via AMHS.

6. Bumping Procedures. A unit can be bumped off a live fire range/training facilities in order to support a higher priority /contingency as directed by appropriate command authority.

7. Notice to Mariners (NOTMAR)

a. All training events that affect the waterways around Camp Lejeune, to include the AIWW, the entire New River (all water sectors), Mile Hammock Bay, and Onslow Bay (N-1/BT-3 Impact Area), requires publication of a NOTMARs for coordination with external agencies. W-122 15B airspace and the water space must be scheduled by the requesting unit directly to Fleet Area Control and Surveillance Facility, Virginia Capes (FACSFAC VACAPES) for events like Stinger Missile/Avenger live-fire events using Range E-1, Naval Gunfire, and HIMARS.

b. All events that require NOTMARs 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 Branch Head, RCB/RCO.

c. Many of the ranges that require a NOTMAR also require an air sweep to be conducted during daylight hours before going into a "HOT" status: E-1, G-7, H Ranges, Naval Gunfire, and N-1/BT-3. The preferred method to conduct these sweeps is through a civilian contracted aircraft. Based on the approved RFMSS request Range Control will schedule the air sweep NLT two weeks in advance.

Military aircraft may be used if available. If there is no air sweep, no live-fire can be conducted.

c. All Para Ops require a NOTAM request to be submitted and approved. All Para Ops (PDZs) to include Cargo and JPADS training activities within the Camp Lejeune range complex require a NOTAM.

d. Parachute operations wherein any portion of the flight profile or operations extends into the R5306C or Hatteras Foxtrot MOA are also required to schedule that airspace. R5306C and the Hatteras Foxtrot MOA can be scheduled with Cherry Point Central Scheduling Office at (252) 466-4040/4041 (DSN 582). Aircraft shall contact BIG ROCK Range Control on UHF 323.775 or VHF 141.95 prior to entering R-5306C or the Hatteras Foxtrot MOA. Arrival and departure notifications to/from R-5306C or the Hatteras Foxtrot MOA are required with BIG ROCK Range Control on UHF 323.775 or VHF 141.95.

8. Notice to Airmen (NOTAM)

a. Certain training events require a NOTAM to activate GSRA airspace. Examples of these events are live-fire ranges, parachute operations, and UAS operations located within the GSRA.

b. Range Control prepares and sends a monthly NOTAM request message generated from RFMSS scheduled events.

c. Events requiring a NOTAM must be scheduled in RFMSS NLT four days prior to the first day of the month the event is scheduled in. (An example: a unit that wants to shoot on SR-10 in the month of March must submit the RFMSS request NLT four working days before the end of February).

d. Units not meeting the aforementioned timeline must submit a NOTAM worksheet directly to the responsible agencies (Cherry Point Airfield Management and MCAS New River Operations) no later than 96 hours prior to the start time of the scheduled event. (See the example worksheet Appendix J) For questions concerning the NOTAM worksheet contact Cherry Point Airfield Management at (252) 466-6768.

9. Road Closures

a. When a requested event requires the using unit to close a major roadway, that event must be scheduled ten working days in advance in order for Range Control to publish a Road Closure Message. Ranges requiring road closures include:

(1) G-10 Convoy Range. Shooting the M2 .50 cal/.50 cal Sniper Rifle closes Highway 172.

(2) ETA-2 Line Charge MICLIC (Inert). Temporarily closes a section of Highway 172.

(3) Onslow Beach (EB Training Area). Firing Inert MICLICs will temporarily close the AIWW, Training Areas IG and IB, section of Highway 172. Road Guards and Navy Safety Boats must be posted.

(4) Naval Gunfire. Closes Highway 172 and the AIWW.

(5) G-29B. When using the .50 sniper rifle, or M2 .50 cal. closes Highway 172.

(6) CVOT Highway 172. Will close Highway 172.

(7) Other training events may require road closures/road guards and gates to be secured if requested.

(8) Temporary bridging and causeway use must be coordinated and scheduled through RFMSS at least 60 days in advance with Range Control at (910)451-3065/1240/1236 and NOTMARs posted a required. Units requesting closure of the AIWW or a section of the AIWW must submit a formal letter via the unit's Chain of Command to the Captain of the Port, United States Coast Guard of Wilmington, N.C. at least 60 days in advance to ensure proper authorization/approval/NATMAR is published.

b. SRRs may require road closures/gates/barriers/road guards, depending upon the requesting unit's SOM, weapons, and/or ammunition.

10. Check-Out/In Procedures

a. An OIC must meet all requirements addressed in Chapter 1 to include being listed on his/her unit's by-name OIC/RSO qualification roster for the specific type of training being conducted.

b. An OIC of a Non-Tenant unit (units not assigned to or stationed at Camp Lejeune) must:

(1) Meet all OIC requirements to include having a command certification letter on file at Range Control; and,

(2) Provide a Command Certification letter with Enclosure (1) to Range Control per the example provided in Appendix H.

c. Checking Out/Checking-In Ranges:

(1) Report to Range Control (Building 1043), Room 110 on Duncan Street NLT 1200 the working day prior to firing/training event, or up to 10 working days (Monday-Friday) in advance before the scheduled event. OICs must ensure that Ranges/Training

Facilities/Training Areas are checked out before the scheduled long weekends/holidays. Units failing to sign out training events must contact the Range Control Operations Officer at 451-1236 to get authorization to sign out ranges, training area, and other facilities.

(2) The OIC/RSOs of all CAS/SIMCAS/Dry CAS events will submit a “Special Instructions (SPINS)” to Range Control/Blackburn/Operations Officer 10 working days before the air event and must conduct a Face-to-Face with BLACKBURN right after signing for the event.

(a) SIMCAS and Dry CAS refer to the same event: Control of an actual aircraft where air-to-ground munitions are not present or release is not intended (formally referred to as Dry Terminal Attack Control).

(3) Grenade ranges require special coordination due to the requirement of having a Base EOD response team standing by to take immediate action with UXO/dud grenades. See the current version of the Range Cards for additional information on F-6, K-402A, K-510, and MAC-3.

(4) The OIC that checked out range will check it back in. This includes the return of all equipment and items signed out within 24 hours. OIC/RSOs are encouraged to submit a range after action report concerning the quality, police, and maintenance condition of the range, at the bottom of the range contract and/or via Interactive Customer Evaluation (ICE) for each range used within 24 hours of completion of the training event. This will assist Range Control /Range Maintenance in the identifying maintenance problems or any enhancements as early as possible so they can be resolved.

Chapter 4

Airspace, Aircraft, UAS Operations, and Facilities

1. General

a. This Chapter describes restricted airspace, aircraft operation procedures, UAS operations, and other aviation-related facilities controlled by Camp Lejeune, and sets forth all instructions and policies concerning their use. Camp Lejeune restricted airspace is managed in order to enable safe, simultaneous use by training units. All live-firing and aircraft operations must conform to airspace regulations contained in this section and other applicable Federal Aviation Administration (FAA) regulations.

b. A major portion of Camp Lejeune lies within Restricted Areas designated by the FAA as R-5306D, R-5306E, R-5303 A/B/C, and Restricted Area (Airspace) R-5304 A/B/C (Figure 4-1). 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 Agreement (dated 28 May 2015) signed by MCIEAST-MCB CAMLEJ, MCAS New River, Regional Airspace Coordinator, and Department of Transportation/FAA further divides R-5303 and R-5304 into sub areas and Restricted Operating Zones (ROZ) for real-time joint use and scheduling.

c. All aircraft prior to entering and exiting the airspace must check in with BLACKBURN. For the purpose of this chapter, BLACKBURN will be utilized to indicate the agency performing range control functions within assigned RTA.

2. Special Use Airspace

a. SUA. SUA is airspace of defined dimensions wherein activities must be confined because of their nature, or wherein limitations may be imposed upon aircraft operations that are not a part of those activities.

b. Restricted Area. Restricted areas contain airspace identified by an area on the surface of the earth within which the flight of aircraft, while not wholly prohibited, is subject to restrictions. Restricted areas denote the existence of unusual, often invisible, hazards to aircraft such as artillery firing, aerial gunnery, or guided missiles.

c. Using Agency. The using agency is the military unit or other organization whose activity established the requirement for the SUA. The using agency is responsible for ensuring that:

(1) The airspace is used only for its designated purpose.

(2) Proper scheduling procedures are established and utilized.

(3) The controlling agency is kept informed of changes in scheduled activity, to include the completion of daily activities.

(4) A POC is made available to enable the controlling agency to verify schedules and coordinate access for emergencies, weather diversions, etc.

d. Controlling Agency. The controlling agency is the ATC facility that exercises control of the airspace when an SUA area is not activated. A military ATC facility may be assigned as the controlling agency, subject to the concurrence of the service area office and the concerned Air Route Traffic Control Center. A controlling agency shall be designated for each joint-use SUA area.

e. Restricted Areas

(1) R-5306D. Includes airspace from surface to 17,999 ft Mean Sea Level (MSL) within the area from Latitude (LAT) 34 Degrees 44’51”N, Longitude (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 30’21”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. MCAS Cherry Point Approach Control is the Controlling Agency and MCIEAST-MCB CAMLEJ is the Using Agency.

(2) R-5306E. Includes airspace from surface to 17,999 ft MSL within the area from Lat 34 Degrees 40’21”N, Long 77 Degrees 21’11”W (Grid 18S TD 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. MCAS Cherry Point Approach Control is the Controlling Agency and MCIEAST-MCB CAMLEJ is the Using Agency.

(3) R-5306D Fixed-Wing Procedural Line. Subdivides Restricted Area (Airspace) 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 effect by BLACKBURN, fixed-wing hazardous traffic shall remain south of the line when flying below 3000 ft MSL. Moving the three mile buffer to the Procedural Line below 3000 ft MSL allows

approaches to MCAS New River. Above 3000 ft MSL, the three mile buffer is from the border of R-5306E as before.

(4) R-5303 (GSRA). Designated Altitudes: R-5303A -- Surface to 6999 ft MSL; R-5303B -- 7000 to 9,999 ft MSL; R-5303C -- 10,000 to 17,999 ft MSL. R-5303A excludes the Airspace 1,500 ft AGL and below within a three nm radius of Sky Manor Airport (18STD 633440). 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 R-5303B/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. Washington ARTCC is controlling agency of R-5303C, MCAS Cherry Point Approach Control is the Controlling Agency for R-5303A and B, and MCIEAST-MCB CAMLEJ is the Using Agency for R-5303A, B, and C. When activated FW aircraft are not authorized in the airspace.

(5)R-5304 (GSRA). Designated Altitudes: R-5304A -- Surface to 6999 ft MSL; R-5304B -- 7000 to 9,999 ft MSL; R-5304C -- 10,000 to 17,999 ft MSL. R-5304A excludes the airspace 1,500 ft AGL and below within a three nm radius of Holly Ridge Airport (18STD 675195). 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 R-5304B/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); to Lat 34 Degrees 36’51”N, Long 77 Degrees 29’01”W (Grid 18S TD 7228 3306); to Lat 34 Degrees 32’16”N, Long 77 Degrees 30’13”W (Grid 7024 24633); to Lat 34 Degrees 29’43”N, Long 77 Degrees 35’15”W (Grid 18S TD 6548 20003); to Lat 34 Degrees 32’42”N, Long 77 Degrees 34’54”W (Grid 18S TD 6309 2561) to the start point. Washington ARTCC is Controlling Agency of Restricted Area (Airspace) R-5304C. MCAS Cherry Point Approach Control is the Controlling Agency of Restricted Area (Airspace) R-5304A and B, and MCIEAST-MCB CAMLEJ is the Using Agency for R-5304A, B, and C. When activated FW aircraft are not authorized in the airspace.

(6) 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 R-5306D and R-5306E which shall be deactivated for that purpose.

f. Warning Area W-122. The portion of Warning Area W-122 of concern to 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 15A). Warning Area W-122 is controlled by the Fleet Area Control and Surveillance Facility, Virginia Capes (FACSFAC VACAPES) (Phone Number 757-425-2670).

g. New River Class D Area. MCAS New River controls this airspace, which extends upward from the surface to and including 2500 ft MSL and within a five nm radius of MCAS New River.

3. General Aircraft Operations

a. Fixed-wing operators utilizing R-5306D/E are also required to schedule R-5306C and Hatteras Foxtrot per Memorandum of Agreement (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. Fixed-wing operators utilizing W-122 airspace are required to schedule with FASFAC VACAPES, (757) 433-1219/1286. 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 or out of assigned SUA a "**Whiskey Alert**" call will be reported immediately to the agency responsible for the affected airspace.

b. This Order 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. All 14 CFR responsibilities remain intact.

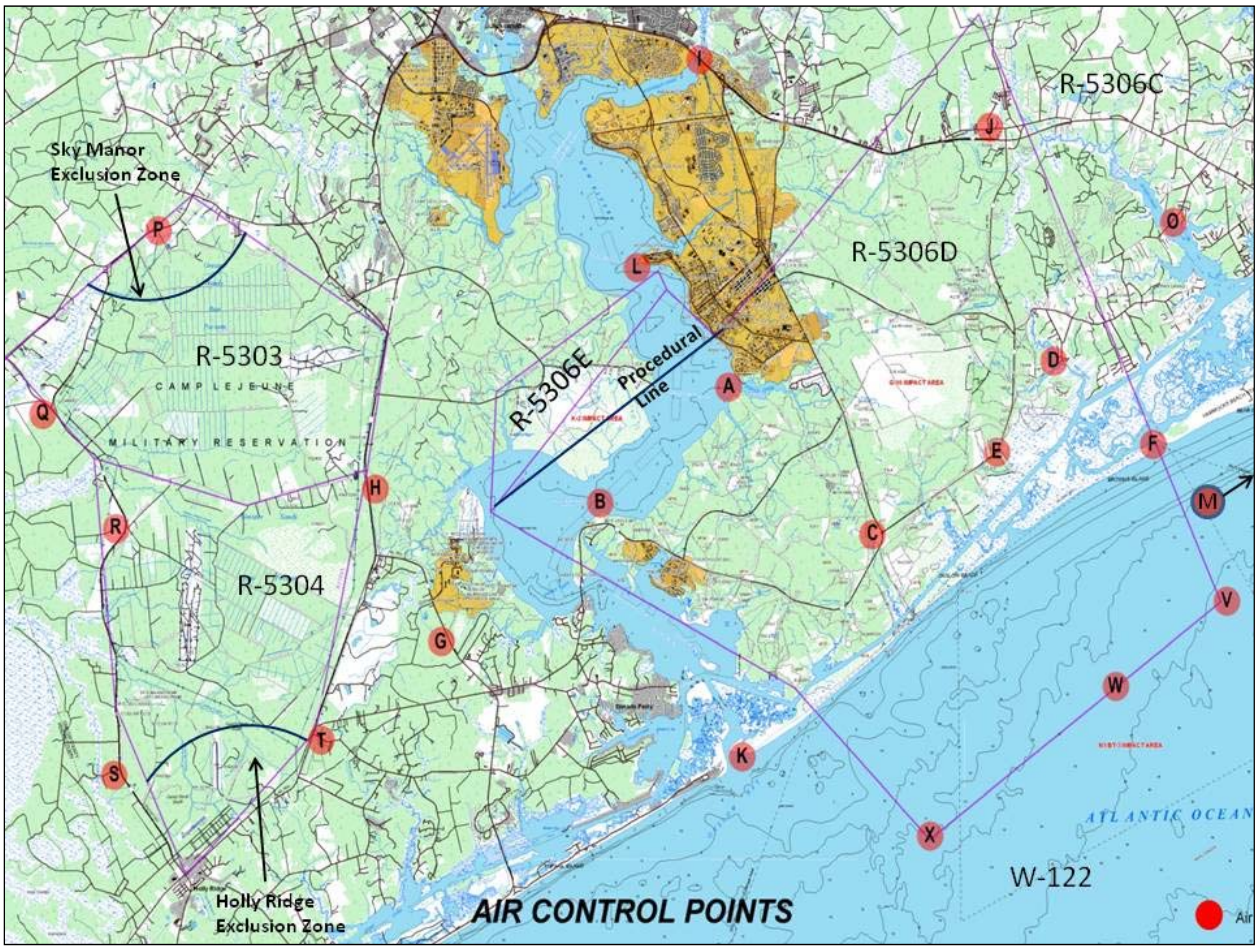


Figure 4-1.--SUA and Air Control Points

POINT	GRID WGS 84	LAT	LONG	AIRSPACE	REFERENCE
Alpha	18STD 85615 35395	34° 38' 17" N	77° 20' 20" W	5306D	Weil Point
Bravo	18STD 80707 31502	34° 36' 07" N	77° 23' 29" W	5306D	Gillette Point
Charlie	18STD 90705 30592	34° 35' 45" N	77° 16' 56" W	5306D	Intersection Sneads Ferry Rd & HW 172
Delta	18STD 96993 36001	34° 38' 45" N	77° 12' 54" W	5306D	Bear Creek at Willis Landing Neighborhood
Echo	18STD 94890 33088	34° 37' 09" N	77° 14' 14" W	5306D	HW 172 at Range G-36
Foxtrot	18SUD 00499 33212	34° 37' 17" N	77° 10' 34" W	5306D	Bear Inlet
Golf [1]	18STD 75200 27287	34° 33' 46" N	77° 27' 01" W	Hatteras F MOA	Route 210
Hotel	18STD 72299 32692	34° 36' 39" N	77° 29' 00" W		Dixon Fire Tower

POINT	GRID WGS 84	LAT	LONG	AIRSPACE	REFERENCE
India	18STD 84516 46087	34° 44' 03" N	77° 21' 13" W		Bridge Route 24
Juliet	18STD 95269 43306	34° 42' 41" N	77° 14' 08" W	R5306D	Hubert Fire Towe
Kilo[1]	18STD 85517 23405	34° 31' 48" N	77° 20' 13" W	Hatteras F MOA	New River Inlet
Lima	18STD 82117 39392	34° 40' 24" N	77° 22' 41" W		Hadnot Point
Mike[1]	18SUD 06504 35211	34° 38' 26" N	77° 06' 40" W	R5306C	Bogue Inlet
November[1]	18SUD 01497 48788	34° 45' 43" N	77° 10' 08" W	R5306C	Railroad Bridge Silverdale
Oscar[1]	18SUD 01392 40406	34° 41' 11" N	77° 10' 05" W	R5306C	Bridge Queens Creek
Papa	18STD 64980 40992	34° 41' 02" N	77° 33' 55" W	R5303A/B/C	Powerline Road Junction
Quebec	18STD 60987 35350	34° 37' 56" N	77° 36' 26" W	R5303A/B/C	Road Junction
Romeo	18STD 63614 31303	34° 35' 47" N	77° 34' 39" W	R5303A/B/C	Road Bend
Sierra	18STD6320 623469	34° 31' 32" N	77° 34' 47" W	R5303A/B/C	Road Bend / Intersection
Tango	18STD 70244 24758	34° 32' 20" N	77° 30' 13" W	R5303A/B/C	Intersection of HW 17 and HW 172
Victor	18SUD 03023 28051	34° 34' 31" N	77° 08' 51" W	R5306D	Eastern corner of R5306D at sea
Whiskey	18STD 98977 25384	34° 33' 02" N	77° 11' 27" W	R5306D	N-1/BT-3
X-Ray	18STD 92203 20678	34° 30' 24" N	77° 15' 49" W	R5306D	Southern corner of R5306D at sea

Table 4-1--Air 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 the Direct Air Support Center (DASC) for a specific exercise, shall be published in the Exercise Air Ops Plan and Pilot-Controller Handbook after coordination with the RCO.

c. Prior to entering the R-5306D, R-5306E, R-5303 A/B/C, or R-5304 A/B/C area, aircraft shall contact BLACKBURN on the 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 BLACKBURN is required at all times for all aircraft. Aircraft operations in the SUA are on a VFR concurrent use basis. Extreme vigilance shall be used as numerous military aircraft use these areas concurrently. Once in the SUA, 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. See and avoid other aircraft. “BIG ROCK” (Cherry Point) manages aircraft operations in R-5306C and Hatteras F MOA. During FW operations in support of TACP/JTAC/CAS G-10 operations and transiting/holding/operating in the R-5306C and Hatteras F MOA, aircraft are required to check in/out of R-5306C/Hatteras F MOA with BIG ROCK (Cherry Point) Range Control. After FW aircraft check in, BIG ROCK will switch aircraft to BLACKBURN. BIG ROCK will continue to provide SUA boundary containment/safety-of-flight using (pre-briefed) JTAC TAD frequencies and UHF Guard. Draft SPINS must be submitted via email to Camp Lejeune Range Control and “BIG ROCK” (Cherry Point) Range Control at least ten (10) working days prior to the TACP for comments and approval. Final SPINS and AIR FLOW must be submitted to Camp Lejeune Range Control and “BIG ROCK” (Cherry Point) Range Control via email attachment prior to the BLACKBURN and unit TACP Face-to-Face brief.

d. If utilized, the DASC will perform its doctrinal DASC functions within the scheduled portion of the restricted airspace. DASC will utilize the call sign CHIEFTAIN and utilize their own frequencies. All aircraft will check in with BLACKBURN prior to entering restricted airspace and then be passed to CHIEFTAIN after receiving a range brief. BLACKBURN retains overarching control of assigned airspace regardless of the DASC assuming this role.

e. During TACP exercises, when CHIEFTAIN is co-located with the Air Officer at OP-2/OP-3/OP-5/OP-14, participating aircraft will be directed after check-in to switch from CHIEFTAIN’S frequency to a Tactical Air Direction (TAD) frequency. BIG ROCK and CHIEFTAIN (via the Air Officer) will also monitor the two TAD frequencies and provide time-critical safety of flight advisories directly over the TAD net or Guard as required. This positive two-way communication alleviates the requirement for participating aircraft to directly monitor Range Control frequency during TACP exercises.

f. Flights over MCIEAST-MCB CAMLEJ Installations require the following visual conditions (unless unit minimums are more restrictive):

	DAY	**NIGHT**
Helo	500 ft/1 mile	1000 ft/3 miles
Tiltrotor (<150 KIAS)	500 ft/1 mile	1000 ft/3 miles
Tiltrotor (>150 KIAS)	1000 ft/3 mile	1000 ft/3 miles
FW	2000 ft/5 miles	2000 ft/5 miles
FW (with Ordnance at night)		3000 ft/5 miles
UAS (Group 1)	500 ft/1 mile	1000 ft/3 miles
UAS (Group 2 and larger)	2000 ft/5 miles	2000 ft/5 miles

g. Aircraft shall be advised of and deconflicted with GPs, live ranges, and indirect fire Gun Target Lines (GTLs). To safely allow concurrent air operations and indirect firing, manned aircraft shall not approach **CLOSER THAN 1000 meters from GTLs**. Pilots must be

familiar with all Artillery GPs and MPs locations assigned to Lejeune.

h. Minimum altitude for aircraft flying over all civilian residential areas, to include mainside housing areas is, 1000 ft AGL.

i. Aircraft will not fly directly over the ASP area lower than 1000 ft MSL. The ASP is located just west of the G-10 Impact Area at grid 880-355.

j. CAS missions shall not fly over the Cantonment Area, Industrial Area (Mainside), MCIEAST-MCB CAMLEJ ASP, or base housing areas. Aircraft must maintain a minimum of 1,000 ft 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.

k. Aircraft will remain clear of all NOTAMed parachute drop zone operations.

l. 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, is involved in the exercise, and is directed/controlled by a JTAC or “CHIEFTAIN”.

m. Only rotary wing aircraft are authorized to enter the R-5303 A/B/C(GSRA) and R-5304 A/B/C (GSRA) when the airspace is activated. When the airspace defined by R-5303 A/B/C (GSRA) or R-5304 A/B/C (GSRA) is not activated, an 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 information and coordinate a switch to ATC.

n. Refer to Chapter 3, para 6 for fixed and rotary-wing PARAOPs NOTAM requirements.

o. SUAs R-5303/5304 may be subdivided and de-activated to support fixed-wing operations and aircraft recovery efforts to MCAS New River.

p. The number of fixed wing sections allowed in the R-5306D/E is limited to capabilities of the air command and control entity supporting the TACP training.

q. Figure 4-1 and Table 4-1 display the air control points used by BLACKBURN for aircraft utilizing Camp Lejeune ranges and impact areas. Rotary-wing aircraft may request routing between air control points using the terms “RED LINE” for roads, “BLUE LINE” for the New River and AIWW, and “FEET WET” when flying over the Onslow Bay

/Atlantic Ocean. BLACKBURN will brief “HOT” ranges within 500 meters either side of the requested route.

r. Fixed wing SIMCAS / Dry CAS is only authorized in the R-5306D and R-5306E. Rotary wing SIMCAS / Dry CAS is authorized in all restricted airspace. Aircraft conducting SIMCAS / Dry CAS in support of the ground units shall maintain positive two-way communications with the terminal controller (FAC/JTAC) who, in turn, will have positive two-way communications with BLACKBURN or the tactical agency. SIMCAS / Dry CAS aircraft shall adhere to the boundaries established to integrate SIMCAS / Dry CAS 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 / Dry CAS can have inert /captive carrying ordnance items on the aircraft.

s. Aircraft malfunctions, mishaps, emergencies, near misses, or precautionary landings shall be reported to BLACKBURN when it is safe to do so (aviate, navigate, and communicate). The RCO or RCOO shall be notified immediately and an incident report and other appropriate reports such as HAZMAT spill will be created.

4. Coordination and Control

a. Aircraft and Terminal Controllers

(1) Aircraft participating in live firing operations, bombing, CAS (live or simulated), or combined air-ground exercises require positive control by a FAC, FAC(A), or JTAC. FAC/JTAC and DZ/LZ control officers have the same responsibilities as an OIC/RSO of firing units. SIMCAS / Dry CAS only requires one (1) person (FAC/JTAC) present. Chapter 3 and information in Appendix G paragraphs discussing OIC and RSO of this Order apply.

(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 working days prior to the exercise to discuss air operations, use of FAC/JTAC, FAC(A)s, DASC or the tactical agency, and determine and resolve conflicts. Unit must provide Range Control/BLACKBURN a copy of the Air Tasking Order/SPINS/FLOWS at least ten (10) working days in advance of the exercise to verify scheduled events. Unit must provide updates to the Air Tasking Order/SPINS as required.

(3) FAC/JTAC/Tactical Agency (CHIEFTAIN) must conduct a Face-to-Face brief with Range Control and BLACKBURN at the time of signing for the event. FAC(A)s will receive the Range Safety Brief upon entering MCIEAST-MCB CAMLEJ restricted airspaces.

(4) FAC/JTAC

(a) For the purposes of this SOP, the term FAC (ground or airborne) is synonymous with FAC(A), Weapons Training Officer (WTO), JTAC, and OIC of firing unit. This individual must be RSO / OIC qualified and certified by his commanding officer for CAS, SIMCAS / Dry CAS.

(b) The FAC will notify BLACKBURN immediately after the last aircraft has cleared the area so any temporary fire suspension may be lifted for ground units.

(c) The FAC (if employed on the ground), will be positioned to see the aircraft and the target.

(5) Aerial Gunnery Not Involving CAS

(a) CAS, by definition, necessitates detailed integration with friendly units on the ground. When aircraft employ ordnance in the Camp Lejeune Range Complex with no integration with other units, there will be no requirement for a qualified FAC or JTAC, although the RSO/ROIC requirement will still apply.

(b) When executing SWD at G-10, qualified pilots designated in writing by the squadron CO to be able to conduct all weapons release events will be required in each aircraft.

(c) The qualified pilot(s), RSO, and ROIC will be responsible for the safe conduct of fires on the range, adherence to range WDZs, and adherence to this Order.

(6) Range Control Air Requirements for CAS and 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 / Dry CAS with ground units requires standard OIC, RSO, FAC, JTAC, DASC, G-10 Helo, G-10 Fixed, and G-10 Helo/Fixed procedures through the ground unit.)

(b) Scheduling. Squadrons/Groups submit request for the range airspace (N-1/BT-3, G-10 Helo, G-10 Fixed, G-10 Helo/Fixed, G-10 Laser), G-10 UCAS, OP, and OP Laser in RFMSS up to 90 days prior but no later than two (2) working days prior to the event. TAs must be scheduled and approved in RFMSS before submitting an e-mail SRR for use of a FAC(A).

(c) The OIC can be a squadron pilot. FAC-qualified is desired but not required. OIC can be E-6 or above if JTAC-qualified unless using dud-producing ordnance which would require an E-7 or above. OIC will be on the ground in an OP and have communications

with BLACKBURN and the flight. OIC maintains target clearance. Lead instructor pilot for flight will be RSO. A qualified and certified WTO (Weapons Training Officer) or above, or a FAC(A), can act as RSO. If lasers are used, the Range Laser Safety Officer (RLSO) qualified person can be on the ground or in the air and can be the OIC or RSO of the event.

(d) OIC will send a WORD version copy of the SPINS and EXCEL version of the FLOWS to BLACKBURN/Range Control at least ten (10) working days prior to the event. The SPINS must have the ordnance type/DODIC/NALC listed. The event OIC must attend a Face-to-Face brief with BLACKBURN after signing for the event NLT the day prior at Range Control.

(e) Execution. OIC checks in from OP with BLACKBURN via normal procedures and receives a HOT range brief and placed in a HOT status. Flight checks in with BLACKBURN and receives a HOT range brief and confirms number of aircraft and ordnance. OIC has communications with BLACKBURN and the flight (Squadron Common). Flight conducts range sweep of target area, Holding Areas (HAs), and Battle Positions (BPs) being used. Flight conducts training on squadron common tactical frequency and monitors BLACKBURN throughout training in the event of check fire, emergency, etc.

(f) Flight lead Instructor Pilot and OIC on the ground are responsible for the safe conduct of fires on the range, adherence to range SDZs/WDZs, and this Order.

(g) Upon completion of the training event, the flight will check out with BLACKBURN. OIC or RSO will report ordnance expended by DODIC/NALC, type and number of aircraft, number of personnel trained, and request to go “COLD”. OIC will coordinate with BLACKBURN for a range inspection of the OP.

(7) All aircraft shall contact BLACKBURN to receive a range brief and authorization to enter the airspace. BLACKBURN shall direct aircraft to switch to the DASC (if one is used) or the FAC/JTAC for entry into the scheduled portion of the restricted airspace. If communications cannot be established, the pilot shall immediately contact BLACKBURN for assistance and further instructions.

(8) Minimum altitude for fixed-wing operations inside the restricted area is 3000 ft AGL (coordinating altitude). Fixed-wing operations below 3000 ft AGL coordinating altitude (i.e., strafing runs/low-altitude ingress) are authorized when deconflicted from rotary-wing operations with lateral and altitude separation. Helicopter and tiltrotor aircraft shall not exceed 2000 ft AGL when fixed-wing aircraft are operating in the R-5306D/E. Minimum coordinating altitude for rotary-wing when fixed-wing is on station is 500 ft AGL. Fixed-wing aircraft shall not fly through occupied BPs

and HAs. The minimum altitude for fixed-wing aircraft from Initial Point (IP) to the Pop-up Point (is 1000 ft AGL outside the Installation boundary and 700 ft AGL within the boundary.

Control Point	Altitude Minimum (AGL)	ATK Heading	Offset
Bravo	700 ft; 1000 ft off-base	030-100 degrees	Either
November	1200 ft	150-270 degrees	Either
Oscar	1200 ft	150-270 degrees	Either
Mike	1200 ft	150-300 degrees	Either
Foxtrot	1000 ft	206-360 degrees	Either

Table 4-2--IPs for G-10 Impact Area

Control Point	Altitude Minimum (AGL)	ATK Heading	Offset
Bravo	700 ft; 1000 ft off-base	180-255 degrees	Either
November	1200 ft	180-255 degrees	Either
Oscar	1200 ft	180-255 degrees	Either
Mike	1200 ft	215-255 degrees	Either

Table 4-3--IPs FOR N-1/BT-3 Impact Area

Control Point	Altitude Minimum (AGL)	ATK Heading	Offset
Charlie	700 ft	260-330 degrees	Either

Table 4-4--IPs for K-2 Impact Area

NOTE: (Table 4-4) K-2 pull-offs are left; avoid over flight of the L-5 Range, Rifle Ranges at Stone Bay/EOTG and MARSOC live fire ranges. Procedural line must be suspended in order to allow fixed wing operations below 3,000 feet AGL.

(9) Tables 4-2, 4-3, and 4-4 provide approved attack headings and altitudes from control points (all headings are magnetic). Units may develop other attack headings so long as the WDZ profile is contained within the impact area and the WDZ is approved by Range Control Branch.

(10) Appendix B offers further special instructions for CAS into impact areas N-1/BT-3, K-2, and G-10. Appendix B describes Helicopter/tiltrotor BPs and HAs for these impact areas. Appendix B and the current version of the Range cards contains information on the use of the UCAS Facility. Aerial gunnery may be conducted at SR-7,

SR-9, and SR-10, also see the applicable Range Cards.

(11) Restriction due to Weather for CAS missions into authorized impact areas are in accordance with this Order.

(11) CAS and SIMCAS / Dry CAS missions in any TA or range shall remain clear of adjacent ranges or impact areas.

5. Aircraft Mishaps

a. Units shall notify BLACKBURN of any aircraft Incidents/MISHAPs in RTAs.

b. The following information shall be reported, if available:

(1) Location;

(2) Type of Aircraft;

(3) Personnel Involved;

(4) Name, grade, organization, and present location of caller and telephone number or any other information as required/needed.

c. BLACKBURN will call “CEASE-FIRE” on all RTAs that affect the mishap site. Clearance from BLACKBURN will then be given for the rescue party to access the mishap site area.

d. Firing will not resume until the rescue has been completed and all personnel and equipment have been accounted for.

6. Tactical Airspace Control Agencies

a. The DASC is the principal tactical 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 OIC/RSO will have the same responsibilities as a OIC/RSO of a firing unit. The DASC must have a minimum of two DASC trained OIC/RSO qualified personnel on duty per this Order. Training/familiarization of new DASC personnel with BLACKBURN is encouraged and can be arranged by contacting Range Control.

b. If utilized, the DASC is normally the primary tactical agency responsible for the control and coordination of the scheduled portion of the restricted airspace. Other tactical agencies such as Air Support Elements, Tactical Air Control Squadrons, or Airborne Airspace Control Platforms (E2C Hawkeye) may be authorized to control and coordinate the scheduled portion of the restricted airspace.

c. The DASC (or other approved tactical 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 tactical agency is unable to maintain two-way communications with BLACKBURN, the tactical 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).

d. When the DASC (or other approved tactical agency) has control of a portion of the restricted airspace, it shall exercise procedural control over all aircraft within the scheduled portion of the restricted airspace. Other control agencies may exercise positive or procedural control based on controlling capabilities. The following procedures apply:

(1) The tactical agency has the same responsibilities as BLACKBURN for airspace control and coordination.

(2) When the tactical entity has control of the scheduled portion 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” frequency “assigned by the DASC” for the exercise. If utilized, the DASC brings its own frequencies to control aircraft

(3) Prior to entering the restricted airspace, all aircraft shall contact BLACKBURN to receive a range safety brief and authorization to enter the airspace. BLACKBURN will then hand-off participating aircraft to the DASC/JTAC/FAC. 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.

(4) The tactical agency shall switch the aircraft to their terminal controller, at which time the provisions of paragraph 4. Coordination and Control apply.

(5) CAS aircraft operating over any impact area on the installation must have positive two-way communication with the tactical controller who, in turn, must have positive two-way communications with the tactical agency on a BLACKBURN frequency.

(6) Upon mission completion, when released from the terminal controller, the pilot shall contact the tactical entity for hand-off to BLACKBURN before exiting the scheduled portion of the restricted airspace. The FAC/JTAC conducting the event will provide the number of personnel trained and number of all rounds/rockets/missiles/bombs expended by DODIC. The FAC/JTAC must obtain this information from the pilots before the aircraft departs.

(7) Non-participating helicopter and tiltrotor aircraft will contact the BLACKBURN as soon as possible after lifting from each TLZ/ALZ.

(8) Additional IPs, altitudes, attack headings, and offsets may be approved by BLACKBURN and delineated in appropriate Exercise Operations Plans/2d MAW Pilot Controller Handbook.

(9) Types I, II, and III CAS events are authorized in the R-5306D/E, per the 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 an inbound heading call (in degrees).

(a) SRRs 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 RSS 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.

(10) The tactical agency OICs 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.

(11) Once the tactical entity has received control of the scheduled portion of the restricted airspace from BLACKBURN, they shall retain control responsibility until completion of the exercise. **BLACKBURN retains authority to take back the airspace at any time.**

(12) BLACKBURN will maintain divert authority over all helicopter and tiltrotor aircraft operating in the Camp Lejeune area for the conduct of actual MEDEVACs.

7. Helicopter and Tiltrotor Operations

a. Helicopter and tiltrotor pilots shall inform BLACKBURN when entering or exiting a restricted airspace and entering, departing, or transiting from one TLZ to another.

b. Helicopter and tiltrotor pilots will transit on the right side of the road on red and blue routes.

c. Helicopters operating in the Camp Lejeune airspace in communication with Blackburn shall 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.

d. Tiltrotors operating in the Camp Lejeune airspace in communication with BlackBurn shall transit at 1500 ft AGL. Once established in a working area, tiltrotors operating in conversion or Vertical Take Off and Landing 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.

e. MV-22 Aircrews will minimize time on deck and excute “Extended Ground Loitering Procedures” in accordance with the “Naval Air Training and Operations Procedures Standardization” when applicable, in order to mitigate potential for fire hazard.

(1) 75 percent nacelle

(2) 75 percent engine power

(3) Minimize time-on-deck

f. Helicopter and tiltrotor aircraft shall not exceed 2000 ft AGL when fixed-wing aircraft are operating in R5306D/E. Minimum altitude for fixed-wing operations inside the restricted area is 3000 ft AGL

(coordinating altitude). Figure 4-2 depicts an Altitude V Diagram.

g. 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).

h. Due to the high volume of flights within Camp Lejeune controlled airspace predominately using night vision devices, in addition to lighting regulations set forth by FAA lighting exemption 8028C and reference (z), aircraft operations within the Camp Lejeune Complex shall abide by the following:

(1) 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.

(2) All single ship aircraft and the last aircraft within a flight shall have overt position and anti-collision lights on.

(3) While conducting TLZ operations, at the discretion of the aircraft commander/flight leader safety of flight conditions exist, for a single ship and/or the last aircraft within a flight to secure the overt position and anti-collision lights below 200 feet AGL.

(4) 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.

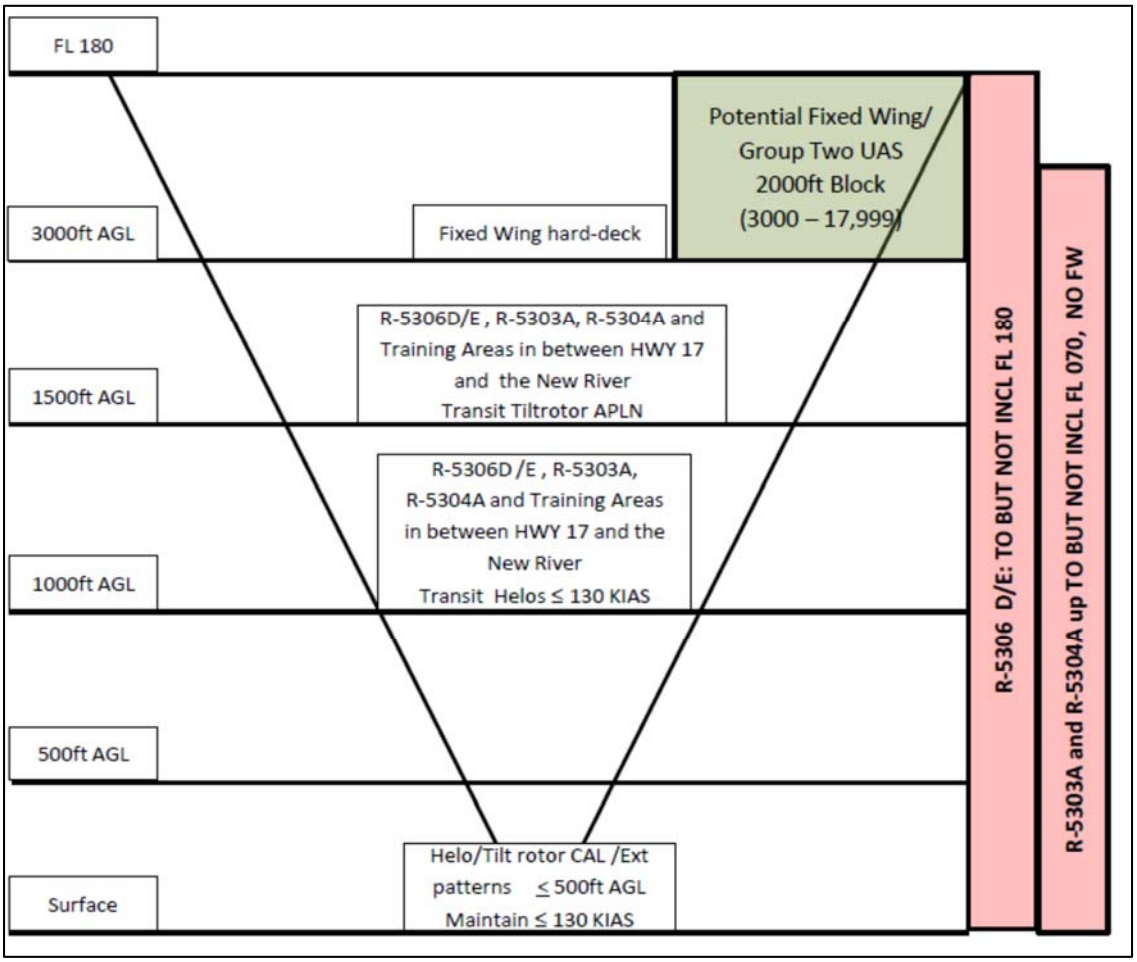


Figure 4-2.--Altitude V Diagram

(5) Aircraft flying at night without night vision devices will operate overt position and anti-collision lights. Unaided aircraft shall announce over BLACKBURN that they are unaided.

(6) Aircraft flying outside the Camp Lejeune Range Complex, refer to FAA lighting exemption 8028C and reference (z) for lighting.

i. Helicopter and tiltrotor live firing shall engage targets near the center of the impact area. Helicopter and tiltrotor aircraft shall have positive target 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 Order for routes, headings, BPs, and HAs when using G-10, K-2, and N-1/BT-3 impact areas. See the Range Cards for use of G-10 UCAS procedures.

j. External lifts and HRST are not authorized from ALZs (except ALZ-22). Aircraft with external cargo shall not fly over improved roads, built-up areas on Camp Lejeune, or over the trailer park vic. Sneads Ferry Bridge (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.

8. Helicopter/Tiltrotor Landing Zones

a. TLZs. All TLZs must be scheduled whenever troops are in the TLZ; external lifts, rappelling, fast rope, SPIE Rig training, troop lifts, etc. Scheduling all TLZ use is encouraged for availability and to track usage. Pilots may conduct unscheduled rotary-wing confined area landing and takeoff operations into TLZs only after authorization is granted by BLACKBURN and the pilot ensures, by overflight, referenced as a “Cold Pass,” that the TLZ is not occupied. Pilots will document all landing/take offs/times/numbers in TLZs/ALZs (usage) in M-SHARP (Marine Sierra Hotel Aviation Readiness Program). When a TLZ is used for troop lifts, a TLZ Control Officer (Sgt or above) will maintain communications with BLACKBURN.

TLZ	GRID 18S TD	LAT (N)	LONG (W)	TA	CO-LOCATED DZ/GP/MP/RWY
Albatross	89622754	34 34’06”	77 17’36”	IG	DZ, GP-18
Bluebird	87372597	34 33’13”	77 19’02”	ID	DZ, GP-22A/B
Canary	85312856	34 34’35”	77 20’25”	IF	GP-27
Buzzard	63583504	34 37’48”	77 34’44”	SH	SR-9
Cardinal	78393689	34 39’00”	77 25’05”	KB	
Condor	75773544	34 38’11”	77 26’46”	MF	DZ
Coot	90944274	34 42’19”	77 16’58”	FA	
Crane	96203559	34 38’31”	77 13’25”	GE	GP-7
Dodo	88733098	34 35’56”	77 18’13”	HB	DZ, GP-16
Dove [1]	85883094	34 35’53”	77 20’05”	HB	GP-25
Duck	65772157	34 30’33”	77 33’05”	SV	Camp Davis South
Eagle	78504117	34 41’19”	77 25’05”	MC	
Egret	84633050	34 35’38”	77 20’54”	IE	GP-30
Falcon	91452931	34 35’04”	77 16’25”	GG	DZ, GP-13
Finch	83573197	34 36’25”	77 21’38”	HG	GP-35
Flamingo	61623534	34 37’56”	77 36’02”	SG	SR-9
Goose	91973100	34 35’59”	77 16’06”	GG	DZ, GP-10
Gull	96923506	34 38’14”	77 12’56”	GI	GP-9
Hawk [1]	89693224	34 36’30”	77 17’39”	HE	
Hummingbird	94323217	34 36’38”	77 17’35”	GH	Reduce Visibility TLZ
Jaybird	87953392	34 37’31”	77 18’46”	HD	
Kingfisher	71453264	34 36’37”	77 29’33”	SM	
Kite	81662935	34 34’58”	77 22’50”	JC	
Lark [3]	94773885	34 40’16”	77 14’23”	FC	DZ
Loon	94663200	34 36’33”	77 14’21	GH	
Mallard	78794561	34 43’43”	77 24’57”	AC	
Nighthawk	76202946	34 57’05”	77 26’23”	LG	MARSOC Complex
Oriole	80573120	34 35’57”	77 23’34”	JA	GP-33

TLZ	GRID 18S TD	LAT (N)	LONG (W)	TA	CO-LOCATED DZ/GP/MP/RWY
Osprey	89432924	34 35’00”	77 17’45”	IA	GP-17
Parrot	76603901	34 40’08”	77 26’17”	MB	
Partridge	64713780	34 39’19”	77 34’03”	SE	
Peewee	70863349	34 37’04”	77 29’57”	SJ	SR-6
Penguin	90023769	34 39’35”	77 17’29”	GB	DZ, MP-1
Pheasant	66682359	34 31’39”	77 32’31”	SV	DZ, Camp Davis North
Phoenix	64892348	34 31’34”	77 33’41”	ST	
Pigeon [4]	93883829	34 39’57”	77 14’58”	MOUT	UH-1Y Only
Pipit	69343523	34 37’59”	77 30’58”	SF	SR-6 N
Plover	85413231	34 36’37”	77 20’25”	HC	DZ, GP-29
Quail	90522839	34 34’35”	77 16’58”	IB	GP-15
Raven	93743837	34 40’00”	77 15’04”	MOUT	(Soccer Field)
Robin	95104295	34 42’29”	77 14’14”	QA	
Sandpiper	82603058	34 35’47”	77 22’14”	HG	GP-31
Snipe	72303728	34 39’08”	77 29’04”	SD	
Swallow	66672456	34 32’11”	77 32’32”	SV	
Swan	91294127	34 41’31”	77 16’41”	FE	GP-2
Tern	93893742	34 39’29”	77 14’57”	GC	MP-4
Turkey	70903138	34 35’56”	77 29’54”	SL	
Vulture [2]	76123001	34 35’15”	77 26’27”	LG	Contact EOTG
Woodpecker	92774083	34 41’19”	77 15’44”	QB	GP-3

Table 4-5--TLZs

NOTE(S):

1. TLZ DOVE and TLZ HAWK contain a large amount of loose sand, which can impact/limit CH-53E and V-22 operations.

2. Scheduling must be coordinated through the OIC, EOTG (S-3).

3. Approaches to or departures from TLZ LARK must be from North, South, or West. For noise abatement, do not depart or approach TLZ LARK to and from the east across Highway 172 unless it is unsafe to do otherwise

4. Located on top of Hotel at MOUT Complex Lejeune; capable of supporting the landing of one UH-1/Y or lighter Helicopter upon approval of SRR from requesting unit. Approaches to TLZ Pigeon for landings and HRST shall be made from the NE to minimize roof damage to buildings directly south of TLZ Pigeon.

b. The Victor, Whiskey, and X-Ray Airspace Control Points may be utilized to provide control of aircraft operating feet wet off the coast of Camp Lejeune for High Speed Tactical Approaches as

coordinated with BLACKBURN.

c. ALZs. Units shall schedule ALZs using procedures in Chapter 3, after coordination through the Area Commander of that ALZ. Some numbered ALZs do not appear in Table 4-6. ALZ-2, is located at II MEF Headquarters. The requesting unit must coordinate with key personnel or acting representative of II MEF G-3 (Air Officer) at (910) 451-8487 prior to using ALZ-2. As with any request, II MEF G-3 (Air) is the 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 shall make it known on the TAR form in RFMSS. Requesting unit is responsible to coordinate safety, security, and traffic control issues. ALZ-4 and ALZ-33 are scheduled through MCIEAST-MCB CAMLEJ AC/S, G-3/5 Base Operations at (910) 451-0375. Requesting units shall contact the MCIEAST-MCB CAMLEJ (AC/S, G-3/5) for a copy of the SOP for ALZ-4 and ALZ-33. ALZ-32 is scheduled through the MARSOC G-3 Air at (910) 440-0863/0862. ALZs are not authorized for tactical training such as HST/HRST/Parachute events. Units must schedule a standard TLZ for those types of events.

ALZ NUMBER	GRID 18S TD	LAT (N)	LONG (W)	LOCATION	AREA COMMANDER
2	82843950	34 40’28”	77 22’13”	II MEF Headquarters	CG, II MEF (G-3 Air)
4	85063840	34 39’54”	77 20’45”	WPT Hill Field	MCIEAST-MCB CAMLEJ G-3/5
5	84083793	34 39’38”	77 21’22”	Headquarters 2d MLG	CG, 2d MLG
6	84773720	34 39’15”	77 20’55”	10th Marines Area	CO, 10th Marines (S-3)
7	91573769	34 39’36”	77 16’28”	OP2 (Restricted)	RCO, G-3/5
8	83472961	34 35’08”	77 21’39”	Courthouse Bay	CO, MCES (S-3)
10	82484237	34 42’01”	77 22’29”	Tennis Courts Paradise Point (Restricted)	MCIEAST-MCB CAMLEJ G-3/5
12	80784388	34 42”49”	77 23’38”	Golf Course West	MCIEAST-MCB CAMLEJ G-3/5
13	82394390	34 42’50”	77 22’34”	Golf Course East	MCIEAST-MCB CAMLEJ G-3/5
15	74814686	34 44’21”	77 27’35”	Camp Geiger Parade Deck	CO, SOI-E (S-3)
20	80073629	34 38’42”	77 25’58”	Rear K-504A/B	RCO, G-3/5

22	90542691	34 33’46”	77 16’59”	EOTG Boat Locker	OIC, EOTG (S-3)
24	84184523	34 43’35”	77 21’25”	Naval Hospital	CO, NAVHOSP
26	85673630	34 38’47”	77 20’19”	French Creek Soifert Field	CG, 2d MLG (G-3)
27	75563045	34 35’29”	77 26’50”	Stone Bay Rifle Range	CO, WTBn
28	93793813	34 39’52”	77 15’01”	MOUT Lejeune CTF(Restricted)	RCO, G-3/5
29	75044105	34 41’12”	77 27’20”	Camp Devil Dog	CO, SOI-E
32	74992965	43 35’04”	77 27’19”	MARSOC Headquarters	MARSOC G-3
33	85203848	34 39’57”	77 20’39”	WPT Hill Field	MCIEAST-MCB G-3/5
34	79254635	34 44’80”	77 24’40”	Headquarters Camp Johnson	CO, MCCSSS

Table 4-6—ALZs

9. Off-Base Tactical Landing Zones. MCIEAST-MCB CAMLEJ currently has leasing contracts in place for use of TLZs by MV-22 or CH-53 aircraft at the Caledonia Correctional Institution in Halifax County, NC and the Bladen Lakes State Forest in Bladen County, NC. Use of these TLZs requires scheduling in RFMSS and checking in and out with Blackburn. These TLZs are restricted to limited operations such as touch and go’s, pattern work, and approaches. Only aircraft crew personnel are permitted to deplane and these TLZs will not be used for infantry related missions. Aircraft will not remain in the TLZs for any significant duration unless required to do so as a result of aircraft malfunctions or other safety issues. Details for use of these TLZs are published in the current MCIEAST-MCB CAMLEJBul 3710.

10. Parachute Operations and Drop Zones. DZs must be scheduled in RFMSS for PARAOPS. Range Control maintains copies of all DZ surveys (AF Form 3823). If supporting aircraft will fly in either the HAT FOX MOA or the R-5306C airspace, the unit must schedule these airspaces through BIG ROCK (Cherry Point Range Control, Phone Number 252-466-2936 or 252-466-2233.

DZ	GRID 18S TD	LAT (N)	LONG (W)	Rad/DME from NAVAID	TA/TLZ/GP/MP/RWY CO-LOCATED
BLUEBIRD [1]	87382599	34 33’ 13”	77 19’ 02”	DIW 109/007	ID, TLZ, GP-22
CONDOR [2]	75793543	34 38’ 11”	77 26’ 45”	DIW 091/005	MF, TLZ

FALCON [1]	91512926	34 35′ 03″	77 16′ 23″	DIW 094/009	GG, TLZ
LARK	94763886	34 40′ 16″	77 14′ 29″	DIW 071/013	FC, TLZ
PHEASANT [3]	66692361	34 31′ 40″	77 32′ 31	ILM 069/019	SV, TLZ, Camp Davis N

Table 4-7--Parachute DZs

NOTE(S):

1. Requires safety/recovery boats. Boat support is using unit responsibility. Safety Swimmers are a unit responsibility.

2. Requires coordination through MCAS New River Operations prior to use and scheduling with Range Control.

3. Use of PDZ Pheasant must be deconflicted with MAG-26 and MAG-29.

11. Water Drop Zones. Water DZs must be scheduled 14 days in advance to permit publication of a Notice to Mariners (NOTMAR). (See Chapter 3 for scheduling procedures). Safety recovery boats and safety swimmers are required and must be provided by using units. Gator and Shark Water DZs specific locations may be adjusted by coordinating with Range Control.

12. Drop Zone Control

a. DZ/Water DZ Safety Officer (DZSO) Jumpmaster/Safety Insert Officer (SIO) or Malfunction Officer (MO) (Sgt or above) will be assigned for parachute operations.

DESIGNATION	GRIDS	LAT/LONG	AREA	NAVAID RAD/DME
Gator	18STD 9326	34 deg 33″ 27′ N 77 deg 15″ 21′ W	Onslow Bay	DIW104010
Shark	18STD 8722	34 deg 31″ 11′ N 77 deg 18″ 40′ W	Onslow Bay	DIW125007

Table 4-8--Water DZs

DZSO must be current and a certified jumpmaster/Safety Insert Officer (SIO) on the Command Certification Letter. The DZSO shall:

(1) Carry out the duties normally associated with a FAC /Terminal Controller, to include signing for the DZ and creating /releasing a NOTAMs.

(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 jumps within these areas.

(5) If any part of the PDZ is within 1000 meters of a body of water that is four ft or deeper, must have the required safety boats and safety swimmers to support the number of jumpers.

b. Use of PDZs 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).

13. Unmanned Aircraft System Operations

a. Background. For the purposes of this order, the term UAS refers to all Groups of UAS including Commercial Off the Shelf (COTS). If a UAS is purchased with government funds, the aircraft is classified as a government owned UAS. All Non-program of record UAS will require a special range request (SRR) with items 1-4 below as enclosures. For II MEF units the SRR will be routed to range control via the II MEF UAS program manager; for non II MEF organizations the SRR will be routed to range control via the appropriate chain of command. Any UAS whether government owned or not, must meet the following requirements prior to beginning flight operations:

(1) Interim Flight Clearance (IFC) or Airworthiness Certificate.

(2) Approved DoN COTS UAS Exemption.

(3) Spectrum approval from the MCIEAST G-6 Spectrum Manager.

(4) Certification of UAS operator training.

(5) Concept of operations.

b. FAA Regulations. According to current FAA regulations, government owned UAS operations must be conducted within Restricted Areas or Warning Areas or as designated in the National Airspace System with an approved Certificate of Authorization (COA) or Waiver. Due to this restriction, UAS operations cannot originate from Range L-5, TLZs Cardinal, Condor, Eagle, Parrot, Vulture, Phoenix, Swallow, Pheasant, Nighthawk, and Duck, or training areas not included in

restricted airspace without an approved FAA COA or Waiver. UAS operations are permitted in the GSRA Restricted Area with the exception of the Holly Ridge and Sky Manor airport exclusion areas. Once airborne, UASs cannot depart the Restricted Area except under special circumstances that have been coordinated with the FAA and ATC. All UAS operations will be conducted in accordance with reference (a) and this Order which provide institutional range safety guidance and direction for units training with and/or testing UASs on operational training ranges. Reference (a) can be found on the RCB website.

c. UAS operations:

(1) UAS operations will be conducted in accordance with reference (bs).

(2) An individual UAS operator may not operate more than one Ground Control Station (GCS). Proponents desiring to operate multiple AVs from a single GCS must seek and obtain specific permission from Range Control. This may be achieved via an email Special Range Request.

(3) UAS Operators must yield the right of way to all manned aircraft. Yielding the right of way means that the unmanned aircraft must give way to the manned aircraft and may not pass over, under, or ahead of it unless well clear. The minimum acceptable spacing between manned and unmanned aircraft is 1000 feet vertically and 1000 meters laterally unless they are operating under the control of a common training exercise commander or his/her representative. UAS Operators will not operate a UAS in vicinity of any other aircraft as to create a collision hazard.

(4) UAS operations must remain within the ROZ assigned by Range Control.

(5) UAS Operators will not operate a UAS in a careless or reckless manner so as to endanger life or property.

(6) Units may fly UASs through Gun Target lines, SDZs, and over dudded impact areas to support live fire training.

(7) Live-fire UAS (armed and those with LASERs) are approved for use aboard Camp Lejeune. Live-fire UAS are not cleared for overflight of personnel; therefore, the ground corridors under the flight path from launch point to impact area must be sanitized of personnel.

(a) Using the established range footprints and training areas within the boundaries of Lyman Road, Sneads Ferry Road and Highway 172 to employ live-fire UAS, for example, would mitigate

sanitization requirements because of the proximity to the G-10 Impact Area.

(b) Using a lauch point to support longer range live-fire UAS employment is an option so long as the ground corridors under the flight path are sanitized.

d. Intelligence Oversight. MCO 3800.2B, Intelligence oversight, governs the proper use of collection and materials associated with it. For the purposes of this order, a statement must be included on a unit flight schedule, training plan, or letter of instruction that publishes domestic tactical air reconnaissance mission, both manned and unmanned. The proper use statement will state: “This domestic tactical air reconnaissance mission is conducted in accordance with MCO 3800.2B.” The authorized signature on the unit flight schedule, training plan, or letter of instruction constitutes certification of proper use statement. The proper use statement validates the mission and certifies that it is conducted in accordance with the Intelligence Oversight Regulations and Service Domestic Tactical Reconnaissance Imagery policy.

e. Runway Facilities. TLZ Bluebird has a UAS runway facility (hard packed gravel runway) designed for the larger UASs like the Shadow, Blackjack, and Fire Scout. This facility was designed to meet the requirements for UASs that need a runway to take off and land. Units with larger UASs that need this facility to operate at Camp Lejeune are required to schedule it in RFMSS. Tactical vehicles and other manned aircraft must stay off this runaway.

f. Restricted Operating Zones and Training Areas. Restricted Operating Zones (ROZs) exist as the primary airspace for UAS operations, (see Table 4-9 and Range Control website). UAS launch, recovery and control will normally occur within the assigned ROZ. A Launch and Recovery Site (LRS) must be reserved in RFMSS. ROZs 1-4 were designed for the Group 3 and larger UASs flying above 3000 feet. Smaller UAS (SUAS) may use these ROZs. Live fire range SDZs, training areas, and adhoc ROZs may be used as ROZs if scheduled in RFMSS and coordinated with range control.

g. On-Call ROZs. To support flexible Group 1 and 2 UAS integration in unit training, “On-Call ROZs” may be requested real time (same day request) with Blackburn to employ SUAS on ranges, in training areas, on the beaches, or around training facilities. On-Call ROZs are defined by a point (8 Digit grid) with a 500 meters radius to an altitude of up to 400 feet AGL. The employment of “On-Call ROZs” will be on a not to interfere basis with ongoing or previously scheduled training events. On-Call ROZs are restricted to SUAS operations only. Due to their non-scheduled nature, On Call ROZs are at the discretion of BLACKBURN.

h. UAS Visual Line of Sight (VLOS) requirements. Permission to fly a UAS beyond VLOS can only be approved when operating entirely within Restricted Airspace. UAS capable of geo-fencing and/or capable of mode 3 IFF (squawking) may use these methods to operate beyond visual line of sight. UASs without these capabilities must be kept in sight by a visual observer without the aid of optics to ensure he can see and avoid manned aircraft at all times. VLOS requirements may be met through the use of multiple daisy chained observers. All visual observers must have positive communications with the OIC.

(1) When UAS is being operated beyond VLOS, UAS Operators must:

(a) Use geo-fencing and/or mode 3 IFF capabilities.

(b) Constantly know the unmanned aircraft's location.

(c) Maintain the unmanned aircraft's attitude, altitude, and direction of flight.

(d) Be aware of other air traffic or hazards.

(e) Ensure that the unmanned aircraft does not endanger the life or property.

(f) Remain within the ROZ assigned by Range Control.

ROZ	ROZ Name	Perimeter WGS-84 GRID (18S TD)	LRS[1]
1	Onslow Bay	890260,930290,930250,910240	Beach/Ship
2	Highway 172	955370,962370,972343,962348,952344	TLZs Crane/Gull/Ship
3	MOUT Lejeune	900400,945400,945375,900375,895387	TLZs Pigeon/ Raven/ MOUT facility/Ship
4	Marines Road	870350,892350,900320,906320,906305,930290,890260,830302,852320	TLZs Jaybird/Falcon/ Osprey/Albatross/ Quail/Egret/Dove/ Ship
5	Bluebird	850290,900275,900240,850270	TLZ Bluebird
6	Stone Bay UAS	746288,752272,758280,765285,766291,758297,754299,753296	LC
7	GSRA CIED	632260,650260,650250,633250	OP-11
8	Farnell Bay	830364,850364,854355,820313,800320,830340	Boat
9	AIWW	977346,980340,910270, 880250,875255,906274,968336	Boat
10	Combat Town	880330,898330,800320,900310,880310	TLZ Hawk, Combat Town
11	Lark	930395,945395,956376,93037	TLZ Lark

ROZ	ROZ Name	Perimeter WGS-84 GRID (18S TD)	LRS[1]
12	Falcon	907304,907305,925316,935302,916283,906301	TLZ Falcon
13	GSRA-Turkey	690320,720320,710283,680270,680290	TLZ Turkey
14	Partridge	636400,650400,650370,626370	TLZ Partridge
15	Finch	833325,847316,844315,837307,834301,825306,818306,830323	TLZ Finch
16	Robin	925430,940434,953430,953422,947410,947405,925405	TLZs Robin/ Woodpecker
17	G-10 Impact Area	887373, 904378, 916373, 953373, 952341,948332, 903317	TLZ Penguin/Tern OPs, MPs
18	K-2 Impact Area	775354, 789364, 828364, 825335, 803321, 774337	VL-1, VL-3, VL-5, K-Ranges

Table 4-9--Camp Lejeune SUAs ROZs

Note. 1. LRS sites are for UAS employment. UAS may launch/recover from inside the assigned ROZ or transit to the ROZ from a remote LRS site.

i. Scheduling. UAS operations will be scheduled in accordance with Chapter 3 along with the following considerations.

(1) ROZs can be viewed on the RCB website. Units employing UAS may schedule more than one UAS ROZ and work between them as BLACKBURN can deconflict. UASs originating and/or terminating outside of Camp Lejeune Restricted Areas shall coordinate an entry/exit point and routing to and from a UAS ROZ. Deconfliction with other training units is the main reason UAS ROZs are established in RFMSS. All scheduled UAS ROZs will appear on the Daily RFWO with altitudes so aviation training units can brief and avoid them. Deconfliction may be required prior to Range Scheduling approval. Deconfliction e-mails will be submitted to: lejeunerangescheduling@usmc.mil.

(2) UASs shall have the ability to load a programmed flight plan, which the unmanned aircraft will execute autonomously should the control link be lost. This flight plan can be adjusted in flight, after coordinating with BLACKBURN. The basic plan shall always begin with the unmanned aircraft holding its present position for 30 minutes, and then proceeding directly to either the scheduled Divert Pattern or preplanned exit point, as required. BLACKBURN shall be notified immediately if the up/down link is lost with the unmanned aircraft for more than five minutes to be able to clear the flight plan route. These five minutes will allow the UAS pilot time to re-acquire the UAS while leaving an additional 25 minutes for BLACKBURN to clear airspace.

(3) Units using secondary control stations aboard Camp Lejeune must schedule the control site in the original RFMSS request.

The unit must comply with the check-in/out procedures and OIC/RSO requirements of this Order.

j. RSO and UAS Operator Requirements. A sergeant may serve as RSO for non-live fire UAS events in which an OIC is not required; a contractor may serve as RSO for non-live fire UAS events with approval of the Installation Commander. An OIC and RSO are required for live-fire UAS events. RSO and UAS Operators must meet all requirements addressed in Chapter 1 to include being listed on his/her unit's by-name OIC/RSO qualification roster as being authorized for UAS operations. These individuals are responsible for the overall conduct and safety of UAS operations. The RSO shall be knowledgeable and experienced on UAS operations and have a current Camp Lejeune OIC/RSO Safety Card to sign out the event/facility. See Appendix G for OIC/RSO requirements. Use of any laser system from UAS shall be in accordance with Chapter 7 and Appendix G of this Order.

k. Pre-flight Preparations

(1) Prior to conducting UAS operations the OIC must review following information:

(a) Location of the GCS, Portable Control Station (PCS), and, LRS.

(b) UAS type and mission (e.g., IQT, currency flying, test flight, training flight, flight in support of, etc.).

(c) Hours of operation.

(d) Verification of geo-fencing data and altitude block within ROZs for flight operations.

(e) Intended UAS route (if applicable).

(f) Transponder code (if equipped).

(g) Review Emergency/Down UAS and lost link procedures.

(h) Any other pertinent information on the conduct of the flight.

(i) Review the Daily Range Firing Warning Order and current Camp Lejeune Military Installation Map.

(2) For all UAS operations utilizing a LRS on Camp Lejeune, the OIC/RSO must be physically present at the LRS. The OIC/RSO shall establish communications with BLACKBURN on 34.70 FM (Primary), 40.10 FM (Alternate), or could use a cell phone (Tertiary) to call Blackburn at 451-3064 prior to conducting flight operations. In cases where the UAS is launched and controlled from an offsite location, the OIC/RSO must be located at Camp Lejeune and the operator can be at the offsite LRS/Navy Ship unless/until control is passed to an operator aboard Camp Lejeune.

(3) Group 3 and larger UAS shall establish and maintain communications with Range Control (BLACKBURN) on the Air Safety Control Net (233.8 UHF) prior to entry into Camp Lejeune restricted airspace. All Group 3 and larger UASs shall have an operable IFF transponder capable of Mode 3C operation.

l. Weather Minimums

(1) Weather minimums for all Group 1 and Group 2 UAS operations are 1000 ft ceiling and 3 statute miles visibility, unless IFC is more restrictive.

(2) Group 3 and larger take-off weather minimums for pattern work are 1000 ft ceiling and 3 statute miles visibility. The standard weather minimums for Group 3 and larger UAS operations in the restricted areas are 3000 ft ceiling and three statute miles visibility. These Group 3 and larger standard minimums may be decreased with coordination with local airspace management authority if the UAS is capable of operating under Instrument Flight Rules (IFR) during Instrument Meteorological Conditions (IMC).

<table>
<tr><th>UAS CATEGORY</th><th>MAX WT (LBS) (MAX GROSS TAKE OFF WEIGHT)</th><th>NORMAL OPERATING ALTITUDE</th><th>SPEED KIAS</th></tr>
<tr><td>Group 1</td><td>0-20</td><td>Less than 1200 ft AGL</td><td>Less than 100</td></tr>
<tr><td>Group 2</td><td>21-55</td><td>Less than 3,500 ft AGL</td><td rowspan="2">Less than 250</td></tr>
<tr><td>Group 3</td><td>Less than 1320</td><td rowspan="2">Less than 18,000 ft MSL</td></tr>
<tr><td>Group 4</td><td>Greater than 1320</td><td>Unlimited</td></tr>
</table>

UAS CATEGORY	MAX WT (LBS) (MAX GROSS TAKE OFF WEIGHT)	NORMAL OPERATING ALTITUDE	SPEED KIAS
Group 5		Greater than 18,000 ft MSL	

Table 4-10--UAS Characteristics

m. UAS Flight Operations

(1) For UAS operations launching and/or recovering on Camp Lejeune, the OIC/RSO shall contact BLACKBURN 30 minutes prior to takeoff and request to go “HOT” in their scheduled UAS ROZ and LRS. BLACKBURN shall provide a Range Control brief, activate the scheduled UAS ROZ/LRS, and provide advisories for takeoff. The OIC/RSO shall notify BLACKBURN when the UAS is "SAFE ON DECK," and when training is complete for the day, contact BLACKBURN to de-activate UAS ROZ and report the number of personnel trained and the number of sorties.

(2) For UAS operations launching and recovering outside of Camp Lejeune restricted area airspace, the UAS OIC/RSO **shall comply with all FAA COA or Waiver guidelines and contact BLACKBURN prior to the** UAS entering the restricted area to activate their UAS ROZ and receive a Range Control brief with advisories. Upon completion of training, the UAS OIC/RSO shall radio out with BLACKBURN, de-activate UAS ROZ, and report the number of personnel trained and the number of sorties.

(3) The UAS OIC/RSO shall request clearance from BLACKBURN before changing the operating UAS position (scheduled ROZ), altitudes, or route.

n. In-Flight Emergencies. The safety of manned aircraft, personnel and property is paramount. The UAS OIC/RSO shall adhere to all safety precautions prescribed in applicable FAA COA or Waiver and this chapter, managing emergencies in accordance with their UAS Emergency Procedure Checklist and the following range procedures:

(1) In the event of lost communication with BLACKBURN, the OIC/RSO shall:

(a) Maintain UAS within assigned ROZ and within assigned altitude or altitude block.

(b) Try to re-establish contact with BLACKBURN via any means (alternate radio, land line, cell phone, etc.).

(c) 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 scheduled ROZ and land as soon as practical.

(d) For Group 3 or larger UASs, if communications have not been re-established with BLACKBURN, change squawk to lost communications (7600). Maintain assigned altitude block and proceed to pre-briefed recovery UAS ROZ or exit point. Once over or in the recovery UAS ROZ, descend as required to recover.

(e) If operating beyond VLOS, recover, and maintain visual line of sight operations until flight termination or until restoring communication with BLACKBURN.

(2) If required to ditch, the OIC/RSO shall:

(a) Notify BLACKBURN as soon as possible.

(b) Maintain the UAS inside the restricted airspace.

(c) Proceed to the ditch site or, if unable, select, and clear a suitable ditching area and notify BLACKBURN.

(d) Advise BLACKBURN of the location of the UAS ditching point and recovery procedures taken.

(3) An emergency divert landing site can be established upon Camp Lejeune. The planning and scheduling requirements are the same as any other LRS site. The UAS OIC/RSO must advise BLACKBURN of their intention to either use the divert landing site or depart the airspace should an emergency arise.

(4) Emergency Recovery. The UAS OIC/RSO may declare an emergency whenever conditions require the UAS to land as soon as possible. They shall:

(a) Contact BLACKBURN; declare an emergency.

(b) BLACKBURN will divert all other aircraft from the projected UAS flight path.

(c) Advise BLACKBURN of required altitudes to expedite the recovery.

14. Forward Arming and Refueling Point Operations

a. FARP operations are authorized at TLZs Crane, Gull, Swan, Woodpecker, Osprey, Albatross, Bluebird, Dodo, Plover, Penguin, Condor, Camp Davis (North and South). Refueling operations require a Request for FEREIR be submitted to the NEPA section of the EMD. These

areas must be scheduled for FARP operations and signed for. Upon completion, the TLZ must be inspected and cleared by a Range Inspector. All USMC tactical refueling systems are authorized for use.

b. The CO 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 SOP's. All FARP training operations shall be established in accordance with the separation distances specified in NAVSEA OP5 Volume 1. FARP operations shall be conducted IAW NA 00-80T-103 and NA 00-80T-109. Conventional Weapons Loading (CWL) checklists shall be used and aircraft to be loaded with forward-firing weapons shall be positioned so that inadvertent firing will provide the least danger to personnel, buildings, and other aircraft. When forward-firing weapons are involved and the NAVAIR weapons/stores loading manual/checklist so requires, the area ahead of and immediately behind the aircraft shall be cleared and maintained clear until completion of the arming /dearming". The Explosive Safe Quantity Distance (ESQD) will be established and in compliance IAW reference (af) at all times.

c. Hot Refueling and Hot Seating with ordnance is authorized. These operations will be conducted in accordance with NAVAIR 00-80T-103 and NA 00 80T-109. The complete SDZ/Clear Zone must be cleared of all unauthorized personnel at all times.

d. Aviation ordnance is authorized for all FARP sites. In addition, 2.75 Inert/HE/WP/Illum Rockets, 20mm TP-T/HE, MK 76, and MK 80 (inert) bombs are authorized on Lyman Road. ESQD will not be exceeded and only authorized ordnance by the Range Control SOP/Range Cards will be utilized on that range/impact area. COs shall adhere to all policies and guidelines as set forth in governing documents, this Order, and unit SOPs.

e. If the FARP operations require berm construction, excavations, vegetation removal, or anything with potentially significant impact to the environmental integrity of the site, a SRR must be submitted to the CG MCIEAST-MCB CAMLEJ (G-3/5 RCB) with a FEREIR. A SRR and FEREIR must also be submitted if the unit proposes to FARP at a location other than those already approved above. The FEREIR must be submitted 30 days prior to the scheduled FARP activities.

f. <u>Ground Safety Measures</u>

(1) The Safety Arc and ESQD of the aircraft shall be cleared and maintained clear until completion of the loading, unloading, arming, and de-arming.

(2) In the event of a spill of any quantity, units shall immediately contact the ECCC by calling 911 and BLACKBURN. Units shall promptly implement spill contingency and or containment procedures as listed in unit SOP and other governing documents.

(3) Ammunition accounting/reporting, and weapon made safe will be conducted by qualified Aviation Ordnance personnel within the unit conducting FARP Operations.

g. Scheduling FARP Operations

(1) Units shall schedule authorized FARP sites, TLZs, and adjacent TAs 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 will deconflict or schedule as required the surrounding TA(s), TLZs, and GPs to assist the commander in ensuring non-exercise personnel do not enter the FARP site.

(2) Once scheduled, units shall contact Director, Installations and Environment, Resource Conservation and Recovery Section (RCRS) at DSN: 751-1482/commercial (910) 451-1482 and ECON at DSN: 751-5063/commercial (910) 451-5063 and advise him/her of their intention to conduct FARP operations. Notification shall include filling out a Field Exercise Request for Environmental Impact Review (FEREIR) which will 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 provide FARP specific information to Range Control, EMD Environmental Compliance Branch, and Explosive Safety Office. Information will be provided to Range Control NLT 10 working days prior to execution. Information will include:

(a) Operations Order or Letter of Instruction;

(b) Spill response plan, equipment, ammunition mishap, and containment procedures;

(c) Type and quantities of fuel and ordnance (NEW);

(d) ARFF assets/equipment;

(e) C2 and communications plan;

(f) Medical;

(g) FARP site diagram to include ESQD, Safety Arcs; and

(h) Security/road guard plan

h. Communications Procedures

(1) OIC/RSO shall check out the FARP site from Range Control scheduling, Building 1043 on Duncan Street.

(2) OIC/RSO shall call BLACKBURN on 34.70 to request authorization to occupy the FARP.

(3) In order to go “HOT,” the OIC/RSO shall ensure all orders/publication/SOPs concerning FARP operations are followed. Additionally, the OIC/RSO shall, at a minimum:

(a) Ensure appropriate medical personnel and support vehicle are onsite.

(b) Ensure spill response equipment is onsite and response personnel know the spill response plan.

(c) Ensure aircraft rescue/firefighting personnel and equipment are onsite and know the response plan.

(d) Ensure TAs, TLZs, and GPs forward of the FARP site Safety Arcs are clear of training units/personnel.

(e) Establish road guards as required with proper communications.

(4) Once authorization to go “HOT” is received from BLACKBURN, the OIC/RSO will make normal radio checks on the half hour and hour.

(5) Upon completion of training, the OIC/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.

i. Armament Safety Procedures

(1) Aircraft weapon systems will be loaded or unloaded only in approved areas. Selection of these areas will ensure total containment in the event of accidental discharge. The weapon systems dispersion angle and maximum range will be considered for the Safety Arc if natural or manmade barriers are not used.

(2) RW aircraft, loaded with ordnance, may land at Camp Lejeune TLZs. The aircraft commander must ensure that weapons systems are maintained in a safe condition and direction while conducting landings.

(3) Airspace routing used by rotary-wing aircraft flying from the ammunition loading site to and from the firing range will be plotted on a map or chart and maintained by the using unit. This course will be selected so that accidental firing at any point on the course will minimize risk to life and property, however, aircraft weapon systems will be maintained in a safe condition until within the range boundary. Rotary-wing aircraft routing from the ammunition loading site to the firing range will be in accordance with the course rules established in this Order and published in local SOPs.

(4) “Hot Loading, Hot Reloading and Hot Downloading” operations will be conducted in accordance with NAVAIR 00-80T-103 and NA 00-80T-109. Such operations are authorized when a thorough risk assessment has been conducted, control measures implemented and residual risks are identified and accepted by the appropriate commander.

(5) A dry pass or range sweep for the entire range, focusing on the target area, will be accomplished to ensure personnel are clear from hazardous effects. Aircraft may use onboard sensors (advance targeting pods, sniper, Litening Pod), or UAS targeting payload in lieu of a dry pass. Terminal controllers observing the target area may waive the dry pass.

(6) Prior to first weapons release/firing for each pass, final switch configuration will not be accomplished until the aircraft is in such a position that accidental activation or release will be contained within the range, and not represent a danger to ground personnel.

15. 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. For the N-1/BT-3 impact areas flares are only authorized if they burn out before hitting the water. Chaff/flare operations must be properly scheduled in RFMSS and a formal SRR submitted within 10 working days of the event. Two critical factors need to be considered; wind direction and current fire condition at Camp Lejeune. Effects from Chaff and Flares must be contained within authorized impact areas. Units must submit a formal SRR, per Appendix F.

b. Flares are never authorized during Fire Danger Plan 5. Other fire hazard conditions may restrict/modify flare use.

16. Landing Helicopter 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 LHD Deck has four lighted spots with the same dimensions as spots 2, 4, 5, and 6 on the Wasp Class LHD, 114.5 ft between spots. Total LHD Deck length is 495 ft and width is 62 ft (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. Lights may be operated using standard PALS procedures on frequency 30.55.

c. LHD Deck Maintenance. It is incumbent on all using units to report any damage or inoperable lights 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 or considered an TLZ of opportunity. A SRR is required for troops loading/unloading, cargo, external loads, HRST, and special usage of the LHD Deck.

e. If the Stone Bay Water sector is in use for pyrotechnics, then deconfliction must be accomplished prior to using the LHD Deck. When used as a TLZ of opportunity, aircraft will call BLACKBURN and request the LHD Deck. BLACKBURN will deconflict airspace, water space, and clear aircraft into the LHD Deck. Priority will be given to scheduled events/units.

f. Pattern Restrictions

(1) Maximum of 2 aircraft in LHD pattern. Participating aircraft will communicate via a discreet interflight frequency. There is no restriction on spot usage.

(2) Aircraft shall turn to downwind no further 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 ft.

(4) Aircraft will maintain a 250 meter buffer from Bald Eagle nesting area (approximately 500 meters SE at grid 803297) when using the LHD Deck in accordance with Chapter 2 of this Order.

17. MCOLF Camp Davis North/South

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 GSRA under the R-5304. The FAA identifier is 14NC. The airfield is one nm 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/paved runways. Runway 05/23 (Camp Davis South) is 5000 ft long by 250 ft wide. Runway 01/19 (Camp Davis North) is 5047 ft long by 150 ft wide. Airfield elevation at MCOLF Camp Davis is 60 ft MSL. TLZs Phoenix, Swallow, Duck and TLZ/PDZ Pheasant are also located in the Camp Davis area. The R-5304A contains a three mile, 1500 ft AGL exclusionary zone for Holly Ridge Air Park; a grass strip located east of the town of Holly Ridge (approximately two nm SE of Camp Davis). This exclusion zone allows civilian traffic to enter the Camp Davis area below 1500 ft whether R-5304A is HOT or COLD. This exclusion zone is not SUA. Camp Davis North also has 2 painted examples of U.S. Navy ships landing areas, one LHD Deck with 8 spots and one LSD Deck with 2 spots was designed to resemble a Wasp Class LHD/Whidbey Island Class LSD for aircraft operations.

b. Scheduling. The CG MCIEAST-MCB CAMLEJ (G-3/5 RCB) is the scheduling agent for training operations at MCOLF Camp Davis.

(1) 2d MAW units, specifically MAG-26 and MAG-29, have priority of use for Camp Davis runways and TLZs Pheasant, Phoenix, Swallow, and Duck. The only exceptions are prioritized Joint, Combined, or MAGTF Exercises.

(2) Units scheduling MCOLF Camp Davis must submit a TAR via RFMSS from two to 90 working days prior to the requested training date. MAG-29 will prioritize MCOLF Camp Davis use. This includes TLZs Phoenix, Swallow, Duck, and TLZ/PDZ Pheasant.

(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.

(4) All squadrons shall consult the Camp Lejeune Range Control daily RFWO during flight planning to avoid conflicts. Once authorization has been granted by BLACKBURN to proceed to a TLZ of opportunity, and the pilot has ensured, by “COLD” pass, that the runway or TLZ requested is not occupied, training can be conducted.

(5) 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 0.6 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 three nm due east of Camp Davis at 1043 ft MSL (has extensive support cable network).

(3) One tower is six nm due east of Camp Davis at 829 ft MSL (has extensive support cable network).

(4) One tower is 0.7 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 and High Schools by 1/2 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 nm radius of Camp Davis to avoid civilian air traffic conflicts and for noise abatement over the town of Holly Ridge.

(3) When FARP operations occur at either Camp Davis North or South, aircraft using FARP will conform to normal entry and exit course rules for the runways in use to avoid noise complaints from the town of Holly Ridge.

e. Course Rules

(1) The Camp Davis area includes all restricted airspace within the GSRA boundary south of grid line 25. This area is a subset of the R-5304A. All aircraft using Camp Davis will check in and out with BLACKBURN. BLACKBURN approval to operate in the Camp Davis area equals the procedural control. Live fire ranges are located north of the 25 grid line. If flight activities require transit north of the 25 grid line, aircraft must maintain direct communication with BLACKBURN. Monitoring BLACKBURN frequency is encouraged for situational awareness of inbound and outbound traffic while operating in the Camp Davis area.

(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 233.8 (UHF). Pilots will also check-in 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 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 paragraphs 17e(4)f through 17e(4)(i) 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 and maintain a pattern west of the 66 North/South grid line to remain clear of the Camp Davis North pattern.

f. Entry Procedures

(1) **MV-22s/tiltrotors** in APLN mode shall enter the Camp Davis area from a one mile IP either from the NE CP HOTEL, SE CP TANGO, or SW CP SIERRA at 1500 ft AGL, as depicted on Figure 4-3. 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 IP either from the NE CP HOTEL, SE CP TANGO, or SW CP SIERRA at 700 ft AGL, as depicted on Figure 4-3. 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)

(a) **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 4-3). 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 one 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.

(b) **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 4-3). 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 one 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)

(a) **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 4-3). 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 one 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.

(b) **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 4-3). 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 one 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)

(a) **Tiltrotors** enter the pattern for Runway 23 via CP Sierra at 1500 ft and announce entering downwind (see Figure 4-3). 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 one 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.

(b) **Helicopters** (MV-22s in CONV mode) enter the pattern for Runway 23 via CP SIERRA at 700 ft and announce entering downwind (see Figure 4-3). 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 one 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)

(a) **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 4-3). 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 one 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 4-3). 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.

(b) **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 4-3). 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 one 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 4-3). 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.

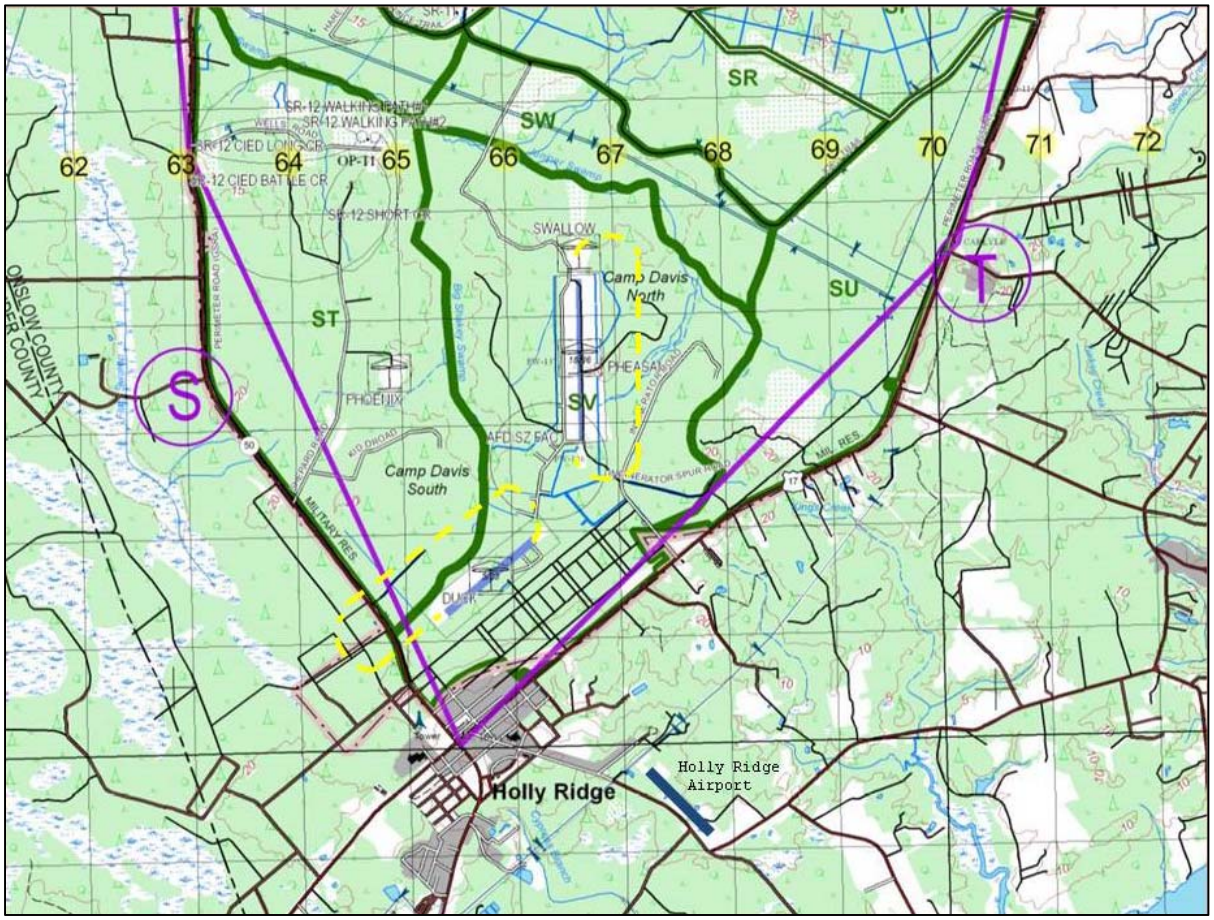


Figure 4-3. Camp Davis Entry Points and Landing Patterns

g. <u>Optional Tiltrotor Entry Procedures</u>

(1) 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.

(2) Pilots shall enter the Camp Davis area from CP Tango or a three nm extended runway centerline for Runway 05 (See Figure 4-3). Prior to entry pilots shall announce their intentions at the one mile initial point (IP) either from the NE CP HOTEL, SE CP TANGO, or SW CP SIERRA 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, one 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 ft 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 northwest 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 CALs is 300 ft AGL. Pattern altitude for a Tactical Approach is from 300-500 ft AGL. Intent to deviate from pattern altitude shall be broadcast 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 whichever 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 loses 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 five 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 feet 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 SRR from 14-45 working days prior to the requested date to the CG MCIEAST-MCB CAMLEJ (G-3/5 RCB). Requesting unit will coordinate with MAG-26/MAG-29 operations and II MEF G-7 to deconflict requirements and approve/disapprove SRR accordingly. MAG-26 and MAG-29 must send deconfliction emails to Range Scheduling. SRR must indicate exactly the type of training requested. Using units may also be required to submit a FEREIR to EMD depending on the type of training activities being done on the ground.

l. Single ship external training will be conducted on the East side of the Camp Davis North runway. Dual ship external training will be conducted on both the East and West sides of the Camp Davis North runway. When dual-site external operations are being conducted at Camp Davis North, all non-HST air operations are restricted to Camp Davis South, with TLZ Phoenix remaining closed for air operations. During single-ship HST operations at Camp Davis North, TLZs Phoenix, TLZ Duck, and Camp Davis South may be used for CALs or other air event training.

m. HST Operations at Camp Davis North

(1) Overview. Camp Davis North will facilitate dual aircraft HST operations with an RSO at each external location and a single Corpsman and safety vehicle centrally staged. To alleviate personnel requirements, the team lead for each HST will act as the RSO. In the event of an emergency at one location all operations will cease until the Corpsman and safety vehicle are back on station. Single ship patterns will be IAW the standard traffic

pattern listed in paragraph 17.f. above. Dual ship patterns will be conducted on either side of the North-South runway with east and west traffic patterns.

(2) Scheduling. HST operations will be scheduled in RFMSS. TLZ Swallow must also be scheduled in RFMSS for load inspection.

(3) External Load Park. All sling loads will be stored at TLZ Swallow surrounding the perimeter of the “lollipop”. Once complete with training or the support window, the last aircraft to utilize that load shall move it back to its designated location.

(4) HST Restrictions

(a) HST will monitor OLF Common.

(b) HST shall have enough radios for each HST to communicate directly with BLACKBURN, OLF Common, and the corpsman independently from each other.

(c) All POVs will park at the designated parking area at Camp Davis South. No POVs are authorized on Camp Davis North. All tactical vehicles utilized by HST on Camp Davis North shall remain clear of pattern operations and shall not be parked on the runway or taxiways.

(5) Single-Ship HST

(a) All participating aircraft will check in with BLACKBURN for entry in to the Camp Davis Operating Area and will advise BLACKBURN that they are inbound for HST operations. Once approved for entry, the participating aircraft will make traffic advisory calls over OLF Common and check in with HST.

(b) Pattern operations will be conducted at 300’-500’ AGL. Single ship patterns shall be conducted to the east of runway 1/19 IAW paragraph F of this chapter. Due to terrain and standing water, external loads should be placed in the grass area east of the runway, and shall not be on the runway at any point. Aircraft in the pattern shall remain inside the power line slash that borders the eastern edge of the Camp Davis Operating Area.

(c) At no point shall the external load overfly any portion of the runway or taxiways during single ship operations.

(d) During HST operations, the runway will not be available for FAM/CAL. All non-HST training will be conducted at Davis South or in accordance with the paragraph below.

(6) Dual-Ship HST and FAM/CAL

(a) All participating aircraft will check in with BLACKBURN for entry in to the Camp Davis Operating Area and will advise BLACKBURN that they are inbound for HST operations on the East or West side. When an aircraft is inbound for FAM/CAL on the West side they will advise BLACKBURN prior to entry. Once approved for entry, the participating HST or FAM/CAL aircraft will make traffic advisory calls over OLF Common and check in with HST if conducting external operations.

(b) Due to terrain and standing water, external loads should be placed in the grass area on the East side and the grass area between the runway and the taxiway on the West side. External loads shall not be on the runway or taxiway at any point. During times that ROZ 7 is in a HOT status, all west patterns will stay inside training area SV, with the visual ground reference of the road that parallels the west side of the runway into the tree-line. When ROZ 7 is NOT in a HOT status, there will not be a restriction on pattern width inside the restricted area. The pilot of a second aircraft will coordinate on OLF Common prior to entering the pattern. The first aircraft will land and remain on deck while the second aircraft transports its load to the west side HST location.

(c) The external load and FAM/CAL pattern for the West side shall not overfly the runway. The landing “lane” for HST will be the grass strip between the runway and the parallel taxiway and shall not overfly the runway at any point during HST operations. The landing lane for FAM/CAL on the West side will be the taxiway or grass to land on the taxiway or in the grass.

(d) Pattern operations will be conducted at 300’-500’ AGL. For dual-ship operations, the runway will be the dividing line between the two patterns. Neither aircraft shall overfly the runway during HST or FAM/CAL operations.

(e) Both aircraft can be over a load or conducting lifting operations at the same time. Aircraft will announce when they are transitioning to forward flight over OLF Common.

(f) When an aircraft is complete with external training, and they are the last aircraft to utilize that load, it shall be repositioned to its designated location. During the reposition, the aircraft still conducting training shall remain on deck until the load is returned and the departing aircraft is clear of the pattern.

(g) During dual-ship HST operations or FAM/CAL at Camp Davis North, pattern operations on Camp Davis South are restricted to the western half of runway 5/23. The deconfliction line between Camp Davis North patterns and the Camp Davis South patterns is the east/west culvert between the two runways.

(7) Deliberate Pickling of a Load. In the event a load must be deliberately pickled, aircraft commanders should exercise sound judgement and avoid pickling the load on the runway.

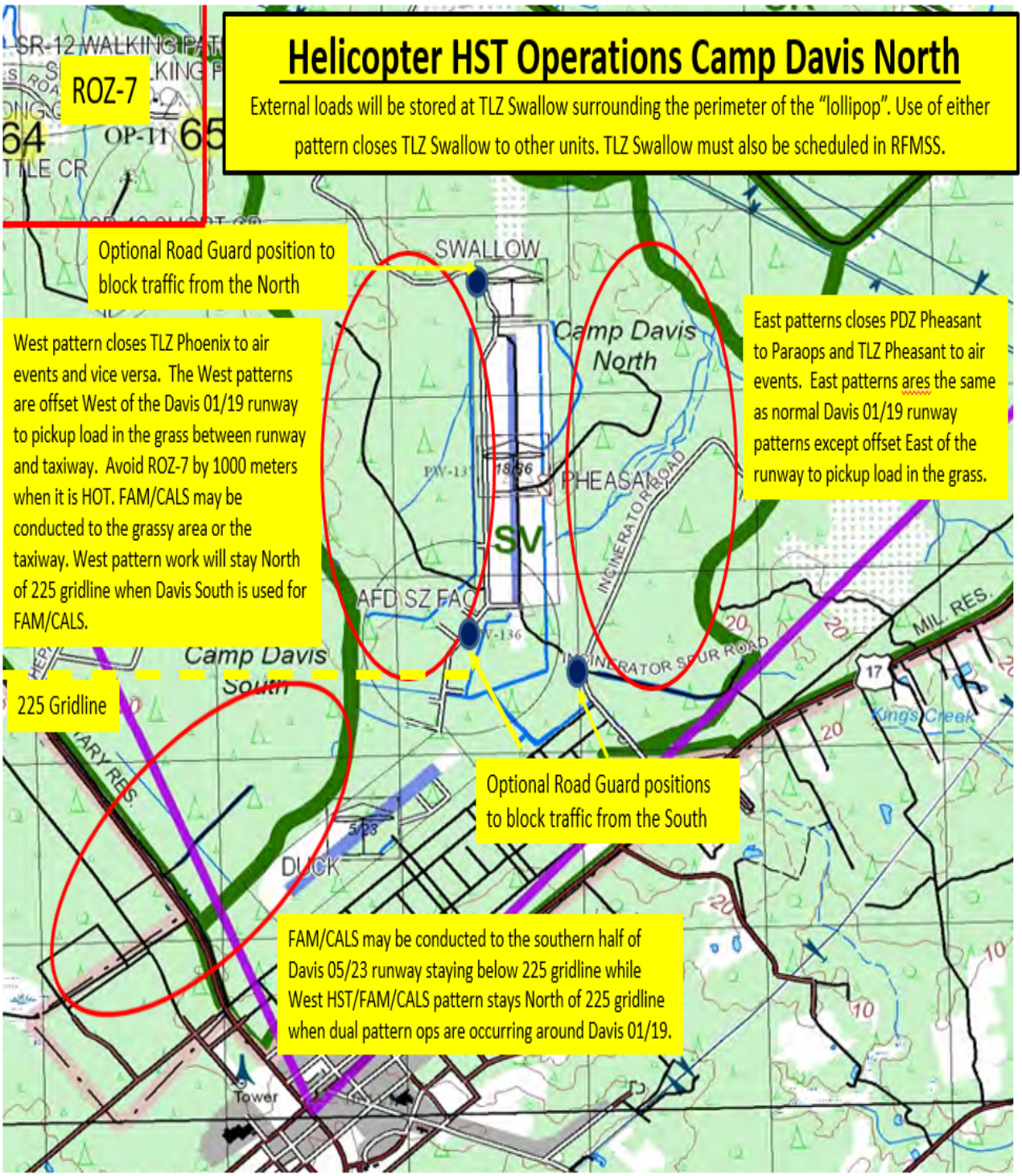


Figure 4-4.- Concurrent Helicopter HST Operations Deconfliction

Chapter 5

Range Policies

1. General

a. Safety regulations for firing on live-fire ranges and training facilities are contained within this Order, the latest version of the Range Cards, and reference (a).

b. All ranges and firing positions are "Off-Limits" to all personnel and units except when scheduled properly and approved in RFMSS, listed in the RFWO (AMHS Message) and signed for by the using unit’s OIC or when authorized by the RCO. Requests to conduct live firing on ranges and GPs, MPs, training facilities, and ETAs will be submitted in accordance with Chapter 3 of this Order.

c. When any live-fire Range, ETA, Artillery GP, MP, OP, or any other training facility is in a “HOT” status, all personnel must be wearing Personal Protective Equipment as per reference (a) (Level 0, 1, 2, 3) i.e., required PPE unless specified otherwise in this Order or in the current Range Cards. Units conducting small arms, standard BZO/FAM firing from a static position are not required to wear helmets and body armor. 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, to the CG MCIEAST-MCB CAMLEJ (G-3/5), at least 30 days in advance of the scheduled training event.

d. Medical personnel (Unit assigned Corpsman/Medic or formally approved contracted civilian EMT) that are properly trained with the proper first-aid equipment will be present on all live fire ranges, or high risk events within training areas (RTAs), and training facilities when training is taking place. Military personnel that are trained as Combat Life Savers are not qualified to act as the Corpsman/Medic for purposes of this order. A safety vehicle (Government Vehicle Only) must be located on all RTAs and facilities during training. Vehicle operators will be familiar with the primary routes to the nearest medical facility. Any military or GSA vehicle capable of transporting a casualty/casualties may be utilized as the safety vehicle. The presence of at least one unit assigned, properly equipped Corpsman /Medic or other military medical equivalent and one Government safety vehicle is the minimum requirement for all live fire event and high risk training. Use of POVs as safety vehicles for training events is not authorized. Government Rental Vehicles can be used if assigned /issued and must display a Range Control POV Pass.

e. All directions of fire are listed in magnetic azimuths. Direction of fire must remain within limits of the approved 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/ETA. All live-fire and effects of live-fire will be restricted to the approved SDZ/impact area for the range/ETA, per this Order and the assigned Range Card for that scheduled live-fire range.

f. The RCO is authorized to permit deviations from this Order with regards to allowable weapons and ammunition, when such deviations are for a specific purpose to enhance training and within established range safety criteria of reference (a) and this Order. A SRR must be submitted 10 working days prior to the training requirement per Appendix F of this Order.

g. OIC and RSO must remain alert to low-flying aircraft to include SUASs at all times while conducting live-fire. When low-flying aircraft are observed approaching the limits of any live fire range/GP/MP/ETA, the OIC/RSO of firing unit will command "CEASE-FIRE" 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 if possible.

h. No running other than what is required for that scheduled live-fire training event (Fire and Maneuver/Fire and Movement Ranges) or any horseplay is permitted on any live-fire range.

i. Anyone observing an unsafe condition during the firing exercises will call “CEASE FIRE”. When “CEASE FIRE” is given, it will be relayed immediately by all members. The OIC/RSO will investigate the unsafe condition, take the necessary corrective action, and will report the correction of the unsafe condition to the OIC. The OIC will resume firing when convinced that the RSO has corrected the unsafe condition.

2. Establishment of Ranges, Training Facilities

a. Only the CG MCIEAST-MCB CAMLEJ 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 CG MCIEAST-MCB CAMLEJ via the RCB, RDB, and RTAM Division. This does not preclude units from placing suitable targets down range after being granted permission from Range Control on existing live-fire ranges within the approved SDZ/WDZ for that range to enhance the target array, assuming all safety precautions and regulations are observed and Base EOD support is provided if required if target are being placed with the impact areas. All unit-emplaced target locations on the ranges with automated targetry must be pre-arranged, approved by a Range Inspector, and removed upon the completion of training.

b. Recommendations to improve ranges and training facilities are invited, and shall be provided by formal letter to the CG MCIEAST-MCB CAMLEJ (G-3/5, RDB, RTAM Division), per reference (ab).

3. 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/repair projects shall be submitted to the Branch Head, RDB via the Director, RTAM Division.

b. Project submission must include complete justification based on a training requirement/training standard, (T&R Manuals, POI, or Unit assigned METL) duration and frequency of use projections. A submission will address the following:

(1) Training requirements;

(2) Current situation;

(3) Impacts if known;

(4) Consideration of alternatives;

(5) Analysis of deficiency.

(6) Weapons/Ammunition requirements.

c. New ranges or major range alterations require review through the NEPA process, per Chapter 12 of reference (s) and reference (ab).

4. Maintenance and Operation of Ranges

a. The maintenance of RTAs and training facilities will be accomplished by the Director, RTAM. No other unit or individual is authorized to perform maintenance on any RTA or training facility unless the work is first approved by the CG MCIEAST-MCB CAMLEJ, via the AC/S, G-3/5 or Director, RTAM Division, and RMB.

b. Units (OIC/RSO) will report all range maintenance issues and other problems to Range Control/Range Inspectors or by filling out the range contract questionnaire at the conclusion of training. Other requests for repairs of existing training complex facilities can be submitted by e-mail memorandum to the Branch Head, RCB/Director, RTAM Division, and Branch Head RMB.

c. Failure to report damage/poor police problems will be considered as having assumed responsibilities for all damage/poor police problems by the scheduled using unit.

d. Operation of Ranges

(1) All RTAs and training facilities aboard this Installation are assigned to the CG MCIEAST-MCB CAMLEJ. 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 Order.

(2) Range Control Branch (RCB)/Range Development Branch (RDB)/Range Maintenance Branch (RMB) personnel are authorized access to all (RTAs) live fire ranges, training areas, and training facilities for the purpose of inspection, operation, safety, HAZMAT, or required maintenance at any time. RCB/RDB/RMB/RTAM Division personnel will not disrupt unit training in the performance of these duties unless coordinated with the OIC/RSO; training units will not interfere with those personnel as they conduct normal inspections /safety surveys. Range Inspectors will conduct random inspections of RTAs and training facilities, and all structures assigned during their daily operations to verify strict adherence to all range safety regulations, other MCIEAST-MCB CAMLEJ orders and policies, and report any and all violations to the RCO as required/directed.

(3) The MCIEAST-MCB CAMLEJ Ammunition and Explosives Safety Officer (AESO) and other designated personnel will be granted access to all ranges for explosives/ammunition safety matters to ensure units are abiding by all required/approved regulations regarding the safe transportation and storage of A&E. Units should refer to ref (br), chapter 2 for ammunition storage / staging requirements.

5. Authorization to Fire. A RFWO message will be produced daily by the RCOO/RCOC and promulgated by an AHMS or Naval message and posted on the Range Control Web Page. No firing will be conducted unless it is specifically listed in the RFWO message, or as authorized by the RCO/RCOO. In addition, authorization to fire must be obtained from BLACKBURN immediately prior to firing. Procedures for requesting and scheduling RTAs and training facilities are contained in Chapter 3 of this Order.

6. Restrictions

a. Unauthorized persons are not allowed within any range complex. Civilians and military personnel not specifically scheduled/pre-arranged to be on RTAs and facilities are not authorized. Unit-command-sponsored functions/events, which include civilian participation in training, may be requested through the unit’s chain of command to the CG MCIEAST-MCB CAMLEJ (G-3/5). See Chapter 1 for additional guidance on requesting special events such as Jane/John Wayne Days, A Day in Their Boots Day, Warrior Night, Field Mess Night, or other special events which may include civilians.

b. The use of all riot control agents/training devices will be in strict compliance with Chapter 6 of this Order, the Range Card for the Gas Chambers, and reference (ac).

c. Firing must conform to all airspace restrictions as contained in Chapter 4 and Appendix B of this Order.

d. Shotguns, Bows, and Crossbows are the only privately-owned weapons authorized on Camp Lejeune and only on the designated MCCS range (R-100 MCCS Skeet/Trap and Archery Range) or civilian handguns on F-11A and during stated times when MCCS personnel are operating these ranges. They are not allowed on any other live-fire ranges unless specifically authorized by the CG MCIEAST-MCB CAMLEJ via the AC/S, G-3/5 and the RCO by e-mail special range request (ESRR) via the unit's chain of command 30 days in advance of this special event. See reference (ad) for privately-owned weapons use while hunting. Shotguns, Muzzle loaders, Bows, and Crossbows are the only privately-owned weapons authorized on Camp Lejeune for hunting per reference (ad).

e. Transporting military weapons and military ammunition in POVs is not authorized aboard MCIEAST-MCB CAMLEJ.

f. Digging is not authorized on any live-fire range except what is required for the safe emplacement/deployment of the weapon systems or on a mortar positions. All holes must be filled in after the training event.

g. Warming fires are not authorized on any live-fire ranges, training area, GPs, MPs, ETAs, or TLZs. Warming fires may be granted by e-mail SRR in TAs when authorized by Range Control and all requirements set forth in the warming fire checklist have been accomplished and the current Fire Danger Plan will allow it. A warming fire checklist will be provided on request from Range Control. A warming fire checklist can also be obtained from the Range Control website.

7. Off-Limits/Restricted Areas

a. The following sites are off-limits/restricted areas:

(1) Posted endangered species/endangered plant areas;

(2) Archaeological Sites;

(3) Posted historical/cultural sites;

(4) Impact Areas (G-10, K-2, N-1/BT-3 Brown's Island and North Onslow Beach);

(5) Within 100 meters of authorized recreation areas or managed ponds;

(6) Within 100 meters of a documented/known cemetery;

(7) Installation Landfills (Current and Old Landfill);

(8) R-100 MCCS Skeet/Trap/Archery Area to include the entire surface danger zone of this complex within the RA TA. Training is not authorized in those assigned areas;

(9) Borrow Pits, all construction sites;

(10) Areas that have been reforested/re-seeded;

(11) Electric Solar Panel Farms/Areas;

(12) Within 100 meters of any fuel farm areas;

(13) Residential Housing Areas;

(14) HAZMAT Sites/Landfills;

(15) Storm water ponds/retention ponds;

(16) Food plots/wildlife clearing areas.

8. Ranges and Firing Positions

a. Live-fire Ranges are described in detail in the current version of the Range Cards, which can be found on the Range Control website and RFMSS Library. 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.

b. Vehicular and foot traffic approaches to ranges and impact areas will be secured by road guards, gates, or barriers during live-fire operations. Road Guard Maps will be provided at the time the range is checked out or can be obtained on the Range Control website. All road guards must be properly instructed in their duties at that position.

c. Any deviation from the published range cards requires an SRR or in some case ESRR. Contact range Control for additional guidance. See Appendix F for specific instructions.

d. Requests for a deviation of these orders will follow the format sited in reference (a) (Chapter 3, paragraph 3-1, 3-2, and 3-3). Such deviations must be approved via the unit’s chain of command, and forwarded to the CG MCIEAST-MCB CAMLEJ. All approvals of

deviations require the signature of the CG MCIEAST-MCB CAMLEJ. Annual deviations/SRRs must be resubmitted for review/approval every year as directed in the approval letter. Requests/re-submissions for deviations of these orders must be submitted at least 30 days or more in advance before expiring.

e. Access to all RTAs and training facilities, including tank trails and perimeter gravel roads, is restricted to authorized personnel/vehicles scheduled events. Units/individuals are not authorized to conduct any running, PT, and hikes/condition marches /biking or other unit recreational activities unless scheduled. The use of POVs within the RTAs must be pre-approved, and vehicle must have an approved Range Control POV pass signed out and displayed properly in the POV. Violators can be cited if not corrected/moved.

9. Range Signs and Markers

a. The range signs and left and right lateral limit markers on all ranges, MPs, and GPs provide important safety information. If range signs are damaged or missing the using unit must report it immediately to BLACKBURN or to a Range Inspector.

b. Surveyed points are placed near the center of all firing lines, GPs, and MPs. Do not remove, destroy, or cover-up any survey points.

c. Lateral Limits. Direct live-fire ranges include lateral limit markers. **Lateral Limit Markers/Lights (Red/Blue) are not to be used as targets.**

(1) Left Lateral Limit Marker. Four feet by eight feet or smaller black background with international orange diagonal stripes.

(2) Right Lateral Limit Marker. Four feet by eight feet or smaller black background with international orange diagonal stripes.

d. 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 like limits of advance will be posted on certain ranges as deemed necessary by the RCO.

10. Communications

a. Training units must maintain two radios, two means of communication between the unit and BLACKBURN (Range Control) for all training being conducted on this Installation. Radio is always the primary means of communication with BLACKBURN (34.70 FM/233.8 Air). Range Control retransmission/repeater frequency is 40.10 for west side of the New River and 38.85 for the east side of New River. If a

landline telephone is available on the range, it can be used as the alternate means of communication. Cellular Phones are only authorized as the **alternate** and official means of communication with BLACKBURN.

b. Units conducting non-live-fire in TAs must check in at the beginning of all training, at 0600, 1400, and 2200 and at the completion of all 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.

11. Safety Equipment

a. A red range flag or red flashing lights (for night firing) must be displayed from range flag poles, light poles, and towers for waterborne ranges when the live-fire range goes “HOT”.

b. Red smoke grenades and red pyrotechnics will only be used as emergency signaling devices. These safety devices are not a mandatory requirement for live-fire training at Camp Lejeune, but are highly recommended for live-fire and movement/maneuver training events.

c. 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 used by the using unit to ensure the SDZ/WDZ are clear.

12. Face-to-Face Briefs

a. The following events/ranges require a Face-to-Face brief with Range Control/BLACKBURN or the RSS:

(1) Control of R-5306D/E, R-5303, R-5304 by DASC.

(2) All CAS missions (including SIMCAS / Dry CAS)

(3) FARP Operations (With RC Operations Officer)

(4) G-10 Helo/Fixed-wing Operations TACPs (LF/NLF)

(5) MAC-3/K-402A (Base RSS)

(6) VIPEX and other large special events

(7) Other ranges/activities as required or directed.

b. All Face-to-Face briefs will occur at BLACKBURN (Unless Otherwise Noted) right after the RTA or facility is checked out. Contact BLACKBURN for larger range activities (EWTGLANT TACP, CAPEX, MEU Events, Unit FSCEXs/TACPs, etc.) at (910) 451-1995/3733 to schedule a brief.

13. 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 (OIC/RSO) must report range usage data such as number of personnel trained and ammunition expended by DODIC to include all blanks/smoke/pyrotechnics type devices when calling into BLACKBURN to secure from the RTAs and facilities. If a live-fire training event takes place past midnight (2400) into another day (0001) the using unit must report each training day data separately.

c. WTBn Stone Bay is responsible for the daily scheduling of their ranges in RFMSS and reporting the utilization of those ranges, to include the number of personnel trained and type/DODIC/quantity of ammunition fired to BLACKBURN as required.

14. Barricades, Road Guards, and Tower Guards

a. Using units are responsible for closing the approaches to the live-fire range SDZs/areas affected 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 OIC when the range is checked out. It is the OIC/RSO’s 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 SDZ/WDZ/assigned danger areas.

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 shall 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 Surface Danger Zone (SDZ) and 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 shall never remove a permanent barricade or road closed sign. Firing units must ensure that barricades are in place prior to commencing any live-fire. Specific requirements for each

range/training facility are listed and described in the Range Cards, which can be found on the Range Control website.

(2) Range Maintenance/Public Works maintains portable barricades and signs for placement as required or upon request. Units requiring portable barricades will return the barricades to the Range Maintenance Section/Public Works upon completion of use.

(3) At no time will anyone drive around a locked gate or a sign/barrier that states “Road Closed”. If properly scheduled, the unit will be given the required keys to unlock the range gate or gates as required. Report all damaged gates/barricades or locks that are not working properly to Range Control/Range Inspectors.

c. Road and Tower Guards

(1) Road guards will be posted only by the OIC/RSO using government vehicles to prevent entry into the danger areas of that specific range.

(2) The OIC or RSO may post other road guards as deemed necessary to ensure safety; however, the arbitrary blocking of roads will not be permitted.

(3) Road guards must have positive means of communication with the unit’s OIC/RSO at all times and must wear a reflective road guard vest that meets ANSI 107 conspicuity class 2 or 3 at all times while assigned as a Road Guard. Road Guards are responsible for conducting a detailed police call of the road guard position. The surrounding areas of the road guard positions must be inspected and cleared by a Range Control Range Inspector.

(4) Tower guards will be posted when firing over, into or from the waterways/ocean adjacent to Camp Lejeune, as specified in Chapter 3. 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, be thoroughly briefed and equipped with binoculars and night vision devices as required. Units will conduct a police call of the tower/tower guard area.

15. Vehicles

a. The speed limit is 25 mph for all civilian and military wheeled vehicles (GSA Vehicles are limited to 15 MPH) and 15 mph for all tracked vehicles while off the hard/paved surfaced roads, such as tank trails/gravel roads, and in the all TAs unless posted otherwise aboard Camp Lejeune. Vehicle speed will not exceed what is safe for conditions such as poor road conditions, adverse weather conditions,

dust, and night driving conditions. Vehicle speed will be reduced as required to operate the vehicle safely at all times.

b. Driving with night vision devices will be in accordance with organizational policies, with a maximum speed of 15 mph while wearing night vision goggles. Night vision driving/night tactical driving will only take place on scheduled/approved TAs/tank trails. At no time will this type of vehicle training take place on any hard/paved surfaced roads. Highway 172 CVOT Course can be scheduled for night vision driving on the paved surface if properly scheduled, signed for, and with the required road guards provided/posted.

c. Speed limits when passing troops that are conducting training (Hikes) is limited to 10 mph. Units must ensure a route reconnaissance is conducted to ensure the scheduled routes are clear and no known hazards are evident and the route can be used safely for road marches with personnel and tactical vehicles.

16. Hikes (Road March)

a. Unit must provide Range Control a completed and signed Hike Checklist via e-mail (attachment) or in person with hike route/overlay at least 1 working day prior to the planned hike. Units must check in with BLACKBURN at the start of the hike, (Road March) halfway, and upon completion reporting the number of personnel trained. The “Hike Checklist” is posted on the Range Control Web page or the RFMSS Library and can be downloaded as required.

b. The unit must have road guards during the hike with required safety vests on, a government safety vehicle and a properly equipped 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/system displayed on them (i.e., flashlight, or chem-lights) that is visible to all others during night/low visibility. Hiking units must keep all personnel at least 6 feet from hard-surface roads. Road guards will be posted for all paved road crossings. Safety vehicles are not authorized on paved PT/MCCS bike trails. Hiking units and the assigned safety vehicles cannot delay/impede the normal flow of civilian/tactical vehicle traffic. Using unit must ensure proper road crossing procedures are in place, enforced, and supervised to prevent a mishap/accident. Units are not authorized to cross major/high traffic roads such as Holcomb Boulevard, Sneads Ferry Road, McHugh Blvd, Cross Street, and Birch Street during periods of high volume traffic. If a unit requires crossing major/high traffic roads on mainside it must be coordinated by MCIEAST-MCB CAMLEJ Range Control, Base Operations, and PMO at least 15 working days in advance to be granted the required permission.

17. Police of Ranges, Training Areas, and Training Facilities

a. Purpose. To identify policies and procedures for clearing, policing of all training facilities, ranges, and TAs aboard Camp Lejeune. Unit Commanders/OIC/RSO are responsible for the policing of all RTAs and training facilities scheduled and/or used aboard Camp Lejeune.

b. Policies and Procedures

(1) Upon completion of training, COs and/or the OIC/RSO will coordinate with Range Control/BLACKBURN for a clearance inspection of the assigned area(s). When multiple areas are scheduled, areas will be inspected on a first-come, first-served basis. Failure to effect timely coordination may result in a delay in obtaining a clearance inspection and delay or otherwise interfere with another unit's scheduled use of the range or training facility.

(2) When a unit schedules a RTA or facility, the unit is responsible for obtaining the proper clearance inspection. Failure to occupy a scheduled range/TA/facility, or allowing another unit use of the areas, does not relieve the scheduled unit from the responsibility to get cleared of those areas scheduled.

(3) When approved through Range Control, co-use is authorized with coordination between a scheduled unit and a unit desiring to use the same facility. Clearance of that facility will remain the responsibility of the initial user, unless the concurrent usage agreement specifically states otherwise.

(4) If it is impossible for an inspection to be conducted prior to a unit's departure (Example; Bad Weather/Darkness) or if inspection conducted is unsatisfactory, the CO/OIC/RSO will designate a responsible individual, [preferably one who participated in the training] to accompany a Range Inspector on a subsequent inspection within 24 hours. Failure to clear a RTA or facility on time will result in the scheduled unit's CO/OIC/RSO being notified of the non-compliance with this Order. If the unit CO/OIC/RSO takes no action, then follow-up action will be taken which could include denial of access to the Installation Training Facilities in accordance with reference (a) and this Order/Range Cards.

c. The unit's OIC/RSO conducting the training, will request a Range Inspector, MOUT Staff member, or the Site Managers for training simulators as may be appropriate, for final inspection prior to securing from the RTA or training facility. BLACKBURN will coordinate the inspection time and will instruct the OIC/RSO to be available to meet the Range Inspector or MOUT Staff for those sites. An inspection will be scheduled 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.

d. Units are required to carry trash bags for policing the area and 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/MCCS dumpsters on the ranges /beach.

e. Training on the Remote Control Unit (RCU) and the Portable Infantry Target System (PITS) is available by the contractor Monday through Friday (0700-1600) on a walk-in basis by contacting 450-9955 at Building 1046 on SimCenter Road or go to www.gtss.katmaicorp.com

f. Problems with the operation of the PITS systems/RCU, or damage to the target systems or ventilation system should be reported to the Contracting Surveillance Representative at (910)451-9374 / 9375 or (910) 450-8004.

g. 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/TAs.

18. Fouled Ranges. It is possible for unauthorized personnel, vehicles, aircraft, and watercraft to trespass onto RTAs and foul target complexes or RTAs. Fouled ranges not only hamper mission readiness, but also pose a significant safety hazard to the trespassers themselves. In order for MCIEAST-MCB CAMLEJ G-3/5 (Range Control/BLACKBURN) to determine the magnitude of this dilemma and apply appropriate corrective measures, documentation is necessary. Any mission interrupted or aborted due to a fouled range will be immediately reported to Range Control/BLACKBURN.

19. Range Violations

a. In addition to the regulations stated in this Order/Range Control Advisory Messages, all training units must abide by the special instructions. Individual range cards containing SPINS and duties along with responsibilities of the OIC/RSO are located at Range Control, as well as the Camp Lejeune Range Control website.

b. Any infractions will result in a range violation. Range Control Operations personnel, are the issuing agents for these violations. In the event of a violation, all training may be halted until corrective action has been taken. OIC/RSO privileges may be revoked by the RCO/RCOO based on the severity of the infraction(s).

Warning: Failure to comply with these regulations may subject the offender to administrative action or disciplinary action under the UCMJ. Commanders of organizations using the ranges are encouraged to submit recommendations, improvements, or changes to the CG MCIEAST-MCB CAMLEJ (G-3/5 RCB).

c. OIC/RSO Decertification/Suspension. Decertification is the loss of privilege to act as OIC, RSO, or RLSO aboard MCIEAST-MCB CAMLEJ due to a major violation of safety procedures. Suspension of privileges may be derived from reoccurring minor infractions or major infractions with mitigation.

(1) Examples of Major Violations are:

(a) Any violation to the safety criteria established in reference (a) and the current version of this Order/Range Cards.

(b) Repeated loss of communications or failure to make/respond to radio checks with Range Control/BLACKBURN.

(c) Conducting live fire on a range that has not been cleared for live fire by BLACKBURN.

(d) OIC/RSO/Corpsman participating in the live fire training.

(e) Firing during a Cease-Fire/Check-Fire/Quiet Hours.

(f) Failure to report a serious Incident/Accident to BLACKBURN.

(g) Firing without the proper medical support available on the range.

(h) Extensive damage to a range, training area or facility.

(i) Intentional disregard of guidance from a Range Control representative.

(j) Flying a UAS that is not scheduled, exiting a ROZ without approval.

(k) Aviation ordnance being dropped or fired outside of the designated Impact Area.

(l) Pilot flying into an SDZ/ROZ without permission.

(m) Failure to secure a range gate or post road guards.

(n) Firing a weapon/ammunition (DODIC) not properly scheduled or authorized for that range, not signed for.

(2) Examples of Minor Violations are:

(a) Missing 2 consecutive radio checks with BLACKBURN.

(b) Denying Range Control personnel access to inspect training/ranges/training areas/training facilities.

(c) Failure to report a change of OIC/RSO/LRSO during a live fire.

(d) Failure to properly clear a range/training areas /training facilities (Range Inspection).

(e) Performing range modifications without prior coordination/clearance with Range Control.

(f) Individuals lacking proper (PPE) Level 0 to 3.

(g) Pilot of an aircraft failing to follow advised routing provided by BLACKBURN.

(3) Decertification requires the OIC/RSO/RLSO to wait a minimum of 60 days prior to recertification. To recertify; the Marine must retake the OIC/RSO Course and receive additional training on the subject area upon which they were decertified. Incidents involving weapon systems will require recertification on that weapon system at the unit level.

(4) The decision to suspend or decertify an individual rests at the level of the Installation RCO/RCOO.

20. Ranges

NOTE: The table below is a quick reference to all ranges aboard Camp Lejeune. This is subject to change. For a complete description of each range, see the referenced current version of the Range Card for that range. A copy of the current Range Cards can be obtained on the Range Control Web Page.

RANGE	GRID	PRIMARY USE OR DESCRIPTION
A-1	18S TD 790445	Pistol Qualification/Requalification Range (Camp Johnson)
B-12	18S TD 743452	Pistol Qualification/Requalification Range (New River Air Station)
R-100 MCCS Range	18S TD 865436	Skeet/Trap and Archery Range (MCCS Range Only)
D-29A	18S TD 839382	Pistol Qualification/Requalification Range
D-29B	18S TD 840382	Pistol Qualification/Requalification Range
D-30	18S TD 851369	Pistol Qualification/Requalification Range

RANGE	GRID	PRIMARY USE OR DESCRIPTION
E-1	18S TD 930287	Anti-Aircraft Range (Stinger Missile)
ETA-1	18S TD 843284	Engineer Demolition Training (MCES)
ETA-2/ETA-2 LC	18S TD 865271	Engineer Demolition Training
ETA-4	18S TD 910328	Engineer Demolition Training
ETA-5	18S TD 824360	Engineer Demolition Training
ETA-6 CVOT	18S TD 845290	Combat Vehicle Operators Training (CVOT) Confidence Course
ETA-7	18S TD 848329	Engineer Demolition Training (Steel/Concrete Cutting Pit)
ETA-7A	18S TD 847335	Engineer Demolition Training (MCES)
ETA-7B	18S TD 842329	Engineer Demolition Training (MCES)
ETA-7C	18S TD 848326	Engineer Demolition Training (MCES)
ETA-7D	18S TD 853328	Engineer Digging Area Training (MCES)
ETA-8/ETA-8A	18S TD 856324	Engineer Demolition Training (MCES)
ETA-9	18S TD 860329	Engineer Demolition Training (2d CEB)
ETA-10	18S TD 865340	Engineer Demolition Training (2d CEB)
ETA Mainside	18S TD 856379	Engineer Training Area (2d CEB) Heavy Equipment Training Area
ETA New River	18S TD 741443	Engineer Training Area (New River, MWSS) Heavy Equipment Training Area
F-2	18S TD 907429	Squad Automatic Rifle Transition Range
F-4	18S TD 918426	Rifle Familiarization Range
F-5	18S TD 909428	Squad Live-Fire Maneuver Course
F-2/5T	18S TD 909428	Combined F-2 and F-5 Range Complex
F-6	18S TD 877383	Hand Grenade Qualification with Grenade Assault Course
F-11A	18S TD 870396	Basic 36 Meter Firing Range (BZO/ZERO Range)
F-11B	18S TD 870395	Pistol Qualification/Requalification Range
F-17	18S TD 877386	Training Tower/Fast Roping/ Rappelling/Climbing Tower

RANGE	GRID	PRIMARY USE OR DESCRIPTION
F-18	18S TD 870394	Machinegun Field Fire Range (Three Ranges) F-18, F-18 7.62mm Match, F-18 .50 cal
G-3	18S TD 897346	Infantry Weapons Range G-3, G-3 TOW
G-6	18S TD 944328	Infantry Company Battle Course (Company Live-fire and Maneuver)
G-7	18S TD 959344	Infantry Weapons Range and Field Artillery Direct Fire Range
G-19A	18S TD 897342	Light Anti-Armor/Antitank Weapons Range
G-19B	18S TD 898340	M203/M32 Grenade Launcher Range
G-21	18S TD 907307	Multi-Purpose Machinegun Range (MPMG)
G-27/G-27A	18S TD 951339	Infantry Squad Battle Course (ISBC)
G-28	18S TD 955346	Reaction to Ambush/Assault Range
G-29A/G-29B/ G-29C	18S TD 904372	Multi-Purpose Weapons Range Complex
G-30/G-30A	18D TD 928373	Infantry Fire Team/Squad/Platoon /Company Defense Range
H-Range	18S TD 953311	Riverine Assault Range Waterborne Gunnery Range
I-1	18S TD 842278	Pistol Qualification/Requalification Range (Courthouse Bay)
K-325	18S TD 823356	Combat Marksmanship Program (CMP) Range
K-402	18S TD 777350	Individual Tactical Training Range Fire and Maneuver
K-402A	18S TD 778351	Military Operations in Urbanized Terrain (MOUT)(Shoothouse)
K-406A	18S TD 777347	Combat Marksmanship Range (CMP)
K-406B	18S TD 777346	Close Combat Range
K-407	18S TD 777344	Live-Fire Ambush Range
K-408	18S TD 775342	Urbanized Live-Fire Obstacle Course
K-500	18S TD 783355	Infantry Mortar Range (60mm/81mm/120mm)
K-500A	18S TD 783355	MK-19 40mm Grenade Launcher Range
K-501 K-501A	18S TD 788361	Electronic Target Rifle/(M249 LMG/M27 IAR Range) K-501A BZO/Zero/CMP Range

RANGE	GRID	PRIMARY USE OR DESCRIPTION
K-502	18S TD 793336	Light Anti-Armor Weapons Range 9mm/Sub-Caliber Training Device Only
K-503 K-503A	18S TD 797361	Electronic Target Rifle M16/M4 Range K-503A BZO/Zero/CMP Range
K-504A K-504B	18S TD 802362	M203/M32/M320 Grenadier Range K-504A (HE/HEDP Only) K-504B (TP Only)
K-505	18S TD 805366	Light Anti-Armor Weapons Range (MK153 SMAW/M72A7 LAAW/AT-4 Rockets/M-3 MAAWS)
K-506	18S TD 809361	Combat Marksmanship Program (CMP) Range
K-507	18S TD 811360	Combat Marksmanship Program (CMP) Range
K-508	18S TD 814361	Combat Marksmanship Program (CMP) Range
K-509	18S TD 819360	Infantry Squad Battle Course (ISBC) (Squad Fire and Maneuver Range)
K-510	18S TD 808371	K-510 Hand Grenade Range K-510 Hand Grenade Assault Course
L-5	18S TD 735311	Infantry Live-Fire Maneuver Range
MAC-1	18S TD 935377	Urban Quick Kill Range, Basic Room Entry and Clearing Range
MAC-2	18S TD 935377	Search and Kill Range, Basic Room Entry and Clearing Range
MAC-3	18S TD 935378	Live-Fire Grenade House
MAC-4	18S TD 936378	Fire Team MOUT Range
MAC-5	18S TD 936379	Basic Squad MOUT Range
MAC-6	18S TD 937379	Combat Marksmanship Range (CMP Range)
MAC-7	18S TD 937380	Urban M203/M32/M320 Grenadier Range
SR-6	18S TD 718330	Infantry Platoon Battle Course (Platoon Fire and Maneuver Range)
SR-7	18S TD 722368	LAR Crew Qualification Firing Range
SR-8	18S TD 699321	Multi-Purpose Machinegun Range (MPMG)
SR-9	18S TD 618353	Infantry Platoon Battle Course(IPBC)/Combined Arms Range(CAB)
SR-10	18S TD 657269	Tank/LAV/AAV/Wheeled Vehicle Crew Qualification Firing Range
SR-11	18S TD 655265	Pistol Qualification/Requalification Range

RANGE	GRID	PRIMARY USE OR DESCRIPTION
A, B, C, Rifle Ranges (SBRR)	18S TD 755307	Stone Bay Known Distance Rifle Qualification Ranges (Alpha, Bravo, Charlie Rifle Ranges)
Hathcock Range (SBRR)	18S TD 762307	Stone Bay 1000 meter Sniper Range
Mechanical Pistol(SBRR)	18S TD 752308	Stone Bay Pistol Qualification Range
Walk Down Pistol(SBRR)	18S TD 753308	Stone Bay Pistol Qualification Range
Dodge City (SBRR)	18S TD 751308	Stone Bay Urban Shooting Range
Multi-Purpose (SBRR)	18S TD 751309	Stone Bay 100 meter Small Arms Range
RR-215 Breacher (EOTG)	18S TD 760301	EOTG Breacher Training Facility
Breacher Pit (EOTG)	18S TD 761301	EOTG Breacher Pit Training Area
Square Bay RR-227 (EOTG)	18S TD 760299	EOTG Small Arms Range
RR-249 (EOTG)	18S TD 760301	EOTG CQB One Story Shoothouse
RR-243 (EOTG)	18S TD 761302	EOTG Three story Urban Training Facility
NLW Range (EOTG)	18S TD 760298	EOTG Non-Lethal Grenades and Weapons Ranges
EOTG Tower SRR-211 (EOTG)	18S TD 759299	EOTG Multi-Purpose Training Tower
MOUT Lejeune	18S TD 938382	MOUT-Lejeune (MOUT Complex)
MOUT Lejeune (E-MOUT)	18S TD 940383	MOUT-Lejeune (Enhanced) (E-MOUT)
MOUT Mobile (NLF) Complex	18S TD 944388	MOUT-Mobile Complex (NLF)
Live-Fire MOUT-Mobile (LF)	18S TD 944388	Live-Fire MOUT-Mobile (LF) Building Numbers 2, 24, 36, 40, 67
MOUT-Mobile Farm House	18S TD 945388	MOUT-Mobile Farm House
MOUT Lejeune UTF	18S TD 942383	MOUT Lejeune (UTF) Urban Training Facility
MOUT-Sniper Tower	18S TD 938382	MOUT-Sniper Tower (MOUT Complex)
MOUT Lejeune FOB	18S TD 944386	MOUT-Lejeune Forward Operation Base (MOUT-Lejeune FOB)

RANGE	GRID	PRIMARY USE OR DESCRIPTION
MOUT-Hawk FOB	18S TD 896319	MOUT-Hawk Forward Operation Base (MOUT-Hawk FOB)
MOUT-Lejeune Bivouac Site	18S TD 944388	MOUT-Lejeune Bivouac Site (MOUT Biv)
MOUT-Train Station	18S TD 939384	MOUT-Train Station
MOUT-Lejeune Hotel	18S TD 938383	MOUT Lejeune, Building 1, MOUT Lejeune Complex
MOUT-Combat Town	18S TD 888322	MOUT-Combat Town
MOUT-Geiger Complex	18S TD 753455	Geiger Mobile MOUT Complex
Airfield Seizure Facility North	18S TD 662227	Camp Davis, Tactical Airfield Assault and Seizure (AFS SZ FAC NORTH)
Airfield Seizure Facility South	18S TD 659214	Camp Davis, Tactical Airfield Assault and Seizure (AFS SZ FAC SOUTH)
GSRA-FOB	18S TD 721339	Greater Sandy Run Area Forward Operating Base (GSRA FOB)
FOB-Lot 140 Ash Street FOB	18S TD 861393	Forward Operating Base Lot-140 Ash Street Forward Operating Base (FOB)
Camp Devil Dog MOUT	18S TD 755413	Camp Devil Dog MOUT (SOI)
Area 5 Training Tank	18S TD 853368	MCWST Qualification and Requalification Training Support Division (RCB)
Courthouse Bay Training Tank	18S TD 833295	Courthouse Bay Training Tank (RCB)
Underwater Egress Trainer	18S TD 843390	Underwater Egress Trainer (UET) "Helo Dunker" TSB
EOD-2	18S TD 817365	EOD Range
EOD-3	18S TD 868338	EOD Range
CS CHAMBER CBRN OBSTACLE COURSE CS CHAMBER	Mainside 18S TD 873386 Camp Geiger 18S TD 747457	Mainside CS CHAMBERS AND CBRN OBSTACLE COURSE Camp Geiger CS CHAMBERS
G-10 Live-fire Convoy Range	18S TD 916374	G-10 Live-fire Convoy Range Site 3
Urban Close Air Support Facility (UCAS)	18S TD 912357	G-10 Urban Close Air Support Facility (UCAS)

RANGE	GRID	PRIMARY USE OR DESCRIPTION
HSTL GSRA CIED Battle Course (SR-12)	18S TD 647256	Home Station Lane Training Complex CIED Battle Course/Complex (GSRA Complex) SR12 HSTL Complex
MET,(CAMLEJ) MRAP Egress Trainer	18S TD 916378	MET, MRAP Egress Trainer (MET) Building 1046.
MET, (NRAS) MRAP Egress Trainer	18S TD 755430	MRAP Egress Trainer (MET) Building AS 3513, Perimeter Rd, MCAS New River
ODS, Operator Driving Simulator	18S TD 916378	ODS, Operator Driving Simulator Building 1046.
SAVT, Supporting Arms Virtual Trainer	18S TD 916378	SAVT, Supporting Arms Virtual Trainer Building 1046.
CCS Trainer, Combat Convoy Simulator	18S TD 916378	CCS Trainer, Combat Convoy Simulator Building 1046.
HEAT Trainer (MCB CAMLEJ)	18S TD 916378	HEAT Trainer (Camp Lejeune) HMMWV Egress Assistance Trainer Building 1046.
HEAT Trainer, (MCAS New River)	18S TD 755430	HEAT Trainer, MCAS New River HMMWV Egress Assistance Trainer Building AS 3515, Perimeter Rd, MCAS New River, Adjacent to AS 3515, located in the large white tent.
Indoor Infantry Immersion Trainer (IIT)	18S TD 869393	Infantry Immersion Trainer (IIT) Training Facility (Indoor)
Outdoor Infantry Immersion Trainer (IIT)	18S TD 943388	Infantry Immersion Trainer (IIT) Training Facility (Outdoor)

Table 5-1--Camp Lejeune Ranges

21. Pistol Ranges

a. All Camp Lejeune pistol ranges are set up and operated by a civilian contractor and require 2 working days advance scheduling. Requests for extensions of range time must be received at Range Control at least two hours before the originally scheduled cold time and during normal working hours. After working hours the using unit will need to contact BLACKBURN. The range operator will provide one set of targets and pasties and must be present on the range before a unit can request to go “HOT”.

22. Impact Areas

a. General. There are three main impact areas aboard Camp Lejeune: N-1/BT-3 Brown's Island, 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 non-dud producing ordnance (Inert Ordnance Only), except on E-1 and G-7 within assigned SDZ. No personnel will enter a designated impact area aboard Camp Lejeune without approval from the RCO and EOD support to escort them. For the purpose of constructing an SDZ/WDZ, ricochet areas, will be contained within the impact area. The USMC does not recognize "buffer zones." 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 Camp Lejeune.

b. For additional information pertaining to impact areas, refer to Appendix B of this SOP.

23. Training Areas

a. General. Scheduling of training/maneuver areas will be done in accordance with Chapter 3 of this Order.

b. TAs and Their Use

(1) The table below lists all the TAs by name and primary use:

TA NAME	PRIMARY USE
AA	Tactical Maneuver Training
AC	Tactical Maneuver Training
B Areas	Tactical Maneuver Training
BA	Tactical Maneuver Training
BB	Tactical Maneuver Training
BC	Tactical Maneuver Training
BD	Tactical Maneuver Training
D Area	Tactical Maneuver Training
DC	Tactical Maneuver Training
E Areas	Amphibious Exercises and Training
EA	Special Use Only
EB	Amphibious Exercises and Training
EC	Amphibious Exercises and Training
F Areas	Tactical Maneuver Training
FA	Tactical Maneuver Training
FB	Tactical Maneuver Training
FC	Tactical Maneuver Training
FD	Tactical Maneuver Training
FE	Tactical Maneuver Training
FF	Tactical Maneuver Training
FG	Tactical Maneuver Training

TA NAME	PRIMARY USE
G Areas	Tactical Maneuver Training
GA	Tactical Maneuver Training
GB	Tactical Maneuver Training
GC	Tactical Maneuver Training
GD	Tactical Maneuver Training
GE	Tactical Maneuver Training
GF	Tactical Maneuver Training
GG	Tactical Maneuver Training
GH	Tactical Maneuver Training
GI	Tactical Maneuver Training
H Areas	Tactical Maneuver Training
HA	Tactical Maneuver Training
HB	Tactical Maneuver Training
HC	Tactical Maneuver Training
HD	Tactical Maneuver Training
HE	Tactical Maneuver Training
HF	Tactical Maneuver Training
HG	Tactical Maneuver Training
HH	Tactical Maneuver Training
I Areas	Tactical Maneuver Training
IA	Tactical Maneuver Training
IB	Tactical Maneuver Training
IC	Tactical Maneuver Training
ID	Tactical Maneuver Training
IE	Tactical Maneuver Training
IF	Tactical Maneuver Training
IG	Tactical Maneuver Training
J Areas	Amphibious Exercises
JA	Tactical Maneuver Training
JB	Amphibious Exercises
JC	Amphibious Exercises
JD	Tactical Maneuver Training
JE	Tactical Maneuver Training
K Areas	Tactical Maneuver Training
KA	Tactical Maneuver Training
KB	Tactical Maneuver Training
KC	Tactical Maneuver Training
KD	Tactical Maneuver Training
L Areas	Tactical Maneuver Training
LA	Tactical Maneuver Training
LB	Tactical Maneuver Training
LC	Tactical Maneuver Training
LD	Tactical Maneuver Training
LE	Tactical Maneuver Training
LF	Tactical Maneuver Training
LG	Tactical Maneuver Training
LH	Tactical Maneuver Training

TA NAME	PRIMARY USE
M Areas	Tactical Maneuver Training
MA	Tactical Maneuver Training
MB	Tactical Maneuver Training
MC	Tactical Maneuver Training
MD	Tactical Maneuver Training
ME	Tactical Maneuver Training
MF	Tactical Maneuver Training
Q Areas	Tactical Maneuver Training
QA	Tactical Maneuver Training
QB	Tactical Maneuver Training
R Areas	Tactical Maneuver Training
RA	Tactical Maneuver Training
RB	Tactical Maneuver Training
S (GSRA) Areas	Tactical Maneuver Training
SA	Tactical Maneuver Training
SB	Tactical Maneuver Training
SC	Tactical Maneuver Training
SD	Tactical Maneuver Training
SE	Tactical Maneuver Training
SF	Tactical Maneuver Training
SG	Tactical Maneuver Training
SH	Tactical Maneuver Training
SI	Tactical Maneuver Training
SJ	Tactical Maneuver Training
SK	Tactical Maneuver Training
SL	Tactical Maneuver Training
SM	Tactical Maneuver Training
SN	Tactical Maneuver Training
SO	Tactical Maneuver Training
SP	Tactical Maneuver Training
SQ	Tactical Maneuver Training
SR	Tactical Maneuver Training
ST	Tactical Maneuver Training
SU	Tactical Maneuver Training
SV	Tactical Maneuver Training
SW	Tactical Maneuver Training

Table 5-2--Camp Lejeune TAs

(2) Regulations. Weapons and ammunition allowed.

(a) Live-fire is prohibited in training areas unless properly scheduled, coordinated, approved. In addition the TA must be signed for by the OIC if live fire like SESAMS/UTM is involved. Any recreational activities within a training area (TA) must be pre-arranged/approved by Range Control and scheduled in RFMSS properly.

(b) Blank fire ammunition and I-TESS-II gear are authorized in TAs if properly scheduled in RFMSS. Requests to conduct blank firing and pyrotechnic use must be included in RFMSS and must be signed for by a Sgt (E-5) or above that is on the Command Certification Roster for that type of training activity.

(c) Blank fire and I-TESS-II gear will not be fired within a 300 meter buffer zone of any civilian residential structure not part of a MCIEAST-MCB CAMLEJ training complex (Marine Corps controlled property) or outlying civilian buildings. At no time will live-fire ammunition and blank ammunition be mixed together in a TA.

(d) 5.56mm/9mm SESAMS/UTM (Ultimate Training Munitions) are authorized in TAs and training facilities if properly scheduled in RFMSS as a live fire event and must be signed for by a a SSgt/E-6 or above that is on the Command Certification Roster for that type of training activity as the OIC.

24. Training Areas External to Camp Lejeune

a. The CG MCIEAST-MCB CAMLEJ (G-3/5) has the delegated authority to execute appropriate agreements with the U.S. Forest Service when conducting external training in a National Forest.

b. Requests must be submitted by letter via the chain of command to the CG MCIEAST-MCB CAMLEJ (G-3/5) at least 45 days prior to commencement of training.

c. The following information is required:

(1) Unit requesting training;

(2) Date of request;

(3) Date and description of training;

(4) Attached map, dated and referenced to specific request. Indicate boundary of area requested and special features such as DZs, command post, TAs, bivouac areas, etc.;

(5) Number of troops; number and size of vehicles/equipment;

(6) Sanitation facilities provided;

(7) Field Liaison Contact

(a) Unit POC;

(b) Grade and Name;

(c) Telephone Number

(8) MCIEAST-MCB CAMLEJ Liaison Contact

(a) Unit POC;

(b) Grade and Name;

(c) Telephone Number

(9) Unit POC for billing (Title and Telephone Number)

(10) Inter-Service Support Agreement Number

d. The using unit CO will meet with the Forest Supervisor's designated liaison officer (LNO) at the site of planned occupancy one week prior to the commencement of the exercise. The unit CO will be prepared to post signs around the immediate exercise area to caution the public that military vehicles will be using the roads and training will be conducted in assigned areas.

e. All special instructions received from the Forest LNO and range regulations of this Order will apply to training in National Forests.

25. Observation Posts. OPs/OPs Lasers are designated and identified as listed below and must be requested in the same manner as other training facilities/ranges. Other training events such as sniper live fire may be conducted with some OPs through a SRR by identifying coordinates, stating intended purpose, and time period. For standalone mortar events, the OP is signed for by the Mortar Position OIC and the FOs (Sgts and below) are authorized to be on the OPs conducting fire missions. OPs must be scheduled in RFMSS and signed for like all other training facilities.

OP	COORDINATES	REMARKS
2	18S TD 91553757	Lucky’s Mound, G-10 Impact Area, Lasers Authorized.
3	18S TD 92773704	G-10 Impact Area, Lasers Authorized
5	18S TD 89803440	Poggemeyer’s Peak, Lasers Authorized, Range Control
6	18S TD 90023225	G-10, Fire Tower (Base Forestry)
8	18S TD 63983056	SN Area GSRA 125 Ft
9	18S TD 72243673	SD Area GSRA 125 Ft SR-7 Range

10	18S TD 63173596	SG Area GSRA 125 Ft SR-9 Range
11	18S TD 64872567	ST Area GSRA 125 Ft
GSRA Fire Tower	18S TD 71903291	SR-46 Compound GSRA Fire Tower
12	18S TD 80973619	K-2 Impact Area OP-12, Lasers Authorized (Located at K-506)
14	18S TD 94893386	G-10 Impact Area (South/East), Lasers Authorized
OP Combat Town	18S TD 88893226	OP within Combat Town OP-15
OP Mobile MOUT	18S TD 94213876	OP within Mobile MOUT OP-16
Sniper Tower MOUT Complex	18S TD 93823807	Sniper Tower MOUT Complex
E-MOUT Tower	18S TD 95013834	E-MOUT Range, Control Tower
Sniper Tower Dodge City	18S TD 75133079	Sniper Tower Stone Bay Rifle Range Dodge City
F-5	18S TD 90954289	F-5 Live-fire Range, Control Tower
F-6	18S TD 87673835	F-6 Live-fire Range, Control Tower
L-5	18S TD 73563115	L-5 Live-fire Range, Control Tower
G-6	18S TD 94553293	G-6 Live-fire Range, Control Tower
G-21	18S TD 90733072	G-21 Live-fire Range, Control Tower
G-27	18S TD 95093337	G-27 Live-fire Range, Control Tower
K-402	18S TD 77753508	K402 Live-fire Range, Control Tower
K-500A	18S TD 78393556	K-500A Live-fire Range, Control Tower
K-501	18S TD 78853621	K-501 Live-fire Range, Control Tower
K-502	18S TD 79343614	K-502 Live-fire Range, Control Tower
K-503	18S TD 79763611	K-503 Live-fire Range, Control Tower
K-504A/B	18S TD 80243621	K-504A/B Live-fire Range, Control Tower
K-505	18S TD 80573662	K-505 Live-fire Range, Control Tower
K-509	18S TD 81923606	K-509 Live-fire Range, Control Tower

K-510	18S TD 80813719	K-510 Live-fire Range, Control Tower
SR-6	18S TD 71883302	SR-6 Live-fire Range, Control Tower
SR-7	18S TD 72243689	SR-7 Live-fire Range, Control Tower
SR-8	18S TD 69963212	SR-8 Live-fire Range, Control Tower
SR-9	18S TD 61553543	SR-9 Live-fire Range, Control Tower
SR-10	18S TD 65722698	SR-10 Live-fire Range, Control Tower
Bear Tower	18S TD 97403420	N-1/BT-3, AIWW
North Onslow Tower	18S TD 93072880	N-1/BT-3, AIWW
Hathcock Range	18S TD 76303080	Firing Tower/Control Tower Rifle Range Sniper Range

Table 5-3--Camp Lejeune OPs/Range Towers

26. Recreational Use of Ranges, Training Areas, and Facilities

a. Presently only R-100 (Skeet/Trap and Archery Range) and F-11A for civilian handguns is available normally on weekend and federal holidays for recreational shooting. Recreational shooters under the age of 18 must be accompanied by an adult at all times. Contact the Skeet/Trap Range Manager at (910) 451-3889 for times and information for both ranges. MCCS maintains a separate SOP for Skeet/Trap shooting procedures for R-100 and civilian handguns on F-11A. Requirements for recreational shooting, using civilian weapons /ammunition, on assigned Lejeune live-fire ranges must be approved by the Range Control Officer (RC)) via a e-amil special range request (ESRR) 30 days in advance with a list of weapons/calibers as per Chapter 1 of this order for unit standalone recreational events.

b. WTBn, located at Stone Bay, sponsors National Rifle Association and other civilian team shooting events. Contact the WTBn (S-3) or the Battalion Gunner at (910) 440-2705/2917 for more information.

c. When not in use for training, the EB training beach is available for limited recreational use. Refer to the flip sign on the road at the entrance of EB TA 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, (910) 451-3064, to check on the use of the EB training beach. MCCS and the CLEO are responsible for advising its patrons on the environmental rules of the beach and cleaning up after

its use. CLEO's will periodically check EA/EB TAs to verify recreational users are authorized and in compliance with Base regulations/orders. If any portion of the EB TA is desired to be used for a family day/unit party/special event, the requesting unit must submit a formal SRR through their chain of command to arrive at Range Control at least 30 working days in advance of the date of the event. Any recreational activities within a training area (TA) must be pre-arranged/approved by Range Control and scheduled in RFMSS properly.

27. Fire and Movement/Maneuver

a. Fire and maneuver training will be conducted only on designated/approved ranges. Review Chapter 17 of reference (a) for additional information on live-fire and maneuver ranges. OIC/RSO will ensure all individuals and crew served weapons 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 OIC/RSO (when required by the Range Cards) will submit a coordinated/detailed plan (SRR or ESRR) to Range Control. This plan will include, but is not limited to:

(1) A detailed SOM, 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 safety control measures, signals, including means of communications.

(4) Terrain features and facilities required.

(5) A SRR signed by the unit chain of command and a reviewed and signed RM worksheet (see Appendix D, RM, and Appendix F, SRR of this Order) and any other pertinent information concerning the proposed live-fire exercise that will assist in evaluating the safety of the event.

c. Prior to Live-fire and Maneuver Training, the OIC/RSO will:

(1) Conduct at least two rehearsals/dry run exercises prior to conducting any live-fire and movement/maneuver using the same conditions on the assigned range (i.e. night rehearsal for night attack).

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

d. Ensure aircraft participating in fire and maneuver training have communications with a FAC/FAC(A)/JTAC, BLACKBURN or an airspace control agency at all times. Aircraft must conduct a dry pass before conducting live-fire.

28. 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 shall review and change their actions at the crossing sites and adjust unit SOPs to reflect the following procedures. These procedures are also found in reference (ae) if assigned to the 2d Marine Division.

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 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 oncoming 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, and 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, Department of Transportation (DOT) reflective triangles and must have a flashlight in their hand pointed in the direction of the oncoming traffic. The safety lighting system shall be placed in front of the road guards at least 10 meters to warn the oncoming traffic of the Road Guard position.

f. The following precautions will be taken when military vehicles cross paved roads:

(1) One ground controller, located at the crossing site, will post road guards and direct vehicles safely across. Controller will

direct tactical vehicles across using hand and arm signals. For single tactical vehicle crossings (tracked or oversized wheeled vehicle), an A-Driver will dismount and physically ground guide the vehicle across when safe to do so. Two or more vehicles require road guards be posted.

(2) Crossing of paved highways will be an “administrative move”. All service drive lights will be used. Vehicles will close to 25-meter intervals before the lead tactical vehicle negotiate the crossing and all other requirements listed in this Order.

29. Vehicle Training Procedures (Road March Safety Issues)

a. Use of a scheduled TA does not include the exclusive use of that tank trails/gravel roads 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 Range Control. The unit must provide required road guards. Movement of all vehicles to and from ranges and TAs will be confined to established tank trails as depicted on the current Camp Lejeune Special Training Map. Use only authorized crossing points when crossing hard-surfaced roads.

b. Tracked vehicles operating on paved or hard-surfaced roads are not authorized unless approved by Range Control at least 5 days in advance.

c. When moving within TAs, tracked vehicles are not restricted to just tank trails and can move off-road in designated areas. However, when maneuvering off the tank trails, sharp turns shall be avoided to help protect the environment and reduce soil disturbance and every effort will be made to avoid unnecessary destruction of trees. Tracked vehicles are not authorized in endangered species sites, archaeological sites, areas that have been replanted/re-forested, wet lands, drainage ditches, culvert areas, bridges (except Onslow Beach Bridge when pre-arranged), paved road shoulders, and areas that have sewer/water/gas lines. Tracked vehicles will not maneuver on the range complex except when specific permission is granted by Range Control or approved by this Order. Vehicle damage to firing positions or roads that cannot be repaired by the unit will be reported to Range Control.

d. To prevent damage to improved roads on the Camp Lejeune Training Complex, and for safety purposes, only established concrete tank crossings will be used. A list of the tank crossing pads location/grids can be obtained from Range Control.

e. Tracked vehicles on paved roads, when approved/pre-arranged, must be led by a wheeled vehicle with flashing lights. The unit must

have a plan to remove and clean up all dirt, gravel, and mud from the hard-surface road and bridge.

f. Stopping, off-loading of passengers, and scheduled halts will not occur on any hard-surfaced roads. Tactical vehicle events /procedures other than convoy movement are NOT AUTHORIZED on the hard-surface roads of Camp Lejeune.

g. If a vehicle maneuvers on a PDZ/TLZ/training facility causes ruts or damage, the unit will coordinate with supporting engineers to repair any damage caused to all effected areas prior to clearing the area. For planning purposes, ruts that are deeper than boot height (six inches) must be repaired or graded and leveled out.

h. COs shall ensure all vehicle operators are qualified and licensed. Operators and passengers will use the required PPE or CVC, seat belts, safety straps, or nets on vehicles so equipped at all times.

i. The primary purpose of establishing tank trails is to control movement of tracked vehicles and tactical wheeled vehicles within the training complex. These tank trails are considered off limits to civilian-type traffic, except when specifically authorized by Range Control or authorized recreational activity. In such cases, the driver of the civilian vehicle will be issued a Range Control POV Pass as per this Order that indicates authorized dates and locations. Civilian vehicles on tank trails and unimproved roads shall give right-of-way to all military vehicles by moving to the right side of the road as far as is safely possible. Personnel diving civilian vehicles will be instructed to exercise extreme caution, particularly when approaching tracked and tactical wheeled vehicles. Passing tracked or tactical wheeled vehicles on the move on secondary roads and trails by civilian vehicles is prohibited.

j. Units are authorized to conduct blackout/night vision vehicle training on the tank trails/gravel roads. Blackout/night vision training is prohibited on any of the hard-surface roads of Camp Lejeune except on the Highway 172 CVOT Course if properly scheduled in RFMSS and signed for. 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. Using units must ensure the routes are clear and safe before conducting any tactical movement both day and night.

k. All tactical vehicle accidents within the RTAs or training facilities must be immediately reported to BLACKBURN, then to the Road Masters, and the unit's chain of command. Vehicles halted due to break down will be marked with reflective triangles and or red chemical lights as required.

l. Tactical Wheeled Vehicles with mounted crew served weapons. Units are authorized to mount and man crew served weapons stations on all assigned wheeled vehicles aboard Camp Lejeune as long as personnel are wearing all required PPE. Blank ammunition cannot be mounted, loaded or fired while the vehicle is on any of the hard-surfaced roads aboard the installation. Once the wheeled vehicle with mounted weapon system enters the scheduled TA on the tank trails/gravel roads, use of blank ammunition is authorized. Live ammunition can only be mounted, loaded and used on scheduled live fire ranges aboard Camp Lejeune. If the wheeled vehicle departs Camp Lejeune (off the installation) 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.

30. Onslow Beach Bridge Crossing Procedures

a. The following procedures will be used for all tracked vehicles (AAVs, tracked engineer equipment) crossings of the Onslow Beach Bridge to enhance safety and minimize any damage to the bridge. At least one working day prior to crossing and the day of crossing, the unit will contact Range Control at (910) 451-1240 or 451-5803 to ensure coordination has been made with the Bridge Operators at (910) 440-7376. After normal working hours, the unit will contact BLACKBURN directly at 451-3064 to ensure coordination with the Bridge Operators and the unit crossing the bridge.

b. Tracked vehicle must cross at a slow speed (five mph or less). All POVs must be stopped before attempting any crossing.

c. Only one tracked vehicle with ground guides at a time and the tracked vehicle must be in the center of the bridge using ground guides (Front and Back) with safety vests. If a tracked vehicle is towing another disabled tracked vehicle this must be briefed to the bridge operator/Range Control beforehand.

d. The unit must sweep off any dirt, mud, or gravel from the paved roadway of the bridge after the crossing is completed.

31. Public Affairs and Range Operations

a. Military training accidents have high visibility and attract public interest. The public has a right to know about accidents and incidents. However, 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 Order, any visits to RTAs and training facilities must be coordinated through Range Control. Camp Lejeune policy states news gathering media may be invited on the installation through the Camp Lejeune PAO. If a unit desires media coverage of training, coordination must be made with the Camp Lejeune PAO and Range Control at least 72 hours in advance for both internal and external media coverage.

(2) In the event of a mishap (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 Camp Lejeune PAO representative. If there is no PAO representative present, personnel shall firmly and politely reply with “I will refer your query/question to the Camp Lejeune Public Affairs Office”.

(3) Following a mishap (Accident or Incident), anyone that identifies himself as a news media representative must be escorted by a Camp Lejeune PAO designated escort or PAO representative from that unit. Make positive identification of official personnel before volunteering information.

32. Bivouacking on a Range or TA

a. Units/commands desiring to bivouac on a live fire range must include that information on the RFMSS request in the remarks box. Units do not need any special permission or e-mail to bivouac within a scheduled Training Area/TLZ/Live Fire Range if scheduled in RFMSS for the entire time period needed. Live fire ranges shall not be scheduled for the purpose of bivouacking only. Bivouac sites must be marked at night to prevent accidents.

b. When signing for a live fire range, the OIC/RSO needs to confirm the unit’s bivouac intentions and, after arriving onsite, report a six-digit grid location to BLACKBURN.

c. Units bivouacking anywhere within the 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 conducted at 0600, 1400, and 2200 daily.

d. Bivouacking or any type of special event inside a training facility such as Combat Town, MOUT Lejeune Complex, Enhanced MOUT, FOBs, and the Mobile MOUT is not authorized. Units must schedule a surrounding TA for bivouacking. All bivouac sites must be in compliance with the provisions of Chapter 2 of this order.

33. Other Notes/General Comments(s)

a. The use of all pyrotechnics/smoke/CS is prohibited 500 meters from the center of the old and new landfill and the base boundary. Pyrotechnics/Smoke/other training devices are not authorized within 1000 meters of the fuel farms aboard Camp Lejeune.

b. At no time will metal stakes/engineer stakes be used to support any type of target material or used to support wooden pallets being used as targets due to the potential high hazard of ricochets.

34. John E. Waters, Jr. Wildlife Viewing Area. The John E. Waters, Jr. Wildlife Viewing Area, located by the Sneads Ferry Gate/Bridge at grid 7999-2915 near the JE TA, is off limits to all tactical vehicles and all military training.

35. Steel Targets. Adding steel targets to live fire ranges aboard Camp Lejeune will be in accordance with reference (a) Chapter 2, Section 2-10 and the Range Control “Steel Reactive Target Checklist Quick Reference Guide”. A copy of this checklist is posted on the Range Control Web Page. Unit must also submit an E-Mail Special Range Request (ESRR) at least five (5) working days before the event to request approval. Units are not authorized to fire at steel targets using 5.56mm (DODIC A059) or above ammunition closer than 100 meters.

Chapter 6

Weapons, Ammunition, and Explosives (A&E)

1. General

a. The firing of all direct, indirect fire weapons, explosives, demolitions, lasers devices, and all other training devices must conform, in all respects, to appropriate SDZs and WDZs for that weapon system and ammunition. Refer to reference (a) and all other required references and as per this Order. Units firing weapons must conduct a down range sweep to ensure the down range area is clear of all personnel, vehicles, and aircraft before conducting any live-fire. The large number of highways, paved roads, tank trails, adjacent ranges, maneuver areas, homes, and property on and around Camp Lejeune demand that careful consideration be given to all live-fire ranges and surface danger zones (SDZs) and weapons danger areas (WDZs). Containment for all flat and high trajectory projectiles within established impact areas, approved SDZs/WDZs, and sectors of fire for that assigned live fire range/impact area are always a major safety concern at Camp Lejeune.

b. Any new, foreign, or experimental weapon systems or ammunition /ordnance, or explosive/demolition devices and training devices used in the training complex being tested will not be fired or demonstrated on any range without the prior approval from the RCO. Unit must receive authorization to store and use any experimental or use any non-DOD A&E. The unit must provide Range Control with a Safety Certification from Marine Corps Systems Command, Warfighting Lab, Special Operations Command, DoD/Department of the Navy Agencies, or other appropriate military service documentation prior to use of the device/equipment.

c. For further guidance and information on general range safety issues, weapons/ammunition all using units/commands shall refer to reference (a), the current version of the RTAM TECOM Pocket Guide, any published RTAM TECOM SOUMs, this Order/Range Cards, and Ammunition AINs/NARs, TMs on ammunition and weapons. Specific and detailed range safety information and guidance/policy for Camp Lejeune is contained throughout this Order.

2. Transportation, Handling, and Storage of Ammunition and Explosives

a. General. A&E, regardless of type, quantity, or location must meet basic minimum safety and security requirements established in reference (af), Ammunition and Explosives Safety Ashore, reference (p), Marine Corps Ammunition Management Explosive Safety, and reference (ag) Marine Corps Physical Security Program Manual. These provide policies and procedures associated with the handling, storage, safety and security of all Class V A&E. Reference (ah),

Transportation Safety Handbook for Ammunition Explosives and Related Hazardous Material, governs transportation of A&E and related HAZMAT.

(1) Dud fired Ammunition (Unexploded Ordnance/Dud)

(a) Dud fired ammunition (UXO), of any caliber or weight, that has been fired, placed, dropped, thrown or launched, but which fails to function as designed. Duds found outside an impact area, or in a TA, must be reported to BLACKBURN immediately. Do not disturb a dud or UXO.

(b) The OIC will report all UXO (dud) ammunition to BLACKBURN and the unit's ammunition chain of command (S-4/G-4).

(c) Duds/UXO will not be destroyed, moved, or disturbed in any way, except by EOD personnel.

(d) Only Camp Lejeune Base EOD personnel or certified EOD contractors working for the government are authorized to render safe and neutralize or dispose of duds. EOD personnel will notify BLACKBURN prior to entering any impact area.

NOTE: Demolition materials such as C4 or TNT which fail to function are misfires, not duds.

(2) Misfires and Hang Fires

(a) General. A misfire is defined as the failure of a primer or the projectile propelling charge to function, a line charge or demolition material which fails to function. All misfire procedures shall be completed on the range by following misfire procedures in training manuals for the weapon system and assigned ammunition. In the event misfires present an immediate hazard to personnel or a ceasefire is necessary, they will be reported to BLACKBURN.

(b) Hang Fire. A hang fire is an undesired delay in the functioning of a firing system. A hang fire for a rocket occurs if the rocket propellant is ignited by the firing impulse, but the rocket fails to exit the launcher within the expected time frame. For a TOW missile a hang fire occurs when the missile fails to launch, but internal components of the missile, such as batteries and gyros, are initiated. If a TOW Missile has a hang fire, contact BLACKBURN to request Base EOD assistance. A TOW Missile hang fire will not be transported off the range. Some types of ammunition will have a mandatory wait time before conducting any immediate action.

(3) The OIC of the firing unit will ensure accurate records are kept on the number of rounds fired, the number of duds experienced, and the location of the duds. At the conclusion of each

day's firing, the number of duds will be reported to BLACKBURN as part of the Range Utilization Report by the RSO.

(4) Misfired ordnance will have all safety pins and devices reinstalled, and will be replaced in its original shipping container /package before being returned by the unit to the ASP.

(5) OIC and RSO are should be supervising safety and are not authorized to clear any weapons systems or apply immediate action to weapons systems unless someone is in danger of being injured or killed.

3. Explosive Ordnance Disposal (EOD)

a. Base EOD is organized, staffed, and equipped to support training on the live-fire ranges and TAs at Camp Lejeune and MCAS New River. Base EOD is under the cognizance of the Branch Head, RCB. Emergency Assistance is available on a 24-hour basis to all units /organizations located at Camp Lejeune through BLACKBURN. Local law enforcement agencies must request MCIEAST-MCB CAMLEJ EOD support through BLACKBURN via the Installation/Base PMO.

b. The Range Control Base EOD Team operates within the Camp Lejeune Military Complex or other locations as directed. BLACKBURN will relay information to and from the OICs, RSOs using green gear on 34.70 FM or phone at 910-451-3064/4449. Base EOD Technicians will operate in accordance with this Order and all applicable references pertaining to Base 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 Base EOD Technician onsite will make the final decision to secure from operations in the event of foul weather or established safety parameters. He will inform BLACKBURN of his decision and ensure the range/impact area is “COLD” before leaving.

c. Routine requests for Base EOD support will be submitted in writing at least 10 working days in advance of the requested date for support to Range Control Branch. The day prior to requested support or last working day before weekend support, the unit shall contact Base EOD directly for final coordination. The Base EOD Office is located at Building G800 at Camp Geiger and can be contacted during normal working hours at (910) 449-0558/0334. After normal working hours, weekends, and holidays contact Base EOD through BLACKBURN. Examples of routine EOD support are:

(1) Escort vehicles and personnel through impact areas for range maintenance, target placement or replacements, EMD, Wildlife Management, or others as directed/scheduled.

(2) Provide unclassified information on ordnance. This information is available to the OICs and RSOs 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 Base EOD through BLACKBURN at 34.70 FM or (910) 451-3064/4449. Examples of emergency support are:

(1) Located UXO aboard Camp Lejeune and MCAS New River installations outside of the impact areas.

(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 that are unserviceable or damaged and cannot be turned into the ASP or Station Weapons.

(4) Any suspicious item, ordnance or IED found, placed, on or near government facilities or ranges that pose a potential threat to personnel and property.

(5) Any suspicious item, ordnance, or IED found off-base, shall be reported to the PMO or MCIEAST-MCB CAMLEJ CDO at (910) 451-2414. Normally the local police department, FESD, or local sheriff will contact Base PMO initiating the EOD request/support.

e. UXO. UXO within a designated impact area, with the exception of hand grenade ranges, do not require an immediate Base EOD response. Duds and other UXO shall be reported to BLACKBURN. UXO outside an impact area pose a threat to personnel and property and must be reported immediately to BLACKBURN. Units must provide an exact location of the UXO and provide a guide if possible. UXO shall be clearly marked with a visible item approximately five ft. away; all personnel shall be kept clear of the area. **DO NOT DISTURB UXO IN ANY MANNER**.

f. Reporting of Abandoned Ammunition

(1) Using units are responsible for the transportation, security, and return of all abandoned ammunition discovered by that unit aboard Camp Lejeune capable of being transported and not considered UXO to the Base ASP. Additionally, the unit returning the ammunition is responsible for the submission of a MLSR message.

(2) In the event civilian or military personnel discover any abandoned ammunition or explosives they must contact the PMO at (910) 451-2555/2556/2557 and BLACKBURN at (910) 451-3064/4449.

(3) All ammunition found on an installation will be considered extremely hazardous and shall not be handled by unauthorized personnel. PMO will coordinate with the ASP for turn-in of the ordnance, for all items .50 cal and below (Small Arms Only). MCIEAST-MCB CAMLEJ EOD will be contacted immediately to recover the munitions above .50 cal.

g. Explosive Actuated Tools. Explosive actuated tools may be used in the performance of proficiency training by EOD aboard Camp Lejeune and MCAS New River and during Anti-Terrorism/Force Protection Exercises scheduled events. This Order and all applicable EOD publications regarding safety will be followed. In accordance with reference (af) PAN training site requests must record the location with the 100-foot Inhabited Building Distance (IBD) arc on a scaled Base map, any structures within the arc, procedures used to control access to the encumbered area, dates/times of usage, and certification that all material used/consumed during the training will be removed and properly disposed of after the evolution is complete. Both the RCO and the ESO office must approve the training location.

h. EOD Operational Area Clearance (Range Sweeps). Impact areas are periodically swept by EOD to remove UXO 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.

4. 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. A&E must be protected from the hazards of Electromagnetic Radiation Emission Control to ordnance. It is imperative that all commands transporting, or training with A&E, especially aviation ordnance, comply with the requirements of references (ai) and (ak).

d. For a detailed list of HERO type ammunition see reference (ak) for most often used HERO sensitive DODICs; this list is not all-inclusive and may not include new items. Units are responsible to understand all capabilities and limitations of the ammunition they train with. Refer to references (k) and (ai) for a full list of HERO Unsafe/Susceptible Ordnance.

5. Ammunition

a. Ammunition and explosives (to include pyrotechnics/smoke/CS) will be positioned to minimize the potential for ignition from external sources, explosion, rapid burning or sympathetic detonation and will be located, staged, and stored in accordance with the requirements of the current edition of reference (af) for compatibility and safe separation distance. A&E shall be staged to best minimize the effects of weather. Ignition sources such as matches, lighters, or other spark-producing items will not be located near ammunition, pyrotechnics or explosives. Fire extinguishers and/or firefighting equipment will be maintained near the A&E.

b. Ammunition will not be removed from the ranges except as authorized by published orders and will be returned to the ASP with the appropriate packaging and documentation.

(1) Ammunition will never be abandoned, destroyed, buried, fired indiscriminately or otherwise disposed of illegally.

(2) Altering ammunition or assembly of explosive components by any person or organization other than EOD to inert rounds is prohibited.

(3) Any attempt to use ammunition in an unorthodox manner or to purposely attempt to make it malfunction is prohibited.

(4) Use of non-standard munitions/ammunition requires prior approval from the RCO/Base ESO.

c. Training evolutions that require ammunition and/or explosives to be staged, must do so in areas that are temporary in nature. These locations do not require approval by the DoD Explosives Safety Board if ammunition and explosives are in total support of a specific training mission as per reference (ah). Ammunition staged on a range for training must be positioned in a manner such that the required explosives safety quantity distance for the N.E.W. of A&E present does not exceed the range boundary. A&E that are consistently drawn and fired and never left in a storage mode may be staged in support of that training at the approved range.

d. Blank and live ammunition will never be mixed together. Strict accountability, security and safety procedures will be employed to ensure they remain separate at all times. If the use of blanks is necessary the OIC/RSO/Commander will ensure separate storage sites are utilized for blanks and live ammunition and it is supervised at all times. Blank and live ammunition will not be stored together or issued from the same location.

e. The Blank Firing Adapter (BFA) is a necessary component for operational safety while firing blank ammunition for weapons systems designed to accept BFAs and must be enforced/supervised.

(1) The safe separation distance for firing blanks at personnel is five meters. Less than five meters separation distance could result in serious injury. Less than three feet separation distance could result in fatality.

(2) If the training requirement mandates blank firing to be conducted on the same day as live fire, such as rehearsals, the unit must have strict control measures in place and supervised/enforced at all times.

(3) The OIC/RSO will ensure all gear, ammunition sources, and weapons are inspected between live-fire and blank fire training.

6. Riot Control and Smoke

a. The use of lethal or incapacitating chemical agents in training is prohibited aboard Camp Lejeune.

b. Riot Control Agent (RCA)

(1) Types of RCAs authorized for use at Camp Lejeune are limited to CS, CSX, CS-1, CS-2, and CR.

(2) The use of CS in a training area (TA) must be indicated and scheduled on the RFMSS TA Request as a CS event. The unit must provide the required 5711/5769/5702 personnel that are certified on the Command Certification Letter and the CS event itself must be signed for. CS type devices are not authorized/allowed anywhere within the GSRA Complex. The unit must submit via E-mail a Special Range Request (ESRR) with the basic data such as dates, times, location, DODICs to be used, assigned 5702/5769/5711 supporting the event to the MCIEAST-MCB CAMLEJ, RCB/RSS at least 5 days before the scheduled CS training event to ensure the location in the TA does not conflict with the installation boundaries or paved roads, and to indicate whether it is open air release or is being conducted in a tent (Field Expedient Gas Chamber with CS Capsules DODIC K765 only) and is in compliance with the current Fire Condition.

(3) Use of RCAs in TAs requires the supervision by CBRNE personnel specially trained (5702/5769/5711) in field behavior, individual protection, and first aid for RCAs per reference (ac).

(4) RCAs will not be used under any conditions that are dangerous to life, property, or endangered species such as the RCW. Minimum safe distance to TLZs is 500 meters (Unless the TLZ is scheduled in RFMSS for that purpose). Minimum safe distance to paved

roads, any built-up areas to include the MOUT Complexes/FOBs and endangered species sites is 500 meters. No RCA will be used within 1000 meters of the installation boundaries to include waterways and the New River. CS can be used on tank trails as long as the distance from paved roads is more than 500 meters and the surrounding TAs are scheduled and signed for by a 5702/5769/5711. Road guards shall be posted to prevent other units/vehicles/personnel from entering the TA/tank trail. CS will not be used in TLZs unless the TLZ is scheduled in RFMSS and signed for by the using unit as a CS event.

(5) All COs conducting field exercises with RCAs must conduct an RM to include, but not limited to: heat conditions, safety, training of Marines/Sailors, protective gear, open wounds, use of contact lenses, and all other requirements set forth in reference (ac) on CBRNE Training. This will also include the restrictions of driving POVs within one hour after a CS training event.

(6) CS is not authorized inside the MOUT Lejeune Complex, E-MOUT, Mobile MOUT, Combat Town, UTFs, Outdoor IIT and all FOBs. CS/Smoke is not authorized in the entire GSRA complex or any GSRA live fire range.

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 structure, building, tunnel, or basement.

(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 HC smoke. Ensure appropriate protection is provided and consideration is given to weather conditions, and potential downwind 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 RCW cluster sites or 200 feet of a banded RCW cavity tree. 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 Installation.

7. Simunitions, Special Effects Small Arms Marking System (SESAMS), Close Combat Mission Capability Kit (CCMCK), and Ultimate Training Munitions (UTM), and I-TESS-II Gear/Equipment

a. Though simunitions SESAMS/CCMCK/UTM training is less dangerous than live-fire, such training still holds the possibility of injury to users and others in the TAs/facilities. SESAMS/CCMCK/UTM rounds travel at approximately 400 to 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 these innovative training systems/devices at all times. A SESAMS/CCMCK/UTM training event is treated just like any other live-fire event and must be signed for by a OIC that is certified in those devices. All other live-fire safety requirements must be in place, enforced, and supervised.

b. Usage. All requests to use SESAMS/CCMCK/UTM will be initiated via RFMSS and must include a qualified OIC and RSO on those devices. Units can request a specific location such as Combat Town, MOUT Lejeune Complex, E-MOUT, Mobile MOUT, UTFs, a TLZ/GP or an entire TA. Scheduling SESAMS/CCMCK/UTM in the MOUT Lejeune Complex, Combat Town, Mobile MOUT, E-MOUT or a TLZ/GP will include an area that extends to 150 meters from that facility for un-protected personnel around the training site. The entire training site must be secured and controlled by the using unit. This distance provides a buffer area to mitigate the chance for inadvertent contact or injury. The daily RFWO Message will highlight training locations where SESAMS/CCMCK/UTM will be used. This will serve as warning to all other personnel/units of this type of training activity. Other units are authorized within the MOUT training sites as long as the 150 meter rule is in place, enforced, and coordination has taken place between the units. SESAMS /CCMCK/UTM are not authorized to be used in any FOBs aboard this Installation.

c. Safety Guidance. The unit commander/OIC/RSO is responsible for conducting training on SESAMS/CCMCK/UTM characteristics, hazards, and safety procedures before conducting any SESAMS/CCMCK/UTM training. All SESAMS training will be in accordance with the operator manuals for SESAMS and Chapter 14 of reference (a). The unit commander will ensure no live/blank ammunition is located in the SESAMS TA.

(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) or the M50 with outer plastic eye shields and canisters attached are approved for use.

(b) Neck and throat protection such as balaclava, towel, neck scarf, flak jacket attachment, or commercial throat protection like the FX 8000 Protective Throat Collar.

(c) Body/Skin/Groin Protection/Sleeves Down. Camouflage utilities, required PPE will be worn during simunitions/SESAMS training events. The groin can be protected with the flak jacket groin attachment, an athletic cup, or a towel placed inside the trousers.

(2) A Government safety vehicle and properly equipped corpsman will be present during all SESAMS/CCMCK/UTM training. If the safety vehicle or corpsman departs, all SESAMS/CCMCK/UTM training will cease.

(3) All safety requirements listed in reference (a), technical /operator manuals, references, pamphlets for SESAMS/CCMCK/UTM and this chapter of the Order will be met, enforced, and supervised by the OIC /RSO.

(4) 9mm SESAMS are not authorized to be used during weather when temperatures are below 38°F and CCMCKs (5.56mm) when temperature are below 18° F.

d. Rules of Engagement (ROE)

(1) No intentional shots to the head or face or below the waist. No shots will be taken at a distance closer than 7 feet/2 meters for the 9mm device and thirteen 13 feet/4 meters for the 5.56mm device.

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

(3) Full face and eye protection will be worn until the OIC 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 TA by emplacing road guards or barriers.

(2) SESAMS will not be used within 250 meters of any paved, hard-surface road used by civilian traffic (e.g., Sneads Ferry Road, Marines Road, Lyman Road, Highway 172, and Onslow Beach Road).

f. Communication Procedures. The OIC or the RSO will call into 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/CCMCK/UTM) brief and authorizes the use of simunitions/SESAMS/CCMCK/UTM the OIC/RSO will make normal radio checks every 30 minutes (on the hour and half-hour) stating: "Combat Town, TLZ Gull, TA Hotel simunitions/SESAMS/CCMCK/UTM in use." This will notify all other units in the area that simunitions/SESAMS/CCMCK /UTM are in use in that area.

g. Upon completion of training, the OIC/RSO will contact BLACKBURN and request to go "COLD" and will report number of rounds expended, number personnel trained, and that a police call was conducted. 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 OIC/RSO and all SESAMS/CCMCK/UTM ammunition collected/turned in.

h. Range Training and Instrumented Systems Support (R-TISS). Integrated Laser Engagement System (I-TESS-II), Training IED (TIED), Improvised Munitions Explosive Effects Simulator System (IMEESS), Training Counter Radio-Controlled Electronic Warfare (T-CREW) and SESAMS/CCMCK Kits with required PPE are available from checkout through the Tactical Engagement Simulation Center (TESC). Personnel are required to be trained on the devices prior to obtaining the equipment. Contact the R-TISS Warehouse at Building 1046, R-TISS phone number is 451-9009 to schedule training or obtain the equipment. This service is provided at no cost to Marine units assigned to Camp Lejeune.

8. Small Arms

a. General

(1) Small arms are defined as man-portable, individual, and crew-served weapons systems of 30mm and below, to include rifles, pistols, shotguns, infantry automatic rifle, light/medium/heavy machineguns (LMG, MMG, HMG), sniper rifles, sub-machineguns, and ground mounted, vehicle mounted, and rotary-wing aircraft mounted machineguns. All OICs/RSOs/COs shall review all TMs/Operator Manuals and all other required references on the weapon, weapon system, and ammunition (AINs/NARs) before conducting any live-fire training with small arms and be certified on that weapon/weapon system.

(2) Ensure all safety rules/policies/procedures are followed, enforced, and supervised by the command/unit in accordance with Chapter 4 of reference (a) and this Order/Range Cards at all times.

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

(4) Ensure all personnel within the designated hazard areas wear proper PPE as required unless authorized by a formal written request for deviation of this policy via the unit's chain of command to the CG MCIEAST-MCB CAMLEJ via the RCO at least 30 days in advance.

(5) Scheduled units conducting a M16/M4/M249/M27/M38(5.56mm) or M240B/M40A6/M110 (7.62mm) MK13 WinMag .300 static fire/prone position BZO/Zeroing live-fire events are authorized to remove/not use proper personal protective equipment (PPE) except hearing/ear protection for this type of training activity only. This has to be strictly controlled, enforced, and supervised by all OIC/RSO/Unit COs at all times.

(6) Ensure all BFAs have been removed and checked before conducting any live-fire with live ammunition or have been properly attached for all blank ammunition firing events. Ensure strict accountability of all blank/live ammunition at all times. The unit must use the proper BFAs on the weapon when firing blank ammunition. BFAs must be painted a bright color such as red, yellow, or orange and placed on the correct weapon for that color. Units must ensure all ammunition sources like magazines and feed trays are checked, cleared, and inspected by the OIC/RSO.

(7) All personnel will be knowledgeable on immediate action /misfire procedures for the weapon, weapon system, and ammunition per the required operator manuals being used.

(8) Overhead or flanking fire is authorized only as prescribed in reference (a) and this Order. Small arms ammunition must be cleared for overhead fire per the required ammunition orders and messages.

b. Machineguns

(1) Field firing for machineguns includes the firing of 5.56mm linked, 7.62mm linked, and .50 caliber linked machineguns from ground, vehicle mounted, aviation door gunnery, or aircraft mounted machineguns.

(2) Ammunition will have the required security, storage, and accountability on all live-fire ranges per the required references.

(3) Before the start of any live-fire event, the OIC/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 clear of all personnel/vehicles before going hot.

(5) All personnel within the designated hazard areas must wear proper PPE.

(6) No weapon will be loaded until a command to do so is given by the OIC/RSO. The OIC/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 to ensure they stay in the proper direction of fire/approved SDZ. The using unit must ensure proper separation distances as required for all machineguns.

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

(8) Machineguns may be fired over individuals wearing the proper PPE in firing exercises provided the ammunition used is cleared for overhead fire and the provisions of references (a), (am) and appropriate firing tables, operator manuals, FMs, TC, and TMs are followed. 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 OIC/RSO/ARSOs/PSOs to physically and visually confirm it is unloaded properly and in Condition 4.

(10) 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/blocked and the driver must be out of the vehicle unless scheduled for a Live-Fire and Movement event on SR-7, SR-8, SR-9, SR-10 or other authorized ranges. The T&E must be attached. Firing free gun is authorized by ESRR only.

(11) During Fire Danger Plan Four and Five units are restricted from delinking any linked ammunition. The units will request straight ball ammunition from the ASP. The ASP is stocked with straight Linked Ball Ammunition and is available upon request if it is warranted by the the current fire danger condition. If the range is impacted by a Fire Danger Plan Four or Five, the using unit

must train with straight ball ammunition. In the event that straight ball is not available from the ASP, tracer rounds will have to be removed from the belted ammunition after getting authorization /permission from the ammunition chain of command (S-4/G-4 of the unit) for 5.56mm/7.62mm linked. Delinking of all caliber .50 cal. type munition is not authorized. For additional guidance see Navy and Marine Corps Ammo Information Notice 064-2012, or newer updated reference “Policy for Delinking and Accountability of Delinking Small Arms Ammunition (DODIC A064, A131, A151, and A576)”.

(12) The .50 cal. sniper rifle/M107 round DODIC A606 is only authorized on range G-29B (Limited Direction of Fire) firing into the G-10 Impact Area and requires part of Highway 172 be closed.

9. Mortars

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

b. Mortars shall be fired only into G-10 and K-2 impact areas from approved MPs listed in Figure 6-1. 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. The using unit must ensure the proper safe separation between all mortars on the firing line per the mortar system references.

c. All Marines involved in mortar live-fire shall wear the required PPE.

d. A Forward Observer is required for all mortar live-fire (except when conducting Direct Lay and Handheld Modes) to observe and adjust the impact of all rounds being fired and ensure that all mortar rounds impact in the scheduled impact areas.

e. Increments removed before firing will be placed in a small metal or wooden covered container located close to the firing mortar. Once they receive the End of Mission (EOM) command the unused increments are moved to a metal or wooden covered container outside the firing position at a safe separation distance of 25 meters or more away from the weapon. Unused increments will be handled and destroyed in accordance with reference (ap). Burning of increments/powder bags must be in accordance with fire regulations. Firefighting equipment must be on hand during all fire conditions. Units burning increments will notify BLACKBURN before and after the training event. The MP must be in a “HOT” status before burning increments.

MP	GRID LOCATION
MP 1, G-10 Impact Area	18S TD 9037-3755
MP 2, G-10 Impact Area	18S TD 9131-3759
MP 3, G-10 Impact Area	18S TD 9131-3759
MP 4, G-10 Impact Area	18S TD 9389-3748
MP 5, G-10 Impact Area	18S TD 9515-3709
MP 6, G-10 Impact Area	18S TD 9543-3535
MP 7, G-10 Impact Area	18S TD 8964-3470
MP 8, G-10 Impact Area	18S TD 9260-3186
K-500, K-2 Impact Area	18S TD 7825-3550

Table 6-1--MPs and Locations

f. All mortar safety checks for 60mm/81mm/120mm mortars are mandatory before firing any live ammunition (HE/WP/RP/ILLUM/TP). Unit must dig required “DUD Pits” and check post firing for “DUDs”. Mortar sights will be bore sighted before any live-fire training. Ensure mortars have completed bore scope and pullover tests as required.

g. The OIC/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 with rounds landing only in the impact area. Units firing mortars will have applicable firing tables for that weapon system and type of ammunition on the range during the live-fire event. All debris from firing illumination/smoke rounds (parachutes as an example) should land within the boundary of the assigned impact area.

h. The OIC/RSO of the live-fire event will ensure each mortar leader has in their possession a copy of the safety information, as calculated by the RSO/Fire Direction Control (FDC). It will be written on a range card in the form of a SAFETY “T”. The Fire Direction Officer/SNCO/NCO/FDC will have a copy of the safety information for that mortar unit/mortar system/ammunition. All firing data will be checked using a Mortar Ballistic Computer (MBC) or plotting board as either the primary or secondary means.

i. Firing restrictions and limitations in reference (an) apply to all cartridges and fuses. Cartridge M720 will only be fired in the handheld mode using either Charge 0 or 1.

j. LAV-Mortar variants will observe all guidance, guidelines, and restrictions as set forth in reference (ao) on the LAV mortar variant.

k. At no time will any mortar system conduct live-fire into the UCAS facility in the G-10 Impact area.

10. <u>Hand Grenades</u>

a. Before live hand 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, grenade live-fire training can be obtained in reference (ap), Grenade and Pyrotechnic and Chapter 5 of reference (a).

b. Proper PPE (Level 1) 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/K-402A). Once the safety pin has been pulled, the grenade must 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 and at no time will hand grenades be taped.

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 by the using units; 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 of that range. 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 (WP) grenades are not authorized to be thrown on any of the grenade ranges.

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

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

(2) Notify BLACKBURN of the dud/low order detonation/UXO live hand grenade, request to go into a “CHECK FIRE” and request Base EOD support.

(3) Ensure all personnel remain under cover until Base EOD personnel have cleared the dud/low order detonation/UXO.

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

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

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

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

k. Units shall 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.

l. Do not throw practice grenades from the live-fire pits. Practice Grenades will only be thrown from the practice pits/assigned area.

m. 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.

11. <u>40mm Grenade Launchers</u>

a. Personnel firing the 40mm M203, M32A1, M320, and MK19 40mm linked 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 six meter separation will be maintained from the firing positions and between weapon systems. Minimum target engagement range is 310 meters with 40mm linked HE/HEDP and 75 meters for training practice ammunition 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 and the vehicle must be chocked. Ensure the weapon system is properly mounted and locked down. Additional information can be obtained in Chapter 5 of reference (a), reference (aq), for the M203/M32A1/M320 and reference (ar) for the MK-19.

b. Proper PPE is 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. Unit are authorized to dig a “DUD” pit and must conduct post firing procedures for all “DUDs” to ensure they are handled properly and turned in.

c. HE/HEDP (M203/M32A1/M320) grenades will only be fired on authorized ranges and into a dedicated impact area. Minimum engagement ranges for HE/HEDP grenade ammunition is 130 meters for HE and 165 meters for HEDP from point of detonation for the M203/M32 /M320. All units must be cautious and aware of possible sympathetic detonations.

d. Dud/UXO 40mm HE/HEDP rounds are extremely dangerous due to sensitive fusing and shall not be disturbed in any fashion except by USMC EOD personnel. Report all duds with location to BLACKBURN; do not enter the impact areas.

e. 40mm illumination/smoke (signaling devices) rounds can be used in the TAs for unit training (except inside the MOUT complex, E-MOUT, Mobile MOUT complex, and Combat Town Facilities). Ensure all safety rules and weapon conditions are supervised and enforced with the M203/M32/M320 40mm weapon systems. Ensure observance of all safety rules during the fire season to prevent forest fires. Using units will be required to police all debris such as expended rounds and parachutes. Unit will be required to police expended Training Practice TP from the M203/M32A1/M320 and MK-19 round debris down range depending on the range used.

12. Guided Missiles and Rockets (Ground Systems Only)

a. The TOW IIB, MK153 SMAW, M136 AT-4, M72A7 LAAW, M98 Javelin, and M3 Carl Gustaf 84mm MAAWS to include all sub-cal training devices are the only guided missiles and rockets approved for use aboard Camp Lejeune. When firing the TOW Missile, the Kevlar Protected Blanket shall be used based on current references and Chapter 7 and Table 7-4 and 7-5/Notes of the current reference (a).

b. Before firing, the surface danger zone and back blast area will be cleared of personnel, material, vehicles, and vegetation when firing MK-153 SMAW, M72A7 LAAW, M136 AT-4, TOW IIB, M98 Javelin, and M3 Carl Gustaf 84mm MAAWS. Firing the SMAW, AT-4, or the M72A7 LAAW from fighting hole/fighting position or the prone position is not authorized. Units are authorized to dig a “DUD” pit and must conduct post firing for “DUDs.

c. All loading preparations for firing and unloading will be done on the firing line of the scheduled Rocket Range/Missile Range**, with the weapon system pointed down range. Rocket systems will not be**

loaded behind the firing lines. Units are authorized to dig a dig "DUD" pit and must conduct post firing for "DUDs. Firing of anti-tank rockets over personnel is not authorized. Double hearing protection is required. Pre-Fire inspection of all rockets/missiles is required.

d. Care shall be taken with all training devices, i.e. 9mm Trainers/Miles/Javelin/21mm LAAW sub cal. Ensure all safety procedures and PM (Care/Clean) for the weapons system TMs/FMs/TCs are followed, enforced, and supervised.

e. TOW Missiles and aircraft rockets fired from an airborne platform are discussed in more detail in Chapter 4 and Appendix B of this Order.

f. All units firing the TOW Inert Missiles on SR-7/SR-9/SR-10 shall police all TOW Inert Missile wire from the entire range and it must be inspected and cleared by a Range Control Range Inspector.

13. Artillery/High-Mobility Artillery Rocket System

a. Artillery will only be fired from designated and surveyed GPs, see Table 6-2, unless a specific SRR has been approved for other areas/sites and surveyed/approved by 10th Marines and Range Control. Artillery can only fire lowest charge and highest angle of fall, aboard Camp Lejeune and the M825 Smoke Round is limited to high angle release only from designated GPs. Quiet Hour requirements/policies listed in Chapter 1 pertain. Requests for firimg beyond normal "Quiet Hours" requires a formal SS at least 30 days in advance.

b. Impact areas for the G-10, K-2, and N-1/BT-3 are described in Appendix B of this Order. G-10 is the principal impact area for artillery indirect fires. Firing into the K-2 is authorized by formal SRR at least 30 days in advance and is only permissible from a few approved GPs as listed in RFMSS. Direct fire artillery is authorized on Range G-7 only.

c. An Artillery FO with positive visual means to observe rounds impacting is required at all times. The OP must be in a "HOT" status before a GP can be placed into a "HOT" status.

d. All FOs/observers will call "CHECK FIRE" when rounds are unobserved or out of the impact area and must report the same.

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

f. No personnel/vehicle traffic is authorized within Area E of the Artillery SDZ, as depicted in Chapter 10 of reference (a). 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.

g. The firing unit will place necessary road guards (with comm) and/or barriers to prevent access within Area E. Traffic on main and secondary roads may be delayed for short periods of time (five minutes) when properly scheduled and coordinated with the RCO /BLACKBURN.

h. Artillery Safety. Artillery unit safety certification programs, to include specific artillery safety billets, will be in compliance with references (a) and (as). Review references (a) and (as) 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 in accordance with all applicable orders.

i. Danger Areas. SDZs constructed by Range Control and 10th Marines with assistance of the units involved and will use those grid coordinates and the procedures listed in references (a) and (as). At no time will units intentionally deliver artillery rounds within 750 meters of the outer edge of the current G-10/K-2 Impact Areas.

j. Ammunition and Propellants

(1) Alteration of fuses/ammunition is prohibited.

(2) Modular Artillery Charge System of 155mm propelling charges (MACS), 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 references (as) and (at).

(3) Firing Improved Conventional Munitions, M982 Excalibur, Copperhead, and antipersonnel-type projectiles in training is prohibited at Camp Lejeune. Firing of the High-Mobility Artillery Rocket System requires close coordination, detailed planning, and deconfliction.

(4) Prior to firing artillery illumination, check with BLACKBURN for aircraft flights/routing to minimize interference with night flights, night vision flights, and local fire conditions. The firing unit must check the wind direction by using assets from the artillery unit. All debris from firing illumination/smoke rounds (parachutes as an example) should land within the boundary of the assigned impact area.

k. The maximum ordinate will not exceed 17,999 ft. and will remain within the restricted airspace outlined in Chapter 4 of this Order.

l. 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.

(1) Training unit forward observers must observe the the first illumination round and make adjustments to ensure that all components of the illumination round remain in the impact area. It is the RSO / OIC responsibility to suspend shooting, if in his/her opinion, wind gusts will cause debris - even after round functioning - to fall outside of impact area.

m. Any projectile that bursts or lands outside the impact area requires immediate action by the firing artillery unit such as sounding "Check Firing, move to the rear of the piece and fall in", maintain all data on the howitzers, notify BLACKBURN and the unit's chain of command immediately and conduct an investigation in accordance with reference (as) and this Order.

n. Artillery Direct Fire is only authorized on the G-7 Range. The Range Cards contain a detailed range description and listing of safety rules and policies for this range.

o. GP-23 is the only GP 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 reference (av). Engineer training at this GP satisfies the requirements of Sections – Regiment Engineers – 8102, Arty Brty – 6122, Arty Btry – 6124 of reference (au). Requests to conduct engineer operations in this GP 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 ft. 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 when filling pits. 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 returned to normal grade, 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 GP without prior approval from Range Control and the 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/pine trees is authorized.

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

ARTILLERY GPs	GP GRIDS
GP-1	18S TD 8974 4226
GP-2	18S TD 9129 4127
GP-3	18S TD 9280 4090
GP-7	18S TD 9622 3568
GP-9	18S TD 9693 3523
GP-10/GP-10K	18S TD 9183 3083
GP-12/GP-12K	18S TD 9348 3101
GP-13/GP-13K	18S TD 9161 2866
GP-15/GP-15K	18S TD 9052 2839
GP-16/GP-16K	18S TD 8868 3089
GP-17	18S TD 8938 2920
GP-18	18S TD 8961 2742
GP-20	18S TD 8898 2659
GP-21	18S TD 8889 2960
GP-22	18S TD 8698 2618
GP-23/GP-23K	18S TD 8667 3396
GP-25/GP-25K	18S TD 8586 3091
GP-26/GP-26K	18S TD 8583 2921
GP-27	18S TD 8524 2848
GP-29/GP-29K	18S TD 8535 3237
GP-30/GP-30K	18S TD 8453 3050
GP-31/GP-31K	18S TD 8252 3084
GP-32/GP-32K	18S TD 8135 3015
GP-33 (Inactive)	18S TD 8051 3120
GP-35/GP-35K	18S TD 8355 3197
GP-37	18S TD 8850 2725

Table 6-2--Artillery GPs and Locations

14. Tanks, Assault Amphibian Vehicles, and Light Armored Vehicles

a. Within the GSRA tank main guns (TP-T) ammunition or DODIC (CA38) may only be fired on SR-10. See the Range Cards for other ranges that support tank live fire. AAVs equipped with the Up-Gunned Weapon Station (.50 cal/MK-19(TP**) and LAVs equipped with 25mm chain gun** are authorized to fire on the ranges approved in RFMSS according to the Range Cards for those ranges. All MK-19/M203/M32/M320 training ammunition dunnage down range on CBC G-6, K-509, G-27, SR-7, SR-9, and SR-10 must be policed and removed from the range (DODIC BA12, BA21, BA35, B519, B576, B577, B584).

b. Although the unit CO is responsible for safety during all phases of firing, Vehicle Commanders are responsible for the safe firing of their weapons and operation of their vehicles. Weapons will be cleared, pointing down range, and checked by the OIC/RSO before departing the range. Vehicle commanders shall exercise care in maneuvering their vehicles in a manner to minimize potential damage to supporting infrastructure and the general condition of the range.

c. Static Firing. During daylight and periods of 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 a battle run and all vehicle weapons systems have been cleared and checked by the OIC/RSO, they will move to the rear of the range and out of the firing area or maneuver box. Review Chapter 8 of

reference (a) for additional information on tank and light armored vehicles firing. Using units will police all range roads, the area around the defilade firing positions, targets (areas where the grass is cut) on SR-7 and SR-10 and remove all ammunition dunnage such as brass/links/tank round canisters from the range and the surrounding areas in which the vegetation is maintained.

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

g. Off-Road Maneuver. Tracked and wheeled vehicles may be authorized to maneuver off-road in TLZs and other designated areas. Upon completion of this training, the unit is responsible for filling and smoothing all ruts that are deeper than six inches or more and returning the area to a normal 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. Additional information can be found in Chapter 5 of this Order. If conducting military operations within the approved TVMA GSRA ruts are not required to be filled in.

15. Aerial Gunnery

a. Safety measures, ranges, and firing requirements for aerial gunnery (CAS/SIMCAS/Dry CAS), including guns, rockets, and missiles, can be found in Chapter 4 and Appendix B of this Order and Chapter 11 of reference (a).

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

c. Communication will be maintained between FAC/FAC(A)/JTAC, OIC/RSO, firing aircraft, Navy Boat Crew (when applicable) and BLACKBURN at all times.

d. Aircraft weapon systems will be loaded or unloaded only at authorized locations.

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 BLACKBURN or the Range Safety Specialist (RSS)/Range Control

Operations Officer (RCOO) and will be conducted in accordance with the appropriate aviation gunnery manuals established by Marine Aviation Weapons and Tactics Squadron One, reference (a), this Order, the Range Card for that range, 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 and approved targets before firing Inert ammunition only.

h. When conducting CAS or SIMCAS / Dry CAS, aircraft must be under the positive control of a FAC/FAC(A)/JTAC. When conducting SIMCAS / Dry CAS within the MOUT Lejeune Complex, E-MOUT, Combat Town, or Mobile MOUT, 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 reference (au).

k. Review references (a) and (aw) for additional information on aerial gunnery firing.

16. Air Defense Weapons

a. Safety measures, ranges, and firing requirements for air defense weapons can be found in RFMSS and the Range Card for E-1, as well as in Chapter 12 of reference (a).

b. The E-1 Range is the only location aboard Camp Lejeune authorized to fire air defense weapons (Stingers/Avenger Weapon System). Using unit must also coordinate the scheduling of the W-122 15B (VACAPES). Procedures for runaway gun and missile misfires must be in place. Additionally, unit must have a recovery/clean-up capability for targets/drones that fail to sink within the approved SDZ. Targets shall be recovered if possible by the using unit. Units are required to sweep/check the entire beach to include the State Park up to two days after conducting a live-fire event. A separate handout /layout with direction of fire will be provided at the time of check out.

c. The preferred method to conduct these air sweeps is through a civilian contracted aircraft. Based on the approved RFMSS request, Range Control will schedule the air sweep NLT two weeks in advance. Military aircraft may be used if available. If there is no air sweep, no live-fire can be conducted.

d. All environmental policies protecting sea turtles/sea mammals on the beach during the turtle nesting season (1 May to 31 October) must be enforced and supervised by the OIC/RSO.

e. Unit must be on the lookout at all times for marine mammals, surface craft (Boats) or aircraft within assigned SDZ and go into a "Check Fire" if sighted.

17. Demolitions

a. General. The routine use of high explosive demolitions will be confined to demolition ranges (ETAs) and specially prepared pits, per reference (a). However, SRRs for the use of demolitions in other TAs/ranges can be considered. Use of demolitions to simulate supporting fires or IEDs, when authorized, is limited to the use of 1/4-pound blocks of TNT or less. Review Chapter 15 of references (a) and reference (ax), Explosives and Demolitions, for additional information on demolition training. All using units must have a plan in place to fill and level all holes and remove and dispose all Demolition/Explosive debris from the range such as steel/concrete /wood.

b. OIC/RSO will ensure positive means to keep personnel/vehicles 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 missile proof bunker or outside of the SDZ of the demolition pit during firing of live explosives.

c. OIC/RSO will ensure that all personnel wear the required proper PPE, safe separate based on NEW, and or missile proof bunkers.

d. All demolition/explosive operations must go into "CHECK-FIRE" during Thunderstorm Condition 1 and if unscheduled aircraft fly near or over the assigned ETA.

e. Trash/Fuel Shots are not authorized on any ETA, EOD, or live-fire ranges.

f. At no time will units mix live explosives with any inert training devices during the same training event.

g. Cratering charges will not be exploded on roads leading into or adjacent to the ETA and can only be used in the center of the ETA pit area. Units must fill 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 require a SRR at least (10) ten working days before the scheduled event and must use charges no larger than 0.25 lbs. NEW at all MOUT sites. Units will be guided by reference (ax) and (ay), Demolitions Materials, OP-5, EODB/TM/TO 60A Series, other required references, and this Order. Breaching operations require a written certification that a school trained breacher is present. Breaching operations must be conducted in accordance with all requirements set forth in the Guidebook for Assault Entry Techniques Manual and other required references for this high-risk type training event.

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

18. Mines, Booby Traps, and Pyrotechnics

a. Mines and Booby Traps

(1) The use of live mines and booby traps is confined to controlled firing demonstrations. Such demonstrations may be conducted on any ETA for the approved size of Net Explosive Weight (NEW) for that ETA. Units firing a M18A1 Claymore mine will strictly follow procedures in reference (az) and this Order. For additional information on mine/booby traps, see reference (a), Chapter 15.

(2) All personnel will wear the proper/required PPE.

(3) Non-Explosive Practice (Simulated Blue Bodied) mines, Training IEDs, and booby traps can be used in all TAs and on all demolition ranges provided necessary safety precautions are taken as stated in reference (a), Chapter 15. 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/pyrotechnic devices **are left on any range, training facility, or in any TA. 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.

(5) Simulated devices found by other units, the CLEO, or PMO will be treated like the live device it is simulating. The using unit must maintain accountability of all devices at all times.

b. Pyrotechnics. Smoke grenades, CS grenades, and other types of pyrotechnics such as signaling devices are authorized for training, but must be supervised by an NCO or above. Use of pyrotechnics may be restricted by fire conditions, wind direction and close to the base boundary; unit must check with BLACKBURN during fire season (March-June and September-December). Additional information for smoke grenades, CS grenades, and other pyrotechnic devices can be found in reference (ap).

c. Non-Pyrotechnic IED Simulators. Marine units training with non-pyrotechnic IED simulators will receive training prior to using the equipment in the properly scheduled TA. Only those Marines who have completed the required training will be authorized to draw and use approved equipment.

d. Trip Flares. All trip flares/flash bang type devices will be positioned so they ignite below waist level (two/three feet above the ground). The using unit must police and remove all debris after use.

(1) Trip flares shall be positioned so the hazard pattern or the impacting flare does not endanger personnel.

(2) Trip flares shall not be left on any RTA. Trip flares shall be counted before being issued to ensure all items issued are retrieved on completion of the demonstration or exercise.

19. Non-Lethal Weapons

a. General. The term “non-lethal” shall be understood as a function of intent. It is a goal, not a guarantee for these weapons. The RCO must approve the concept of employment of any non-lethal weapons not previously addressed in this Order.

b. The OIC (SSgt or above) and RSO (Sgt or above) for non-lethal weapons and certified on the CO Certification Letter.

c. The use of SESAMS/CCMCK/UTM shall be employed in accordance with Chapter 14 of reference (a) and reference (ba).

20. Non-Standard Weapons and Ammunition

a. The CG Marine Corps Combat Development Command (MCCDC) (C465) must approve the use of any non-standard ammunition, explosives, or weapons systems prior to use aboard Camp Lejeune. The CG MCIEAST-MCB CAMLEJ (G-3/5) is the final authority for use of non-standard ammunition, explosives, or weapons aboard the Installation.

b. Requests to use non-standard weapons and/or ammunition will be made in RFMSS (the comments block will include a list of the non-standard items).

c. A copy of the Limited Safety Release, Safe and Ready Certification or Safety of Use Memorandum (SOUM) will be provided to RCB prior to the request being approved.

d. MARSOC may request the use of non-standard items of explosives when necessary for Special Forces training and operations to the installation commander. MARSOC units must request permission via formal naval letter to the CG MCIEAST-MCB CAMLEJ (G-3/5) to use all non-standard weapons and ammunition aboard Camp Lejeune.

e. The use of non-standard A&E or foreign ammunition on training ranges will be reported to Range Control and Base EOD prior to use.

21. Research, Development, Testing, and Evaluation

a. All non-tenant Research, Development, Testing, and Evaluation (RDT&E) activities within the Camp Lejeune RTA must contact MCIEAST-MCB CAMLEJ (G-3/5 RCB), 60 days prior for coordination and approval.

b. Certifications. Personnel desiring to conduct RDT&E events on Camp Lejeune RTAs will comply with the provisions of Chapter 1 of this Order regarding OIC/RSO certifications and applicable briefs. RDT&E Event Coordinators will ensure that RTAs are properly scheduled and accessed in accordance this Order. Events not properly qualified through Camp Lejeune Range Safety and properly coordinated will be ordered to exit the RTA until proper coordination has taken place.

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

a. Within the ST TA, GSRA Complex is the Counter-Improvised Explosive Device (CIED) Home Station Lane Training Complex, Joint Improvised-Threat Defeat Organization (JIDO Course) for mounted and dismounted CIED training which will be coordinated and scheduled through the MCES.

b. A separate Range Order/Range Card for this complex is published by the MCES and Range Control.

c. The Ground Based Electronic Warfare Systems for IED/JIDO training can be used during training. Counter Radio Control Electronic Warfare (CREW) systems are ground based radio jammers. The OIC/RSO for the unit utilizing these systems must ensure the frequency load sets that are being jammed by the CREW systems have been cleared via the MCIEAST-MCB CAMLEJ Spectrum Officer and Range Control before conducting any training with these systems. These systems/devices can be checked out at the Tactical Engagement Simulation System (TESS) warehouse and used in TAs after proper coordination has been accomplished prior to training.

d. Live ammunition, pyrotechnic, explosives, and demolitions are not authorized on this range complex (HSLT SR-12). Blank ammunition, SESAMS (9mm/5.56mm), practice hand grenades with fuse, and smoke grenades are authorized if properly scheduled and coordinated. Smoke grenades are only authorized in areas where the threat of fire is low. Smoke grenades are not authorized in any of the buildings/structures of this complex.

Chapter 7

Laser Operations

1. General

a. The fundamental concept of laser range safety is to prevent direct and collateral injury or damage resulting from laser use. Personnel using or supervising the use of lasers will be thoroughly familiar with all aspects of laser operations, systems employed and associated dangers during training as per Chapter 16 of reference (a). Military lasers are being integrated into many aspects of military training, UAS/SUAS, and operations. 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/DoN/USMC/Navy arsenal, including ground, water, and airborne systems. Personnel using or supervising the use of any class of laser will be thoroughly familiar with all aspects of laser operation, laser safety, system employment, and all associated dangers during training and operation. A detailed list of applicable references and definitions for lasers can be found in references (a), (n), and (o).

b. The word laser is an acronym derived from a description of the physical process (Light, Amplification, Stimulated, Emission, and Radiation). The laser generates a beam of intense, monochromatic light that is usually invisible under normal operating conditions. The basic hazard associated with laser light is eye damage. This damage can vary from a small burn, undetectable by the injured person, to severe vision impairment. Additional terms and procedural guidance can also be found in Chapter 16 of reference (a). Eye damage by laser light occurs three ways:

(1) Intrabeam or direct viewing;

(2) Diffuse reflection; or

(3) Specular reflection.

c. Definition of Terms

(1) Diffuse Reflection. The scattering of laser light as it reflects off of a rough surface.

(2) Divergence. The increase in the diameter of the laser beam as the distance from the aperture of the laser increases.

(3) Maximum Permissible Exposure (MPE). The level of radiation a person may be exposed to without hazardous effect.

(4) Nominal Ocular Hazard Distance (NOHD). NOHD is the distance from the laser to the human eye, where laser exposure does not pose a hazard.

(5) Optical Density (OD). Refers to the density of the eyewear (goggles or visors) required to protect the eye from laser radiation.

(6) Specular Hazard. A shiny or mirror-like surface. Examples are vehicle windows, polished metals, and standing water, plexiglass, and chrome bumpers.

d. Direct viewing is the most hazardous form of damage, as the light beam is focused directly on the retina. Diffuse reflections occur when the laser beam intercepts a rough surface and is reflected in a scattered pattern. Specular (mirror-like) reflections redirect the light beam and cause the same eye damage as direct viewing. The use of appropriate laser eyewear (goggles or visors) with the correct Optical Density (OD) for the frequency of the laser will eliminate the ocular hazards associated with lasers.

(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/classes of lasers currently approved, have the required Range Laser Safety Officers (RLSO), and have conducted the required laser safety training for all classes of lasers. No one may act as RLSO until certified in writing by the Battalion/Squadron Commander or separate Company Commander as being qualified to perform duties and having trained as a RLSO for all classes of lasers to be used.

(2) RLSOs must take the Range Laser Safety Course, Marine Net Distance Learning Course (RLSC-DL) Course Number RTAMRLSOAA and have the back of the OIC/RSO card signed by a member of the Range Control staff or attend the Administrative Laser Safety Officer (ALSO) Course at Camp Lejeune or MCAS Cherry Point/New River to be properly trained. Contact Range Control at (910) 451-1240 for class schedule.

e. All lasers are currently divided into four classes with three derivative classes: (1, 1M, 2, 2M, 3R, 3B, and 4). All military lasers must be labeled with their appropriate warning and classifications.

f. Laser Classification. Laser systems are classified according to their relative hazards from Class 1 (least hazardous) to Class 4 (most hazardous). For a detailed inventory list of all lasers/class of lasers go https://RTAM.TECOM.USMC.MIL

(1) Class 1 laser systems pose no hazard under any normal viewing conditions. Class 1M laser systems are only hazardous when viewed by magnifying optics.

(2) Class 2 laser systems are low power visible wavelength lasers which are not considered hazardous for momentary (0.25 s) unintentional exposure because the normal observer will blink or look away before eye damage can occur. Class 2M laser systems are low-power visible wavelength lasers similar to Class 2, but are hazardous when viewed with magnifying optics even for a momentary exposure.

(3) Class 3 laser systems are medium power lasers. They are hazardous to personnel who are in the beam path and viewing the source directly or by specular reflection. They usually do not present a diffuse reflection or skin hazard. Class 3R laser systems are considered safe if handled carefully, with restricted intrabeam viewing. With a Class 3R laser, the Maximum Permissible Exposure (MPE) can be exceeded, but with a low risk of injury. Class 3B laser systems are powerful and can cause serious eye injury for exposures of very short duration. They can be hazardous for long distances downrange from the laser system.

(4) Class 4 laser systems are very powerful and the most dangerous laser systems. They can be hazardous for extremely long distances downrange from the laser system. They can also present a potential diffuse reflection viewing, skin, and fire hazard.

g. All lasers have potential hazards. General laser safety rules of employment, engineering, administrative, and procedural control measures are as follows:

(1) All laser systems must be approved by the Laser Safety Review Board (LSRB), with a copy of the approval on file at Range Control or the RTAM Quantico Web Page, 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/evaluated it. Units can contact Range Control at (910) 451-1240 if they have any questions.

(2) All laser systems 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. Typical buffer angles for lasers are two milliradian (mrad) for fixed, five mrad for inertial stabilized, 10 mrad for supported, and 15 mrad for unsupported laser systems.

(3) Only remove the lens cap when ready to fire the laser down range at the approved location/position. Remove the lens cap before applying any power source.

(4) Do not leave the power source connected to the laser device when not lasing. For laser systems that do not have lens caps or disconnects from power sources, the operator must ensure the down range area of the laser hazard area is clear, the system is safe, and the operator is not touching the trigger to the laser system.

(5) Ensure all personnel using or supervising the operation of the laser/laser system are completely familiar with and trained in its operation, 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 RLSO or ALSO per references (n), (o), Chapter 16 of reference (a), and Chapter 7 of this Order and listed on the unit's command certification roster for lasers.

h. Class 1, 1M, 2, and 2M lasers are authorized in all TAs, ranges, and training facilities aboard Camp Lejeune when properly scheduled in RFMSS. 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).

i. Class 3R, Class 3B, and Class 4 lasers are restricted to OPs 2, 3, 5, 12, 14 and Ranges G-3, G-6, G-21, G-27/G27A, G-28, G-29A/G-29B, G-30, K-325, K-402, K-406A, K-406B, K-500, K-500A, K-501/K-501A, K-503/K-503A, K-506, K-507, K-508, K-509, L-5, MAC-6, SR-6, SR-7, SR-8, SR-9, SR-10 and others as listed in the current copy of Camp Lejeune Laser Survey posted on the Range Control and RTAM TECOM Web Pages. All RLSOs for Class 3R, Class 3B, and Class 4 lasers must be designated an RLSO or ALSO and be familiar with the MCIEAST-MCB CAMLEJ Laser Range Safety binder, this Chapter and all listed references on lasers. All ranges assigned to WTBn, Stone Bay Range complex (SBRC) are authorized up to Class 3B Laser Devices.

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 reference (n) and other references listed in reference (o). A certified Administrative Laser Safety Officer (ALSO)/Technical Laser Safety Officer (TLSO), that is appointed in writing by the Commanding Officer, will manage this program. At a minimum, the program will include:

(1) A local laser safety organization

(2) Local laser safety regulations (Unit 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 CO/OIC of the lasing unit will:

(1) Select, train, and certify safety personnel as necessary to assist in complying with the provisions of Chapter 16 of reference (a), references (n) and (o), this Order, and all other applicable laser regulations.

(2) Provide adequate control of the target area to prohibit entry of unauthorized personnel, vehicles, or aircraft.

(3) Designate a RLSO for each lasing site (the RLSO can be the OIC/RSO of the unit conducting training provided he/she is present at the lasing site and is laser safety qualified/certified). The RLSO 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 rotary-wing, that are conducting laser operations from aircraft into the designated Impact Areas must be qualified and trained on that laser device to ensure safe operation.

c. Units that have an inventory of Class 3B, 3R, or 4 laser systems will establish a local laser safety program. This program shall be established as directed by reference (n). A certified ALSO will manage this program.

3. Range Laser Safety Officer. RLSO duties shall not be delegated. The RLSO will:

a. Conduct a “Face-to-Face” Range Laser Safety Officer Brief with the RSS.

b. Be knowledgeable of, and ensure, compliance with this Order, references (a), (n), (o), (bb), (bc), (bd), and (be), 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 (road guards/barriers with laser warning signs) to prohibit unauthorized personnel entry into the laser SDZ (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 (i.e., time, location of laser, and target, azimuth to target, type laser) for unit records in accordance with references (n), (o), and (bf). Unit laser firing logs will be maintained for five years by the using unit.

k. Comply with all applicable duties of the OIC/RSO as listed in Chapters 1 and 3 of this Order.

l. Post at least one person as an air sentry with the sole purpose of watching for unauthorized aircraft entering the Laser Target Area (LTA) or the Laser SDZ (LSDZ).

m. Maintain continuous control of all laser use on the range.

4. Range Control Laser Procedures

a. All laser operations must be scheduled (RFMSS) through Range Control.

b. 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 the 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;

(5) Safety Brief/Pre-Mission Briefs;

(6) Laser Safety Training;

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 (e.g. DANGER, Laser Range in Use, DO NOT ENTER. Access roads must be 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 to be lased.

(4) Never designate aircraft, moving vehicles, or personnel. Never designate specular reflectors such as plexiglass, water, mirrors, vehicle windshields, 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/pointed at any aircraft or above the horizon at any time.

(8) Personnel movements in areas adjacent to the range area shall be known by lasing safety personnel.

d. The following rules apply for all laser use in the RTAs:

(1) The OIC/RSO/RLSO/Commander must be aware of all personnel movements in areas adjacent to the range area. The OIC of any moving personnel or occupied position adjacent to or across from the lasing range must be advised of the hazard. BLACKBURN will pass coordinating safety advisements as needed to all units.

(2) Announcement of laser firing, audible to all training personnel, must be made prior to firing (e.g., "Lasing, Lasing, Lasing" shouted out-loud).

(3) Range Control Branch (RCB) shall:

(a) Maintain laser firing logs for the Installation indefinitely via RFMSS as expenditure reports.

(b) Conduct a sweep as required of laser ranges with EOD support if entering one of the impact areas to remove specular surfaces that may cause reflection.

e. Report all mishaps or unusual occurrences to the Command LSSO immediately.

f. Force-on-Force scenarios will be approved by Range Control. Instrumented Tactical Engagement Simulation System [I-TESS-II] is a Class 3A system.

g. Force-on-Force Laser Operations. Due to the inherent risk of laser use during force-on-force operations, a deliberate Risk Management Analysis will be used in all phases of the training or exercise. Specifically, the OIC/RSO will:

(1) Train safety/controller personnel before conducting force-on-force exercises with lasers.

(2) Provide the RSS with a detailed plan of the exercise including:

(a) A detailed list of all laser use during the exercise will be provided prior to approval in the RFMSS request;

(b) A list of weapons, ammunition, pyrotechnics, smoke, and chemicals to be used;

(c) Unit control and communications measures;

(d) Terrain and facilities to be used; and

(e) Number of personnel in the training exercise versus number of safety controllers and other personnel in support of the exercise.

(3) 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 RLSO or above must ensure lens caps are in place. Any tactical vehicle equipped with a laser system must turn laser systems off when personnel are working or operating in front of the wheeled /tracked vehicle.

h. I-TESS-II is a Class 3A laser requiring certified laser eye protection treat this system with caution and ensure all laser safety procedures are in place.

i. All lasers used aboard this Installation must be in compliance with the Laser Range Safety Certification, current Camp Lejeune Laser Survey, this Order, and Range Cards for the range at all times. These are posted on the Range Control Web Page or the RTAM Quantico web page. A copy of these documents will be handed out to each RLSO 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/Accidents

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 references (n), (o), and (bc). The expeditious examination and treatment of laser eye injuries is critical in minimizing loss of visual acuity.

b. Report laser overexposure incidents immediately to BLACKBURN and the unit chain of command. Subsequent reporting will be in accordance with references (n), (o), and (bc).

c. Chapter 16 of reference (a) and (be) provides additional guidance and policy. Expeditious medical guidance is available

through the Tri-Service Laser Injury Hotline at (800) 473-3549 or (937) 938-3764.

d. Medical Surveillance. Conduct First Aid for any injury from laser energy. First Aid shall not be attempted for damage produced by laser energy to the eye; therefore, prompt reporting to a medical treatment facility is imperative. Suspected eye injuries constitute an **"Urgent"** MEDEVAC. MEDEVAC procedures can be found in Chapter 1 of this Order.

6. Supplemental Laser Information. Class 1, Class 1M, Class 2, Class 2M, and Class 3A lasers are authorized for use in all RTAs with required restrictions based on the laser class and the Laser Safety Review Board (LSRB) documents for that laser device/system.

a. Use of all safety features that limit power output are mandatory on ranges not certified for Class 3B, 3R, and higher lasers.

b. OIC/RSO and the LRSO will ensure use of applicable safety features per the laser TMs for that device/system.

c. Use of Class 3A and below lasers for force-on-force operations must be coordinated with the RSS.

NOTE: DoD Exempt Lasers are lasers designed for actual combat, combat training operations, or classified in the interest of national security and are exempted from the requirements specified in references (bd) and (bf).

7. Laser Ranges

a. Limitations

(1) Camp Lejeune will support lasing operations from fixed and rotary-wing aircraft in accordance with current laser range certification and this Order.

(2) The laser certification for this Installation addresses only those class laser systems approved for training scenarios by the LRSB. Any laser system used in nontraditional modes, R&D applications, and prototype systems will be handled separately and coordinated with the RSS and RCO. The Command LSSO will complete the specific certification on a case-by-case basis.

b. Ranges

(1) Laser certifications may change should the character of the laser certified ranges change. Units planning to use lasing

devices will confer with the RSS as to the Installation's current laser certifications.

(2) Camp Lejeune has multiple LTAs certified for unfiltered Class 3B/3R and Class 4 laser systems. These LTAs certifications are located on Camp Lejeune Range Control website.

(3) These ranges are only approved for use with lasers specifically identified in the current Safety of Use Memorandums (SOUMs) or the current Camp Lejeune laser certification/survey.

(4) OIC/RSO will ensure personnel are basically trained on the use of the laser and weapon assigned to them.

(5) OIC/RSO will brief participants on the capabilities of the lasers and weapons used by other units/components in the exercise.

(6) OIC/RSO will ensure all personnel participating in the exercise have PPE gear (eyeware) required by orders and regulations governing the use of lasers.

(7) For detailed information about laser use aboard Camp Lejeune contact the RSS/Range Control TLSO at (910) 451-1240.

Chapter 8

Maritime Operations

1. General

a. The CG MCIEAST-MCB CAMLEJ, exercises authority to control access to certain navigable waters to prevent injuries from live-fire operations and other training activities as described in reference (bh) and (bg). 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 0050-3328.

(b) On the east and south, follow the arc having a radius of 25,000 yards centered at 9187-2765.

(c) On the west, follow a line bearing 205 degrees from 8809-2475.

(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 77-02-04 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 eleven 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 sectors 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) 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 all water areas 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 (NOTMARs) and by displaying, one hour before firing, a red danger streamer during daylight hours or a red light at night on the range towers/poles specified in the Range Cards for each range. When these signals/lights are displayed, vessels shall clear the sector immediately.

(2) The ACS and AIWW areas will be searched/swept by aircraft prior to bombing and firing operations. Watercraft in the area will be warned of the impending live-fire by safety/guard boats from Range Control Branch (RCB). When warned, vessels must leave the area as quickly as possible by the most direct route. Sweep conducted by civilian contract aircraft, which is the preferred method, Range

Control must be notified at least two weeks in advance of the first day of training.

(3) Prior to any firing over New River sectors, the area will be visually inspected to ensure it is clear of personnel or vessels. Any artillery unit conducting live-fire into the K-2 Impact Area will place observers at TLZ Oriole/GP-33 or other approved locations with the required equipment to observe the effected portions of the New River and call “CEASE FIRE” in the event a vessel or aircraft enters the GTL of the live-fire event.

(4) When firing into the N-1/BT-3 Impact Area, Brown’s Island, the training unit will provide tower guards in accordance with AIWW closure procedures that are properly equipped. Tower Guards will be in communication with the OIC/RSO who will be in communication with Blackburn before the aircraft conducts the range sweep.

(5) All navigable waters between Brown’s Island and the AIWW (bounded by Brown’s Inlet and Bear Inlet) are open to navigation only. No anchoring, fishing, cast netting, wading, or swimming is authorized. No bottom disturbing activity such as clamming, oystering, or crabbing is authorized. There are highly sensitive, unexploded projectiles within the limits of these areas. NOTMARs will close this area when military live-fire training is scheduled. Avoid areas where signs identifying the danger/hazardous areas are posted.

(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, 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 (Grid Coordinates 8513-2588), comprise a Safety Zone approximately 10 nm long. Weapons firing on authorized ranges, 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 the Fire Support Area at sea into G-10, the AIWW will close for four hours for example, (0800-1200 and 1300-1700) at a time with a one hour break in between. The Navy Boat Crew will be on station during live firing to control vessel traffic and pass information as required.

(7) Brown’s Island and the surrounding waterways were historically used as impact areas for high explosive ordnance for many years. The dangers of UXO are prevalent throughout the island and surrounding waterways to include the AIWW. Brown’s Island is closed to any and all recreational use. Civilian watercraft shall not beach or drop anchors on or near restricted areas that are posted with proper warning/danger signs; “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) and Brown's Island at any time is punishable in U.S. District Court by confinement and/or a fine.

c. Military Operations on the Waters of and Surrounding MCIEAST-MCB CAMLEJ

(1) All operations involving military watercraft in the Camp Lejeune area, to include, but not limited to U.S. Navy, USCG ships /smaller water vessels, USMC small boats, and military open water swimmers fall under the jurisdiction of this Order at all times. Units conducting any open water training events, to include water parachute operations/open water swim events will ensure the event is scheduled in RFMSS and the range is properly signed for. If required, ensure the required safety supervisors, safety swimmers, medical support, and safety boats to support the high-risk training event are present and properly posted.

(2) Military operations involving AAVs, LAVs, small boats, open water swimmers, LCUs, LCACs, etc., in waters surrounding the Installation, to include water parachute operations must be scheduled through RFMSS a minimum of 14 working days prior to use. This time frame is required to permit the coordination mandated by federal law with appropriate agencies external to the Marine Corps if required and to permit the publication of the appropriate NOTMARs. Any unauthorized military waterborne operations conducted without a published NOTMARs, which injures civilians or damages civilian property could result civil and military punitive actions.

(3) LCAC Route to/from Mile Hammock Bay. Entry point approaching from the sea – 855-243; Exit point towards Mile Hammock Bay – 864-255. LCACs requesting to cross Onslow Beach must coordinate operations at least 21 working days in advance with the RCO and EMD.

(4) Refueling on or within 100 ft. of water requires a SRR and a FEREIR. POC for FEREIRs is the NEPA Section, ECB, EMD at (910) 451-5063.

(5) Requests to place floating bridges, wires, cables, fuel hoses, pipes, floating targets, etc. across or in navigable waters must be submitted 30 working days in advance of the scheduled event to the CG MCIEAST-MCB CAMLEJ via the AC/S, G-3/5 (RCB) and the USCG via message. 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 CG MCIEAST-MCB CAMLEJ must request area clearance prior to entry. Area clearance is required because five of Camp Lejeune ranges fire into, or from, the Atlantic Coast Sector. Naval message PLA addressees are: CG MCIEAST-MCB CAMLEJ and CG MCIEAST-MCB CAMLEJ G-3/5.

(7) Units conducting training in State of North Carolina waters must be vigilant and yield to hunters, commercial fishermen, and recreational boaters to prevent conflicts. Bridging operations across the AIWW at Camp Lejeune must be coordinated with the Captain of the Port of Wilmington United States Coast Guard at least 120 days in advance. Phone number (252) 247-4570.

(8) All units that operate military small boats or amphibious crafts will do so in compliance with all standard procedures and common courtesy. This includes observing, no wake zones, water craft speed, securing trash, and eliminating fuel spills with particular attention to the entire New River, AIWW, Sneads Ferry Bridge, Onslow Beach Bridge, and Mile Hammock Bay in order to prevent damage to civilian watercraft and property. At no time will any fuel, trash, or ammunition dunnage such as brass, links, or live ammunition be disposed of by dumping them in the water.

2. Navy 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 CG MCIEAST-MCB CAMLEJ. Boats are equipped with the capability to communicate with BLACKBURN and all other water craft if equipped with Marine Band Radios. Coxswains will operate their boats in accordance with this Order, USCG, 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 adhere to applicable storm/sea warnings and the senior Navy Boat Coxswain on station will make the final decision to secure Navy Boat Crew 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 boats may provide back-up support for parachute operations into or near navigable waters of 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.

c. Requesting Procedures

(1) RCO will routinely provide Navy Guard Boat support. For scheduled firing into the N-1/BT-3 Impact Area, E-1, H-1, G-7, Naval Gunfire, and Brown's Island.

(2) For all other boat support, unit requests must be submitted via the chain of command to the CG MCIEAST-MCB CAMLEJ (G-3/5 RCB) 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 (910) 451-3064/4449. The Navy Boat Crew is not manned for emergency 24 hour response; consequently its off-duty response times will vary. The primary source of water rescue assistance on-base is the ECCC by calling 911; at sea, the Coast Guard Station North Carolina Command Center Wilmington (252) 247-4570, Emerald Isle (252) 354-2719, Wrightsville Beach (910) 256-2615, (910) 256-4224, (910) 509-0779, or Channels 16, 83A, or 22 provide emergency assistance.

e. 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-Range, E-1 RANGE, N-1/BT-3, and Naval Gunfire Range Sweeps
When the H Range, E-1 Range, 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 providing the sweep aircraft'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 the Bravo Flag (red flag).

c. Navy Guard Boat 2 will be located in the vicinity of Bear Tower Grid 976-341 in the AIWW. It will have a blue flashing light and fly the Bravo flag.

d. Navy Chase boat (Speedy) will be located in the AIWW during the sweep.

e. The sweep aircraft will sweep the N-1/BT-3 impact area from the AIWW to four miles seaward. Sweep the marshes, creeks, and AIWW between North Onslow Beach Tower (Grid 931-288), Bear Tower (grid 974-342), and Bear Inlet (Grid 003-331). Sweep the beach between North Onslow Beach Tower and Bear Inlet as well as four miles seaward. Sweep aircraft will report any sea mammal sightings to BLACKBURN. Sweep aircraft will report personnel and surface craft contacts to Navy Guard Boat with minimum four digit grid.

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 and/or maintain communication with Navy Boats on CH-16 (156.800) or CH-72 (156.625) the sweep aircraft will contact BLACKBURN. If any aircraft is unable to establish communications with Navy Boats, BLACKBURN will relay all transmissions to Navy Boats.

g. Chapter 2 of this Order discusses the rules for avoiding marine/sea mammals in and around the water impact area/assigned live fire ranges.

4. Amphibious Vehicle Splash Points. 41 numbered splash points (SPs) have been established for amphibious vehicles to enter or leave the water (the gaps in the numeric sequence are due to the deletion of an inactive SPs). Use only existing SPs. Do not widen existing SPs. Do not make new SPs. If an authorized SP is eroded or needs repairs report it to Range Control at (910) 451-1240.

SP	Grid	Description
1	18S TD 97586 34100	SP Bear Tower
2	18S TD 95939 32271	SP Old Brown’s Tower
3	18S TD 93865 30524	SP Freeman Beacon
4	18S TD 92076 28548	SP TLZ Falcon E (Note 1, 5)
5	18S TD 91910 28405	SP TLZ Falcon (Note 1, 5)
6	18S TD 91632 28106	SP TLZ Falcon W (Note 1, 5)
7	18S TD 91021 27546	SP Onslow AIWW (Note 5)
9	18S TD 90093 26927	SP TLZ Albatross N (Note 5)
10	18S TD 90173 26766	SP TLZ Albatross S
11	18S TD 87788 25369	SP TLZ Bluebird S (Note 2)
12	18S TD 87610 25450	SP TLZ Bluebird N (Note 2)
13	18S TD 86732 26043	SP Mile Hammock Bay
15	18S TD 85810 33787	SP Duck Creek N
16	18S TD 85922 33729	SP Duck Creek S
18	18S TD 85649 27683	SP Traps Bay S
19	18S TD 85550 27835	SP Traps Bay N (Note 5)
20	18S TD 85523 35259	SP Weil Point
22	18S TD 84266 33783	SP Tank Trail 1
23	18S TD 84897 34513	SP Tank Trail 2 (Note 5)

SP	Grid	Description
24	18S TD 84535 37504	SP 6th Marines
25	18S TD 83966 38705	SP 8th Marines (Note 5)
26	18S TD 83659 32983	SP Tank Trail 3 (Note 5)
27	18S TD 82858 30125	SP Courthouse Bay N
28	18S TD 82234 39514	SP Hadnot Point
29	18S TD 82869 31880	SP Tank Trail 4
30	18S TD 82666 35509	SP Rhodes Point
31	18S TD 82440 29962	SP Courthouse Bay
32	18S TD 82276 31322	SP TLZ Sandpiper
34	18S TD 82168 29725	SP Courthouse Bay S
35	18S TD 81757 29280	SP TLZ Kite (Note 5)
36	18S TD 81840 38342	SP Town Point
38	18S TD 81189 38532	SP Town Point W (Note 5)
40	18S TD 80794 31455	SP Gillette Point (Note 5)
41	18S TD 80406 31306	SP Oriole (Note 5)
42	18S TD 80387 38857	SP Magnolia Lane
43	18S TD 79213 40805	SP Ragged Point S (Note 5)
44	18S TD 78665 42425	SP Ragged Point N
45	18S TD 78550 28073	SP Everett Creek (Note 3)
46	18S TD 77310 33586	SP Foys Landing (Note 5)
48	18S TD 76716 40390	SP Stone Creek Landing (Note 4)
49	18S TD 85003 28189	SP Traps Bay (Note 5)

Table 8-1--Amphibious Vehicle Splash Points

NOTE(s):

(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.

(4) Stone Creek Landing - requires prior coordination with the Rifle Range. Call Rifle Range, Stone Bay S-3 at (910) 440-1600/2705.

(5) Currently, these splash points are not usable, but this is subject to change. For updates contact Range maintenance at 451-8799

5. Naval Gunfire

a. Purpose

(1) CG MCIEAST-MCB CAMLEJ has authorized NSFS firing from qualified ships (as defined below) into the G-10 Impact Area. To ensure the safe conduct of Shore Fire Control Party (SFCP)/Naval Gunfire Support (NSFS) training, this chapter prescribes procedures

/polices for the planning, coordination, and firing of NSFS aboard Camp Lejeune.

(2) The following is a list of general references that will be used when NSFS is used/fired at Camp Lejeune/G-10 Impact Area: (This List is Subject to Change)

(a) MCO 3570.1C/DA PAM 385-63 (reference (a));

(b) USN Fleet Exercise Publication 5B Series (reference (bj));

(c) Allied Tactical Publication 4E–Naval Gunfire Procedures (reference (bk));

(d) United States Navy SW 323-AB-ORD-020 Rev 2 (reference (bl);

(e) NAVORD PUB TW024-AA-ORD-010, Ammunition (Serviceable, Suspended, and Limited Use) (reference (bm));

(f) MCIEAST-MCB CAMLEJO 3570.1A (this Order);

(g) JtRegtO P3570.1F, Marine Corps Artillery Safety SOP (reference (as));

(h) Navigational Chart 11543 (Cape Lookout-New River) River) NAD 83/WGS-84;

(i) Camp Lejeune Military Installation Map (V742SCPLEJEUMIN) Edition 5-DMA) NAD 83/WGS-84; and

(j) COMNAVSURFLANT Standing Letter of Instruction (LOI) for G-10 Naval Surface Fire Support (NSFS) Shore Fire Control (SFCP) ISO 10th Marines and the Pre-Fire Message.

b. Scope. The procedures described in this Chapter and all references listed above apply to all Marine and Naval Forces conducting SFCP/NSFS training aboard Camp Lejeune. The CG MCIEAST-MCB CAMLEJ is the only approval authority for deviation from this Order.

c. General

(1) Inert ordnance (Training Practice) is not cleared for fire overhead fire into the G-10 Impact Area and will not be used.

(2) Prior to firing, the OIC, RSO, and/or Naval Gunfire Liaison Officer (NGLO) shall conduct a range safety brief with the scheduled firing ship(s). This brief will be conducted within 30 days of the Naval Gunfire 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 three working days (72 hours) before the scheduled event and ensure the CG MCIEAST-MCB CAMLEJ G-3/5 is listed on the message routing.

(3) 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 must also conduct a GPS check of the gun/ship before conducting any live-fire into the G-10 Impact Area. The ship is responsible for scheduling the W-122 airspace and water space with the Atlantic Fleet Exercise Coordination Center and FASFAC VACAPES and air sweep.

(4) The initial fire mission into the G-10 impact area will be a single shot at center grid, as a registration adjust mission to ensure the accuracy of the gun and that spot corrections are having the desired effect. TGT 104 will normally be used for this fire mission and the firing ship/ships must avoid the one published No Fire Area (NFA).

(5) In accordance with this Order, the OIC/RSO and the participating ship(s) will maintain two-way communications with BLACKBURN at all times, on frequencies designated in paragraph 5g(1) on page 8-16, while the range is in a “HOT” status.

(6) Prior to live-fire, a non-firing rehearsal utilizing reference (j) on page 8-9 shall be conducted. All required references are listed on page 8-9 for NGF. This rehearsal may be conducted while enroute to Camp Lejeune/Onslow Bay.

(7) Ships are responsible for maintaining clearance of water surface area 350 meters from ship along the GTL.

(8) Ships are cleared for overhead fire beyond the 350-meter point. Ships must verify munitions to be fired are cleared for overhead fire. The references are listed on page 8-9 above for NGF. Approved DODICs for firing in to G-10 Impact Area are (no exceptions):

PROJECTILE	DODIC
HE-CVT	D350
	D295
	D346
	D803
HE-HC/PDD	D339
HE-PD	D330

	D343
	D884
HE-MT/PD	D338
	D340
HE-VT	D331
	D332
	D347
	D339
ILLUM	D328
	D353
	D354

Table 8-2--G-10 Impact Area Approved DODICs

Note: HE-VT rounds DODIC D331, D332, D347, D328, D353, D354, D333, and D334 are **NOT** cleared for overhead fire of troops.

(9) The G-10 authorized Naval Gunfire Impact Area is defined by the following coordinates:

(a) 3438.70N5-07717.23W7 (GRID 18STD90373605)

(b) 3438.88N4-07716.57W3 (GRID 18STD91403637)

(c) 3438.59N2-07715.51W6 (GRID 18STD93003580)

(d) 3437.88N3-07715.49W3 (GRID 18STD93003447)

(e) 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.

(10) Camp Lejeune has established 1 NFA within the G-10 Impact Area (UCAS Facility). Live-fire into the UCAS is not authorized.

(a) UCAS Facility NFA Coordinates

The corner coordinates for the 100 meter UCAS Buffer Zone:

1. Grid 18STD9102935944
2. Grid 18STD9147535944
3. Grid 18STD9103335583
4. Grid 18STD9147835581

Note: The areas must be marked on the map by the SFCP team and ship.

(11) NSFS Spotters/Observers will normally be placed at an OP with a vantage point perpendicular to the GTL in order to adjust fires.

(12) No intentional dumping of ordnance into the water is permitted.

(13) Naval vessels will not discard refuse/trash overboard or pump bilges while in the Atlantic Coast Sector (12NM) of Camp Lejeune/Onslow Bay.

(14) Ships must report number and type by DODIC of rounds expended to the OIC/RSO (NGLO) at end of training. This information will then be forwarded to BLACKBURN along with number of Marines /Sailors trained. The NGLO will update the Naval Gunfire Usage spreadsheet within 48 hours after the event and submit the spreadsheet to BLACKBURN/Range Control.

(15) 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.

(16) USCG regulations require that the AIWW between Onslow Beach Bridge and Bear Tower be closed to routine marine traffic during NSFS live-firing events. Camp Lejeune will coordinate with U.S. Coast Guard for issuance of applicable Broadcast NOTMARs (BNTM) 30 days in advance, Broadcast Warnings, and schedule the Navy Boat Crew to enforce the closure.

(17) Highway 172 aboard 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 Highway 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-fire with four road guards (positioned in groups of two) who are briefed on duties at each site listed below. This is subject to change due to other requirements.

(a) Intersection of Highway 172 and Sneads Ferry Road (mechanical gate with flashing lights installed and barriers.

(b) Intersection of Highway 172 and Lyman Road (mechanical gate with flashing lights installed and orange cones/barriers).

(c) At ETA-4 and Sneads Ferry Road (Gate to be locked or a Road Guard(s) must be posted).

(d) At Freeman's Creek Landing and Highway 172. This Road Guard(s) also serves as a lookout on Highway 172 for vehicles that have by-passed gates.

(e) Close and lock gate at TLZ Goose.

(f) If G-27/G-27A is scheduled, the unit must add an additional road guard just south of the range to allow the unit access to that range and all traffic is directed north toward the Triangle Gate. Additional coordination will be required between the two units.

(18) Two-way communications between all four checkpoints and the OIC/RSO (NGLO) must be maintained continuously while the range is "HOT."

(19) Additionally, road guards will be deployed at least one hour prior to commencement of live-fire in order to thoroughly sweep Highway 172, Freeman's Creek Road, and boat launch areas prior to Highway 172 closure. It is the OIC/RSO's responsibility to ensure that all detour signs are properly displayed, the two gates are in a down position, lights are properly functioning, and barriers are in place before going "HOT." After the training event, all signs and gates need to be returned to their normal position and cones removed. This operation must be checked and supervised by the OIC/RSO (NGLO).

(20) When available, a NGLO will be present with the firing unit of a U.S. ship during live-fire in order to facilitate a safe evolution. A U.S. Military NGLO is required for all foreign ships shooting into the G-10. NGLO shall ensure ships have all required references (the references are listed on page 8-10 for NGF) prior to going to the ship to easily communicate grid locations with BLACKBURN.

d. Safety

(1) 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 OIC/RSO (NGLO) may ask to cancel a "CHECK FIRE."

(2) 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:

(a) 3429.33N4-07714.61W6 (GRID 18STD94001865)
(b) 3432.31N6-07708.44W0 (GRID 18SUD03552395)
(c) 3430.90N9-07707.43W8 (GRID 18SUD05052130)
(d) 3427.89N3-07713.62W6 (GRID 18STD95451595)

(3) 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.

(4) The maximum height (ordinate) of the NSFS shall not exceed 17,999 ft. MSL.

(5) The OIC/RSO (NGLO) is responsible for determining the minimum and maximum GTL relative to the assigned FSA and Naval Gunfire impact area.

(6) The above standards are not negotiable and are in place to preclude lower round trajectory resulting in a higher skip probability.

(7) An immediate “Check-Fire” will be called for any of the following reasons:

(a) Loss of communications between spotters and firing unit (ship); or OIC/RSO, firing unit (ship) and BLACKBURN; or OIC/RSO and all road guards;

(b) Rounds not observed within the (G-10 Impact Area).

(c) Range fouler (i.e., land, sea, or air; sea mammals, boats, turtles, aircraft, ground units, etc.);

(d) Gun or Gun Fire Control System casualty;

(e) Gun sight angle less than 15°;

(f) GTL outside safe firing limits;

(g) Marine mammals within 100 ft. of ship; and

(h) Whales, turtles, or manatees within 500 yards of ship.

e. 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:

(1) OP OIC and RSO

(a) OIC must be either the NGLO or qualified NSFS spotter E-7 or above that has a valid Camp Lejeune OIC/RSO Card.

(b) Perform duties per this Order and reference (as).

(c) Schedule G-10 Naval Gunfire event, observer positions, and EB Onslow as required.

(d) OIC/NGLO is responsible for signing for the range/OP/impact area at least one day prior to exercise and prior to briefing NSFS. Conduct a safety brief that includes but is not limited to pre-exercise message, FSA, concept of operations, RM worksheet, safety issues, and ship's readiness ratings.

(e) Conduct a Safety Brief with designated firing unit(s) prior to any live-fire into the G-10 Impact Area.

(f) OIC/RSO duties in accordance with Chapter 1. OIC/ RSO may also serve as the RLSO (if school trained and certified by unit CO), when employing lasers.

(g) When firing in conjunction with a combined arms exercise personnel required include: OP OIC, RSO, RLSO, G-10 Fixed-Wing/Rotary Wing OIC/RSO, and other as required.

(2) Firing Unit

(a) The CO of the NSFS ship is responsible for all aspects of safe firing (sea side) aboard the ship.

(b) Responsible to adhere to all regulations and procedures prescribed in Chapter 2 of this Order.

(c) Must request airspace/water space, W-122 (surface-17,999 ft.) from FACSFAC VACAPES and Onslow Beach water space from Camp Lejeune, Range Control.

(d) Ensure all ammunition is cleared for overhead fire and is on the approved DODIC list.

(e) 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 communication checks every 30 minutes on the half hour and hour when in a "HOT" status.

(f) To go "HOT," the ship must follow procedures as prescribed in this Order.

f. Coordinating Instructions

(1) Live-fire NSFS/SFCP training will be scheduled per this Order. Normally 30 days lead time is required in order to coordinate AIWW closure and issue the appropriate Broadcast NOTMARs, schedule the range sweep aircraft. Requests of less than 30 days will be handled on a case-by-case basis. The 2d MarDiv, 10th Marines, and II MEF MEUs

NGLOs will assist in the planning and coordination of all NSFS/SFCP live-fire training and shall be contacted early on in the process. All units conducting Naval Gunfire at Camp Lejeune must ensure all message traffic includes the CG MCIEAST-MCB CAMLEJ (G-3/5).

(2) Supported unit (SFCP/Spot Team) will publish a pre-exercise message to all concerned no later than 72 hours from execution of exercise. Pre-Exercise format per reference (bj) (The references are listed on page 8-10 for NGF).

(3) Full service charge is the only authorized propellant for firing aboard Camp Lejeune. Reduced charge is strictly forbidden.

(4) Only “qualified” NSFS capable ships will be assigned to conduct live-fire support for SFCP training aboard Camp Lejeune. 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.

g. Communications

(1) Range Control MCB CAMELJ nets:

(a) Range Control Safety Net 34.70 FM.

(b) Air Safety Control Net 233.8 UHF.

(c) Civilian Air Safety Net 119.5 VHF.

(d) Commercial Telephone Number for BLACKBURN (910)451-3064/4449 or DSN 751.

(2) NSFS Coordination/Spotter Nets and Road Guard Coordination Net will be promulgated in the Pre-Exercise message.

APPENDIX A

ACRONYMS/DEFINITIONS

1. Acronyms

°F..... Degrees Fahrenheit
AAV..... Amphibious Assault Vehicle
AC/S..... Assistant Chief of Staff
AESO..... Ammunition & Explosives Safety Officer
AHA..... Ammunition Holding Area
AIWW..... Atlantic Intracoastal Waterway
AFS..... Airfield Seizure
ALZ..... Administrative Landing Zone
AMHS..... Automated Message Handling System
ARSO..... Assistant Range Safety Officer
ASP..... Ammunition Supply Point
ATC..... Air Traffic Control
BFA..... Blank Firing Adapter
BP..... Battle Position
Cal..... Caliber
CAPEX..... Capability Exercise
CAS..... Close Air Support
CASEVAC..... Casualty Evacuation
CBC..... Company Battle Course
CBRN..... Chemical, Biological, Radiological, and Nuclear
CCL..... Command Certification Letter
CERTEX..... Certification Exercise
CLEO.....Conservation Law Enforcement Officer
CG..... Commanding General
CMP..... Combat Marksmanship Program
CQB..... Close Quarters Battle
CVOT..... Combat Vehicle Operator’s Training
CVP..... Conversion Point
DA PAM..... Department of Army Pamphlet
DASC..... Direct Air Support Center
DoD..... Department of Defense
DODIC..... Department of Defense Identification Code
Dry CAS ..... Dry Close Air Support
DZ..... Drop Zone
DZSO..... Drop Zone Safety Officer
ECCC..... Emergency Consolidated Communication Center
ECON..... Environmental Conservation
EMD..... Environmental Management Division
EOD..... Explosive Ordnance Disposal
ESO..... Explosives Safety Office
ESQD..... Explosive Safe Quantity Distance
ETA..... Engineer Training Area
ETAR..... Electronic Training Area Requests
EOTG..... Expeditionary Operations Training Group

FAA..... Federal Aviation Administration
FAC..... Forward Air Controller
FAC(A)..... Forward Air Controller Airborne
FACSFAC..... Fleet Area Control and Surveillance Facility
FARP..... Forward Arming and Refueling Point
FCLP..... Field Carrier Landing Practice
FDC..... Fire Direction Center
FEREIR..... Field Exercise Request for Environmental Impact Review
FESD..... Fire and Emergency Services
FM..... Field Manual
FOB..... Forward Operating Base
Ft..... Feet/Foot
GCS..... Ground Control Station
GIS..... Geographic Information System
GP..... Gun Position
GSRA..... Greater Sandy Run Area
GTL..... Gun Target Line
HA..... Holding Area
HAZMAT..... Hazardous Material
HC..... High-Capacity
HEAT..... HMMWV Egress Assistance Trainer
HERO..... Hazards of Electromagnetic Radiation to Ordnance
HMG..... Heavy Machinegun
HQ..... Headquarters
HRST..... Helicopter Rope Suspension Training
I&E..... Installation & Environment
IAW..... In Accordance With
IED..... Improvised Explosive Device
IGIR..... Geographic Information Repository
In..... Inch(es)
IP..... Initial Point
ITX..... Integrated Training Exercise
JIDO.....Joint Improvised-Threat Defeat Organization
JTAC..... Joint Terminal Attack Controller
KGS..... Knots Ground Speed
LAV..... Light Armored Vehicle
LAW..... Light Anti-Tank Weapons
LASER..(Acronym), Light, Amplification, Stimulated, Emission, Radiation
Lbs..... Pounds
LHD..... Landing Helicopter Deck
LRS..... Launch and Recovery Site
LRSO..... Laser Range Safety Officer
LSRB..... Laser Safety Review Board
LTI..... Limited Technical Inspection
LZ..... Landing Zone
MAC..... MOUT Assault Course
MAET..... Modular Amphibious Egress Trainer
MAGTF..... Marine Air-Ground Task Force
MARSOC..... Marine Corps Forces Special Operations Command
MCCS..... Marine Corps Community Services

MCO..... Marine Corps Order
MCOLF..... Marine Corps Outlying Field
MCRP..... Marine Corps Reference Publication
MCWP..... Marine Corps Warfighting Publication
MEB..... Marine Expeditionary Brigade
MEDEVAC..... Medical Evacuation
MEF..... Marine Expeditionary Force
MEU..... Marine Expeditionary Unit
MILCON..... Military Construction
MLSR..... Missing, Lost, Stolen or Recovered
MOA..... Military Operations Area
MOUT..... Military Operations in Urban Terrain
MP..... Mortar Position
MRE..... Meal, Ready-to-Eat
MSL..... Mean Sea Level
MRTC..... Marine Raider Training Center
NAVAID..... Navigational Aid
NCO..... Noncommissioned Officer
NEPA..... National Environmental Policy Act
NFA..... No Fire Area
NLT..... No Later Than
NM..... Nautical Mile
NOAA..... National Oceanographic and Atmospheric Administration
NOHD..... Nominal Ocular Hazard Distance
NOTAM..... Notice to Airman
NOTMAR..... Notice To Mariners
NSFS..... Naval Surface Fires Support
NSTAR..... Non-Standard Training Area Request
NWS..... National Weather Service
OIC..... Officer in Charge
OP..... Observation Post
ORRV..... Off-Road Recreational Vehicles
PAO..... Public Affair’s Office
PARAOP..... Parachute Operation
PCS..... Portable Control Station
PIT..... Portable Infantry Target
PMO..... Provost Marshall’s Office
POC..... Point Of Contact
POV..... Privately-Owned Vehicle
PSO..... Position Safety Officer
RCA..... Riot Control Agent
RCB..... Range Control Branch
RC.....Range Control
RCO..... Range Control Officer
RCRS..... Resource Conservation and Recovery Section
RCW..... Red-Cockaded Woodpecker
RDB..... Range Development Branch
RETS..... Remote Engagement Target System
RFMSS..... Range Facility Management Support System
RFWO..... Range Firing Warning and Airspace Utilization Order

RM..... Risk Management
RLSO..... Range Laser Safety Officer
ROZ..... Restricted Operating Zone
RSO..... Range Safety Officer
RSS..... Range Safety Specialist
RTA..... Range and Training Area
RTAM..... Range and Training Area Management
RVL.....Restricted Visibility Landing Zone
SAR..... Search and Rescue
SCA..... Small Craft Advisory
SDZ..... Surface Danger Zone
SESAMS..... Special Effects Small Arms Marking System
SFCP.....Shore Fire Control Party
SIMCAS..... Simulated Close Air Support
SIO..... Safety Insertion Officer
SIR..... Serious Incident Report
SNCO..... Staff Non-Commissioned Officer
SOI..... School of Infantry
SOP..... Standing or Standard Operating Procedure
SOUM..... Safety of Use Memorandum
SPIE..... Special Insertion and Extraction
SPINS..... Special Instructions
SRR..... Special Range Request
SUA..... Special Use Airspace
TACP..... Tactical Air Control Party
TAR..... Training Area Request
TCC..... Tropical Cyclone Condition
TECOM..... Training and Education Command
TLZ..... Tactical Landing Zone
TM..... Technical Manual
TVMA.....Tactical Vehicle Maneuver Areas
UAS..... Unmanned Aerial System
UCAS..... Urban Close Air Support
UCMJ..... Uniform Code of Military Justice
UET..... Underwater Egress Trainer
UHF..... Ultra High Frequency
USMC..... United States Marine Corps
UTF..... Urban Training Facility
UXO..... Unexploded Ordnance
VCP..... Vehicle Check Point
VHF..... Very High Frequency
WBGTI..... Wet Bulb Globe Temperature Index
WDZ..... Weapons Danger Zone
WTBn..... Weapons Training Battalion
WWTP..... Waste Water Treatment Plant

2. Definitions

Administrative Landing Zone (ALZ). A designated helicopter-tiltrotor landing zones, 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/sea mammal. In some cases, air sentries also observe navigable waters for the approach of vessels.

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 when using a laser.

BLACKBURN. Radio call sign for Range Fire Desk on 34.70 FM, 233.8 UHF, and 119.5 VHF.

Buffer Zone. A safety margin surrounding 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.

CHIEFTAIN. The radio call sign for the DASC (When Activated) for all participating aircraft.

Clear Zone. Used for Aviation Ordnance to indicate the areas in front of the aircraft being loaded/un-loaded with ordnance to ensure a safe area if an accident takes place.

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.

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.

Drop Zone (DZ). A tactical landing zone in which personnel or cargo paradrops are authorized.

Dry Close Air Support (Dry CAS). Dry CAS and SIMCAS refer to the same event: Control of an actual aircraft where air-to-ground munitions are not present or release is not intended (formally referred to as Dry Terminal Attack Control).

Dry Terminal Attack Control. Control of an actual aircraft where air-to-ground munitions are not present or release is not intended, also known as SIMCAS / Dry CAS.

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 training being conducted aboard Camp Lejeune with a live-fire range, training area, or training facility.

Dud. Any ammunition that, having been fired, placed, dropped or thrown, fails to function in the manner intended.

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.

Fire Danger Plan. A restriction/condition placed on training exercises due to the possibility of forest fire. (Fire Danger Plan 1 to 5).

Fire and Maneuver Range. Ranges on which troop movement and live firing may be conducted simultaneously.

Firing Lane. The area within which a single person, aircraft, or vehicle-mounted weapon is fired. 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.

Food Plots. Food plots are cultivated sites within various maneuver/TAs. They are intended to assist in the preservation of natural wildlife.

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 ft.

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.

Intrabeam Viewing. Looking directly at the source of the beam or reflected beam from within the beam.

Land Line (LL). A metallic line between two telephones or between telephones and a switchboard.

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-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).

Live-Fire Range. A range/ETA on which live-fire exercises, including the use of some types of practice ammunition, may be conducted.

Malfunction. Failure of an ammunition item to function as expected when fired or launched, or when explosive items function under conditions that should not cause functioning. Malfunctions include hang fires, misfires, duds, abnormal functioning, and premature functioning of explosive ammunition items under normal handling, maintenance, storage, transportation, and tactical deployment. Malfunctions do not include accidents or incidents that result solely from negligence, malpractice, or situations such as vehicle accidents or fires. Malfunctions are divided into three classes:

Class A. Malfunctions that result in death or lost-time injury, are similar to previous malfunctions that have resulted in death or lost-time injury, are judged as having had an appreciable probability of causing death or lost-time injury, or that have adverse political implications.

Class B. Malfunctions that result in damage to major equipment that cannot be repaired at unit level maintenance or result in an ammunition suspension that significantly impacts readiness or training.

Class C. Malfunctions that are neither a Class A or Class B.

Maneuver Area (MA). TAs, 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.

No Fire Area (NFA). An area designated by the appropriate commander into which fires or effects are prohibited. Also maybe called a No Fire Zone (NFZ).

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 (NOTMAR). A publication to mariners and vessels warning of conditions dangerous to navigation such as live firing or amphibious exercises.

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 7mm exit pupil.

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.

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 Order.

Quiet Hours. No artillery, mortar, rocket, missiles, or dud-producing firing permitted during the 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 Installation organization responsible for safely scheduling, coordinating, and controlling all ranges, TAs, air space, and water space. Range Control maintains a staff (BLACKBURN) on communications watch during all live firing, paradrop, dive operations, 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 Fire Desk Operator (FDO). The government employee (GS, Civilian) assigned communications/fire desk tour during live firing, non-live-fire training, paradrop, and rotary/tilt-rotor/fixed-wing exercises (call sign "BLACKBURN"). The direct representative of the 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/safety.

Officer in Charge of Firing (OIC). Designated by the Commanding Officer of the training unit, the OIC 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, SNCO 9r NCO assigned by the OIC to assist in enforcing all safety measures within the air/surface danger area.

Range Laser Safety Officer/Range Laser Safety Noncommissioned Officer (RLSO/RLSNCO). A designated officer, warrant officer or noncommissioned officer of the firing unit who is responsible for ensuring compliance with the Marine Corps Order on Lasers, Unit SOP and this Order for laser operations and training.

Restricted Airspace. Hazardous airspace established by the Federal Aviation Administration. Permission must be granted to aircraft before traversing restricted airspace during periods when the airspace is in use. Restricted airspace is activated 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 restricted airspace 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 onsite 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.

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, mirrors, and unpainted metal when using lasers.

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 3570.1C/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-tiltrotors landing zone, usually named after a bird, which provides air and ground units a site for helicopter-tiltrotor 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 NOTMARs for up to four hours at a time.

Training Area (TA). An area designated alphabetically by two 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 to Range Control via RFMSS.

Training Facility. A structure, range or area specifically designed for military training.

Unexploded Ordnance (UXO). Ammunition and explosives which have been primed, fused, armed, or otherwise prepared for action and which have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations installations/communities, personnel, or material, and remain unexploded either by malfunction or design or any other cause.

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.

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.

Weapons Danger Zone (WDZ). The ground and airspace required for the lateral and vertical containment of projectiles, fragments, debris, and components resulting from firing, launching, and detonation of aviation-delivered ordnance. This three-dimensional zone accounts for the weapon accuracy, failures, ricochets, and broaches/proposing of a specific weapon/munition type delivered by a specific aircraft type. Weapon Danger Zones represent the minimum safety requirements designed for aviation weapons training on DOD ranges.

APPENDIX B

IMPACT AREAS

1. General. There are 3 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 high hazard/dud-producing ordnance and training practice ordnance can be fired. N-1/BT-3 is restricted to only non-dud producing/inert/TP ordnance. No personnel will enter a designated impact area aboard Camp Lejeune without approval from the RCO and with 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 areas and range boundaries are marked with red warning signs: "Danger Impact Area Keep Out". BLACKBURN controls all live-fire into impact areas aboard Camp Lejeune.

2. Emergency Destruction and Combat Disposal TAs. The G-10A and K-2A Emergency Destruction and Combat Disposal TAs 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. G-10A and K-2A must be scheduled in RFMSS. Chapter 3 of this Order provides scheduling procedures.

3. Impact Areas

IMPACT AREAS	LOCATION	PRIMARY USE OR DESCRIPTION	PAGE
N-1/BT-3	Southeast Corner of MCB Camp Lejeune	Live-fire Riverine Training	B-2
G-10	Center of MCB Camp Lejeune East of the New River	Training Range	B-7
K-2	Center of MCB Camp Lejeune West of the New River	Training Range	B-21

4. N-1/BT-3 Impact Area

IMPACT AREA:	N-1/BT-3
DESCRIPTION:	Bomb and Target Range (Brown's Island, surrounding marsh/waterway areas)
PRIMARY RANGE USE:	H-1 Live-Fire Riverine Familiarization Range
ALTERNATE RANGE USES:	1. Air to Ground Weapon (Inert Only) 2. G-7 Range 3. Field Artillery Direct Fire Range (G-7) 4. Helicopter and tiltrotor gunnery Range 5. Machinegun Mounted on Boats Familiarization Range (H-Range) 6. E-1 Stinger Missile Range 7. Aircraft gunnery and PGM Range (Limited)
STATUS:	Active
LOCATION:	South-East Corner of Camp Lejeune
PRIMARY DIRECTION OF FIRE:	168 degrees magnetic
WEAPONS ACCOMMODATED:	All Pistols All Shotguns All Rifles All Machineguns MK19 40mm Linked LAR 25mm Chain Gun Helicopter and tiltrotor Weapons Aircraft Bombs (Training Practice) M777A2 (G-7 Only) Stinger Missile Launcher Inert Hellfire/Inert APKWS 2.75 Inert (TP) GBU-10 Series (Laser Guided Bomb) Inert (TP) GBU-12 Series (Laser Guided Bomb) Inert (TP) GBU-31 Joint Direct Attack Munition (JDAM) Inert (TP) GBU-32 Joint Direct Attack Munition (JDAM) Inert (TP) GBU-38 Joint Direct Attack Munition (JDAM)

AMMUNITION AUTHORIZED:	All Pistol DODICs All Shotgun DODICs All Rifle DODICs (A606 upon SRR) All Machinegun DODICs 20mm (TP/TP-T) 25mm (TP/TP-T and APDS-T) 30mm (TP/TP-T) 40mm Linked (TP) 2.75 inch Rocket (TP/Illum) MK76 Practice Bomb MK80 Series Bombs (Inert) M781 Practice Round or M576 155mm HE (G-7 Direct Fire Only) Stinger Missiles on E-1
TARGETS/SIMULATORS/DEVICES:	Hard Armor Type Targets
FACILITIES:	None
UTILITIES AVAILABLE:	Electricity: No Lights: No Water System: 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/HEI aircraft bombs/rockets/missiles/30mm/25mm/20mm are not authorized.

(3) Observation Posts, OP-14, Bear Tower and Onslow North Tower, serve N-1/BT-3/Brown’s Island.

(4) No class 3R, 3B, and 4 Lasers are authorized.

(5) Safety Restrictions. AIWW may have to be closed during firing depending on range scheduled.

(6) Bear Tower and Onslow Beach North Tower are included when ranges are scheduled in RFMSS and signed for. They must be manned prior to aircraft sweep.

(7) An aerial sweep of this area must include a sweep for people, small water craft, and marine mammals in the AIWW, creeks, inlets, marsh areas, and the Ocean. The sweep must be conducted

before any live fire. The range must be scheduled in RFMSS at least 14 days prior to usage for Range Control to submit a civilian aircraft contract range sweep request. Submission of requests for range sweeps by military aircraft may or may not be approved by 2d MAW due to availability of aircraft and must be submitted at least 90 days out. Contracted civilian aircraft may provide required sweeps with a shorter notification.

(8) Maneuver Area Restrictions: No ground maneuvers are authorized in this impact area. Units that require target emplacement to conduct training/live-fire on this range must request Base EOD support.

(9) Night use is authorized if properly scheduled and an air sweep is conducted 30 minutes prior to sunset.

(10) Navy Guard Boats will be provided by RCB upon approval of scheduled event in RFMSS.

b. Special Instructions

(1) Firing into the N-1/BT-3 Impact Area must be scheduled through Range Control scheduling at least two weeks in advance of the first day of firing to allow for publication of a NOTMARs and request for air sweeps. See the Range Cards for E-1, H-1, and G-7.

(2) Be familiar with the contents of Chapter 5 of this Order and Range Cards for that assigned range.

(3) Display warning signals from the Onslow Beach North and Bear tower flag poles before firing and until the range is cleared cold. Red Range Flags will be flown during daylight and flashing lights during low visibility and at night.

(4) Tower guards posted with radio and binoculars (NVGs for any night firing) must be in place at least one half hour prior to the aerial search to serve as air/water sentries in Bear Creek and Onslow Beach North Tower. Tower guards are to promptly notify the OIC/RSO or FAC before a vessel or aircraft not involved in the exercise penetrates the SDZ/WDZ. 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) Live fire will cease if the range flags are lowered for any reason.

(6) The using unit will ensure that a visual search has been made of the target complex, AIWW, inlets, marshes, dunes one half an hour prior to firing to ensure that the area is safe.

(7) The RSO is required to have positive and continuous communications with tower guards, the OIC, and BLACKBURN.

(8) Air Operations

(a) Fixed wing aircraft must use control points/IP's and run in headings as contained in Chapter 4 of this Order or approved by a WDZ. Only inert MK76 and MK80 series bombs, inert 2.75-inch rockets, and 20mm, 25mm, and 30mm TP ammunition delieverd at 20 degrees or greater dive angle. Requests for WDZ profiles shall be sent to the RSS using the WDZ worksheet.

(b) Helicopter and tiltrotor aircraft headings are 170 to 190 degrees magnetic or per an approved WDZ profile. Unless specifically authorized by the OIC, the ordnance release point will be south of the AIWW. Authorized ammunition is 2.75 inch rockets (Inert), 7.62mm, .50 caliber, and aerial gunnery with 20mm TP/TP-T, 25mm TP/TP-T, and 30mm TP/TP-T. If conducting door gunnery (7.62mm/.50 cal) weapons must also be fired in the direction 170 to 190 degrees magnetic (Seaward Only).

(c) Close air support operations will be under the positive control of a JTAC/FAC using an approved/scheduled OP. The JTAC/FAC must inform aircraft performing missions of gun positions, ranges, and TAs adjacent to N-1/BT-3 that are occupied.

(d) To deliver/fire the Inert Hellfire, Inert (APKWS) Advanced Precision Kill Weapon System 2.75mm Rocket, Inert GBU-10 Series (Laser Guided Bomb), Inert GBU-12 Series (Laser Guided Bomb), Inert GBU-31 Joint Direct Attack Munition JDAM, Inert GBU-32 JDAM Inert GBU-38 JDAM detailed coordination and planning with approved WDZ profile must take place with Range Control and FASFACS VACAPES if applicable.

1. This type of training event requires that North and Bear Towers are manned by the using unit, and one of the towers must be manned with a JTAC/FAC with the required communications between the towers, BLACKBURN, and the aircraft delivering/firing. If Lasers are to be used (GBU-10/GBU-12) the using unit must have the required Range Laser Safety Officer (LRSO) posted and is properly certified in writing.

2. This event requires that all training areas /training facilities within the published WDZ be cleared of all personnel/vehicles and deconflicted as required.

3. The Hellfire Missile Inert and (APKWS) Advanced Precision Kill Weapon System 2.75mm Inert Rocket requires that Highway 172 and AIWW be closed/secured at the same time. Highway 172 must be secured/closed with the required road guards posted/gates checked

/secured. AIWW also must be closed and the Navy Boat Crew posted and required NOTAM published. Only one missile/rocket can be fired at a time and all impacts must be observed and accounted for. All training areas or training facilities that are impacted by the WDZ must be swept/cleared before any live-fire can be conducted.

4. Inert GBU-10, Inert GBU-12, Inert GBU-31, Inert GBU-32, and Inert GBU-38 require the AIWW to be closed and the surrounding training areas are swept/cleared, Navy Guard Boat posted, and NOTMAR published.

5. Only the targets on the north side of Brown's Inlet are authorized for the ordnance listed above. Hellfire Missile (Inert) targets are placed on the south end of Brown's Island.

6. Only the listed airspeed, altitude, release angle, release range, run-in headings as listed in the approved WDZs are authorized.

7. All inert JDAMs require a "Triple Check Requirement" with the pilot/FAC/JTAC before any release.

8. A JTAC/FAC Face-to-Face brief must also be accomplished with BLACKBURN at least 24 hours before the scheduled event and updated SPINS provided.

(9) The N-1/BT-3 Impact Area accommodates firing from H-1, and G-7 ranges into the Browns Island target area and E-1 out to sea. 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. Any underwater demolition and explosives within the N-1/BT-3 must be coordinated with VACAPES (Fleet Area Control and Surveillance Facility, Virginia Capes). Phone Numbers, Commercial (757), DSN (433) Scheduling, 433-1218/1220, Airspace, 425-1851 or 433-1248,

The N-1/BT-3 Primary Impact Area
18S TD 93413-29434
18S TD 93995-29697
18S TD 94075-31314
18S TD 95281-32420
18S TD 95370-34298
18S TD 95911-34550
18S TD 96254-34710
18S TD 97279-34308
18S TD 97600-34632
18S TD 98757-32878

18S TD 01985-31662
18S TD 06536-24153
18S TD 93237-17948

PIA: Primary Impact Area: defined on the CLNC Special Map (MIM MAP) as a “Black Line’ within the N-1/BT-3 Impact Area.

5. G-10 Impact Area

IMPACT AREA: G-10

DESCRIPTION: Bomb and Target Range

PRIMARY RANGE USE: Weapons 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. HIMARS (Limited)
5. Infantry Weapons Range
6. Machinegun Range
7. Guided Missile Range
8. Naval Gunfire Range
9. Convoy Range
10. Tank Range
11. Rocket Range
12. Laser Range

STATUS: Active

LOCATION: Center of Camp Lejeune East of New River

PRIMARY DIRECTION OF FIRE: None

WEAPONS ACCOMMODATED:
All Pistols
All Shotguns
All Rifles
All Sniper Rifles
All Machineguns (5.56mm/7.62mm/ .50 cal)
M242 35mm Chain Gun
60/81/120mm Mortars
Field Artillery
HIMARS (Limited)
Aircraft Weapons (Limited)
Javelin M98A1
SMAW MK-153
AT-4/M72A7 LAW
TOW II Missile (Limited)

Helicopter and Tiltrotor Weapons Systems
Naval Gunfire
M1A1 Tank (G-29B Only) (Limited)
M203/M32/M320/MK-19

AMMUNITION AUTHORIZED: All Pistol DODICs
All Shotgun DODICs
All Rifle DODICs
All Sniper Rifle DODICs (DODIC A606 by SRR)
All Machinegun DODICs
All DODICS 60/81/120mm Mortars
20mm (TP/TP-T)
25mm (TP/TP-T and APDS-T)
30mm (TP/TP-T)
40mm HE/HEDP/TP (Single/Linked)
2.75 inch Rocket;
TP/HE/WP/Illum/Flechette
105mm (including AC-130)
155mm HE, WP, Illum, Smoke, RP
MK76 Practice Bomb
BDU 33
BDU 45
Laser Guided Training Round (LGTR)
Limited attack heading/release angle
MK80 Series Bombs (Inert)
M781 Practice Round or M576
5 inch HE(Naval Gunfire)
120mm TP (Tank)
BGM-71 TOW IIB
40mm grenades (no CS)
HIMARS (Inert RRPR Only)

TARGETS/SIMULATORS/DEVICES: Hard Targets: 104
(See RCB website for list)

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 the current edition of the 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. Any new WDZ profiles require a Face-to-Face brief with the RSS using the WDZ program to receive approval. As profiles are approved, a list will be maintained for future training events. Contact Range Control for the current approved list. Additionally, for Type II and Type III operations on Camp Lejeune, each attack requires inbound with a heading call (in degrees). A WDZ profile must be approved before the scheduled event.

(a) Special Range Requests for CAS Types II and III attack profiles with ordnance combinations for target sets will be submitted to Range Control for approval.

(b) For Type II and III attacks, FAC/JTAC shall confirm aircraft's navigation system accuracy with aircrew prior to commencing the attack.

(c) When CAS is not being executed, and there is no integration with ground units on G-10, a qualified CAS controller is not required. Qualified pilots are authorized to clear their own fires. Aircraft are responsible for range sweeps, and are required to adhere to all FAH/WDZ/SDZ outlined in this order.

(2) HE bombs from aircraft are not authorized in the G-10 Impact Area.

(3) OPs 2, 3, 5, and 14 serve the G-10 Impact Area.

(4) Maneuver or walking downrange to place targets into the impact area is not authorized.

(5) Night use is authorized.

(6) Laser are authorized in accordance with Chapter 7 of this Order, if properly scheduled, and the Laser Range Certification/Survey is current (provided by Range Control upon checkout of a laser range). RLSO is required.

(7) 2.75 inch illumination rockets/flares must deploy, function, and spent motor must land within the G-10 impact area. FACS, JTACs, and aircrew must take wind speed and direction into account to keep all rocket/flares components within the G-10 impact area.

(8) Unit must provide its own portable toilets on the OP.

b. Special Instructions. See Appendix G. Personnel Requirements for Combined Arms/TACP Shoot.

(1) Fixed-Wing Aircraft

(a) Fixed Wing Aircraft must use Control Points/IPs and run-in headings as contained in Chapter 4 of this Order.

(b) Authorized ammunition is MK76, BDU33, BDU45, and MK80 series inert bombs, LGTR (Limited), 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/TP-T only) for the UCAS Facility is listed separately in paragraph 6. UCAS is scheduled separately within RFMSS and signed for if being used.

(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 non-participating rotary-wing/tilt-rotary-wing operations with lateral and altitude separation. Fixed-wing shall not overfly occupied BPs and HAs.

(d) The master arm shall not be “armed” until sights are on the target, over government property and “cleared hot” is given by the Terminal Controller.

(e) Fixed-wing aircraft must be familiar with the fixed-wing Procedural Line procedures (see Chapter 4). If the arming switch is placed in the “ARMED POSITION” and the weapon system (ordnance) inadvertently separates from the aircraft the effects must be contained within the Base boundary only.

(2) Helicopter and Tiltrotor Operations

(a) Authorized ammunition: 20mm, 7.62mm, .50 cal, 2.75-inch rockets, and Airborne BGM-71 TOW IIB missiles.

(b) When firing 7.62mm, .50 cal, or 20mm ammunition from BP Newt, the “GD” and “GF” TAs may need to be closed and gates secured if the WDZ extends in those areas depending on dive angle.

(c) Ammunition may be delivered from within the standard BPs using Hover Holds, Running Fire, or Diving Fire.

(d) All fires shall be delivered from inside BPs Newt, Eel, Sidewinder, and Wolf unless transitioning to BP Ox operations or other approved WDZs depending on aircraft.

(e) Aircraft/launcher attitude shall not exceed 0 degrees pitch relative to horizon for 2.75 inch rocket delivery unless approved with a prearranged WDZ profile.

(f) 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.

(g) When rotary-wing aircraft are operating within the Restricted Airspace, Maximum HA and BP altitude is 2000 ft. AGL unless FAC/JTAC dictates an alternate altitude as approved through BLACKBURN. Rotary/Fixed-Wing coordinating altitude shall be 3000 ft. AGL.

(h) 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 Highway 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 Camp Lejeune ASP (18S TD 885-355) below 1,000ft. at any time.

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.

3. Helicopter and Tiltrotor Holding Areas (HAs)

HA	**Location (18S TD)**	**Supports BP**
Emily	GE TA and LZ Crane	Eel
Nancy	900-370, 882-370, 880-374, 880-390, 883-390, 900-384	Newt
Sandy	GI TA and LZ Gull	Sidewinder
Wendy	Two km by two km centered on 850-350	Wolf

Figure B-1.--Holding Areas

(a) HA Emily. Area dimensions: “GE” TA 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 956-369) direct to MP-5.

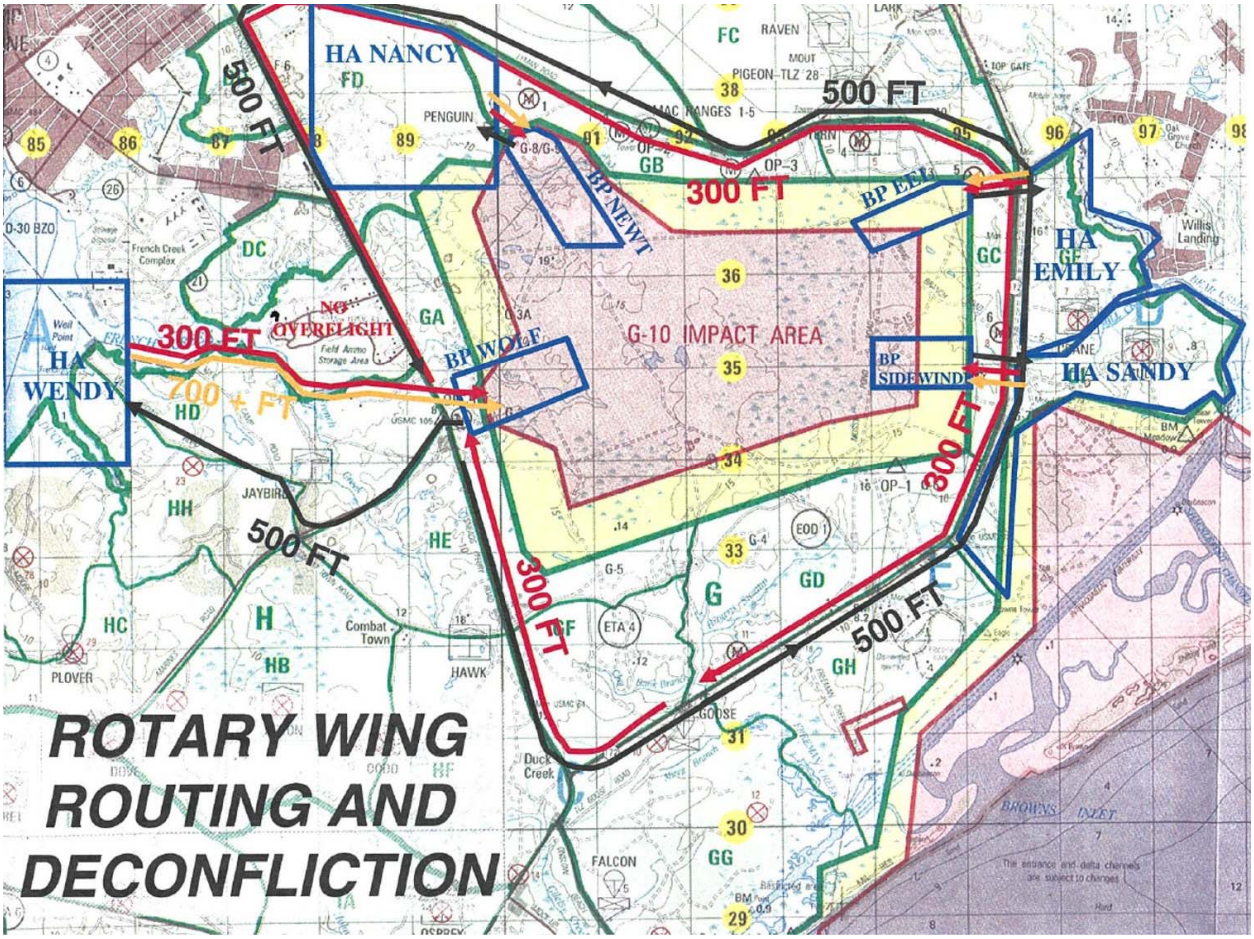


Figure B-2.--Helicopter and Tiltrotor Routing, HAs, and BPs

3. Ingress and egress altitudes along the attack route shall be surface to 2000 feet AGL.

4. TLZ Crane is closed to helicopter, tiltrotor, and UAS training.

(b) HA Nancy. Surface to 2000 feet AGL.

1. Holding area for BP Newt.

2. TLZ Penguin shall serve as the attack/egress route connecting holding area Nancy to Newt (G-29A/B/C).

3. Ingress and egress altitudes along the attack route shall be surface to 2000 feet AGL.

4. TLZs Penguin, Tern, Gull, Crane, and Goose shall be closed to all helicopter, tiltrotor, and UAS training.

(c) HA Sandy. 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 TA (18S TD 954-350) along the 35 gridline to Sidewinder.

3. Ingress and egress altitudes along the attack route shall be surface to 2000 feet AGL.

4. TLZs Gull and Crane shall be closed to all helicopter, tiltrotor, and UAS training.

(d) HA Wendy. Surface to 2000 feet AGL.

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 Camp Lejeune ASP (18S TD 885355) at altitudes below 1000 ft. MSL.

4. TLZ Jaybird shall be closed to helicopter, tiltrotor, and UAS training.

(e) Temporary Holding Areas as approved by the Base RSS. Approved temporary Holding Areas shall be included in SPINS and discussed with BLACKBURN during Face-to-Face brief.

(4) Helicopter, Tiltrotor, and AC-130 Battle Positions (BPs)

BP	Location (18S TD)	Final ATK Cone/Heading	Start Fire Line (18S TD)	Cease Fire Line 18S TD)
Eel	951-370, 951-366, 940-362, 937-366, 947-370	Inert: 245-260 mag HE: 245-255 mag	MP-5	940-362, 937-366
Newt	901-374, 902-375, 904-376,	Inert: 150-165 mag	G-29A/B	907-364, 913-364

	906-375, 913-363, 907-364	HE: 155-165 mag		
Sidewinder	940-353, 950-353, 950-347, 940-347	Inert: 265-285 mag HE: 275-280 mag	95 grid line	940-353, 940-347
Wolf	894-349, 907-352, 909-347, 896-342	Inert: 080-090 mag HE: 080-090 mag	G-3 berm	907-352, 909-374
Ox	4 km diameter circle centered on 923-353, 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 four km diameter circle.

Figure B-3.--Battle Positions

(a) BP Eel. Surface to 2000 feet AGL.

1. Final Attack Heading (inert ordnance only): 245-260 degrees magnetic from MP-5.

2. Final Attack Heading (high explosive ordnance): 245-255 magnetic from MP-5.

3. Authorized ammunition is 20 mm, 7.62 mm, .50 cal, 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, .50 cal, and 20mm gun is defined by the Pond at 18S TD 940-362 then NW to 18S TD 937-366. Aircraft/launcher attitude shall not exceed 0 degrees pitch relative to the horizon for 2.75 inch rocket (Inert) delivery. 7.62mm and 20mm TP munition may be fired from 245-260 degrees magnetic using Target Sight System (TSS) guns or crew served weapons. Fixed forward or Helmet Mounted Sight Display (HMSD) 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 18S TD 940-362 then NW to 18S TD 937-366. Aircraft/launcher attitude shall not exceed 0 Degrees pitch relative to the horizon for 2.75 inch rocket (Inert) delivery. 7.62mm, .50 cal, and 20mm muntions (Inert) may be fired fixed forward or from 245-260 degrees magnetic using Target Sight System (TSS) guns or crew served weapons. HMSD 20mm gun is not authorized.

7. Coordinating Instructions. Clearance to depart the area is required from the terminal controller/BLACKBURN. Units may not occupy MP-5/GP-6 or G-3 when Eel is active. GP-7, and GP-9 shall not fire when BP Eel/HA Emily are active. Aircraft may not occupy BP Wolf when BP Eel is active. TLZs Crane, Gull, and Tern shall be closed to helicopter, tiltrotor, and UAS training when BP Eel/HA Emily are active.

(b) BP Newt. Surface to 2000 feet AGL.

1. Final Attack Heading (inert ordnance only): 150-165 degrees magnetic from the G-29 berm.

2. Final Attack Heading (high explosive ordnance) 155-165 degrees magnetic from the G-29A/B/C.

3. Authorized ammunition 20mm, 7.62mm, .50 cal, and 2.75 inch rockets.

4. To fire 20mm, .50 cal or 7.62mm from BP Newt, the GD or GF training area may need to be closed and gates secured if the WDZ extends in those areas depending on the dive angle. Ammunition may be delivered from within the G-10 Impact Area using hover holds, running fire, or diving fire depending on the angle of fire.

5. Hover Hold. Maximum hover altitude is 300 feet AGL. Aircraft must be forward of the G-29B range berm. The cease-fire line for 2.75 inch rockets, 7.62mm, .50 cal, and 20mm guns is defined by the east/west dirt road (WGS-84 18S TD 907-363 to 913-363). Aircraft/Launcher attitude shall not exceed 0 degrees pitch relative to the horizon for 2.75 inch rocket delivery. 7.62mm, .50 cal, and 20mm guns may be fired from 150-165 degrees magnetic using gunner-controlled off-axis gun or crew served weapons. Fixed forward or HMSD 20mm guns from hover hold are not authorized.

6. Running/Diving Fire. The start fire line is the 37 Northing grid line. The cease-fire line for 2.75 inch rockets, 7.62mm, .50 cal, and 20mm guns is defined by the east/west dirt road (WGS-84 18S TD 907-364 to 913-364). Aircraft/launcher attitude shall not exceed 0 degrees pitch relative to the horizon for 2.75 inch rocket (Inert) delivery. 7.62mm, .50 cal, and 20mm TP ammunition may

be fired fixed forward or from 150-165 degrees magnetic using gunner-controlled off-axis gun or crew served weapons. HMSD 20mm guns are not authorized.

7. Coordinating Instructions. Clearance to depart the area is required from the terminal controller/BLACKBURN. Units may not occupy the G-29A/B/C when BP Newt is active. MP-1 shall not fire when BP Newt/HA Nancy are active. TLZ Penguin shall be closed to helicopter, tiltrotor, and UAS training when BP Newt/HA Nancy are active. Maximum altitude shall be 2000 feet AGL. The “GD” and “GF” TAs may be closed in order to fire 7.62mm, .50 cal, or 20mm ammunition from BP Newt.

(c) BP Sidewinder. Area dimensions: 0.5km width, one km length, surface to 2000 feet AGL. WGS-84 18S TD 940-353, 18S TD 950-353, 18S TD 950-347, 18S TD 940-347.

1. Final Attack Heading (inert ordnance): 265-285 degrees magnetic.

2. Final Attack Heading (high explosive ordnance): 275-280 degrees magnetic.

3. Authorized ammunition is 20mm, 7.62mm, .50 cal, 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, .50 cal, and 20mm gun is defined by the dirt road (Mossy Pond Road) 18S TD 940-353 to 18S TD 940-347. Aircraft/launcher attitude shall not exceed 0 degrees pitch relative to the horizon for 2.75 inch rocket delivery. 7.62mm, .50 cal, and 20mm guns may be fired from 265-285 degrees magnetic using Target Sight System (TSS) guns or crew served weapons. Fixed forward or HMSD 20mm guns from hover hold are not authorized.

5. Running/Diving Fire. The 95-grid line (500 meters west of Highway 172) defines the start fire line. Mossy Pond Rd, 18S TD 940-353 to 18S TD 940-347, defines the cease-fire line for 2.75-inch rockets, 7.62mm, .50 cal, and 20mm gun. Aircraft/launcher attitude shall not exceed 0 degrees pitch relative to the horizon for 2.75 inch rocket (Inert) delivery. 7.62mm, .50 cal, and 20mm TP/TP-T guns may be fired fixed forward or from 265-285 degrees magnetic using Target Sight System (TSS) guns or crew served weapons. HMSD 20mm guns are not authorized.

6. Coordinating Instructions. Clearance to depart the area is required from the terminal controller/BLACKBURN. 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. TLZ Gull shall be closed to helicopter and tiltrotor traffic when BP Sidewinder /HA Sandy are active. Aircraft must stay north of the OP-14/G-27/G-27A complex to avoid possible conflicts.

(d) BP Wolf. Area dimensions: 0.5 km width, one km length, surface to 2000 feet AGL. WGS-84 18S TD 894-349, 907-352, 909-347, and 896-342.

1. Final Attack Heading (inert ordnance): 080-090 degrees magnetic from OP-5.

2. Final Attack Heading (High Explosive Ordnance): 080-090 degrees magnetic from OP-5.

3. Authorized Ammunition: 7.62mm, .50 cal, 20mm, 2.75 inch rockets and airborne 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. At no time will live ordnance be delivered outside the G-10 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 907-352 to 18S TD 909-347). Aircraft/launcher attitude shall not exceed 0 degrees pitch relative to the horizon for 2.75 inch rocket delivery. 7.62mm, .50 cal, and 20mm guns may be fired from 080-090 degrees magnetic using Target Sight System (TSS) guns or crew served weapons. Fixed forward or HMSD 20mm guns from hover hold are not authorized.

5. Running/Diving Fire. The Start-Fire Line is the G-10 Perimeter Road West. The Cease-Fire Line for all ordnance is defined by the eastern boundary (18S TD 907-352 to 18S TD 909-347) unless approved by WDZ profile. Aircraft/launcher attitude shall not exceed 0 degrees pitch relative to the horizon for 2.75 inch rocket (Inert) delivery. 7.62mm, .50 cal, and 20mm TP / TP-T guns may be fired fixed forward or from 080-090 degrees magnetic using Target Sight System (TSS) guns or crew served weapons. Fixed helmet or Helmet Mounted Sight Display (HMSD) 20mm guns are not authorized.

6. Coordinating Instructions. Clearance to depart the area is required from the terminal controller/BLACKBURN. Units may not occupy MP-3, OP-3, MP-7, G-3, or MP-5/GP-6 when BP Wolf is active. Aircraft may not occupy BPs Eel or Sidewinder when BP Wolf is active. TLZ 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 four km diameter centered on 18S TD 923-353, 300 ft. AGL to 2000 ft. AGL. AC-130 or other approved Rotary Wing Aircraft pattern is circular bordered by Lyman Road, Hwy 172, and Sneads Ferry Road staying inside road network. For AC-130 maximum altitude may increased.

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 885-355) at altitudes less than 1000 ft. MSL.

2. Diving Fire. 2.75 inch rocket (Inert), 7.62mm, .50 cal, and 20mm TP delivery shall not exceed 0 degrees pitch relative to the horizon. .50 Cal weapon delivery angle must be at least 25 degrees or greater below the horizon due to its greater approved WDZ.

3. Master arm shall not be “ARMED” until sights are on the target, over range boundary, and a “CLEARED HOT” is given by the terminal controller. The aircraft shall not be armed until aircraft/launcher attitude (delivery angle) is less than 0 degrees relative to the horizon. Master arm shall be secured at the cease-fire line prior to pull-off.

4. Temporary Battle Positions are approved by the Base RSS using the WDZ program. Approved temporary Battle Positions shall be included in SPINS and discussed with BLACKBURN during Face to Face brief.

(f) Coordinating Instructions. Clearance to depart area is required from the terminal controller/BLACKBURN. Concurrent fixed-wing operations into G-10 are prohibited while BP Ox is active.

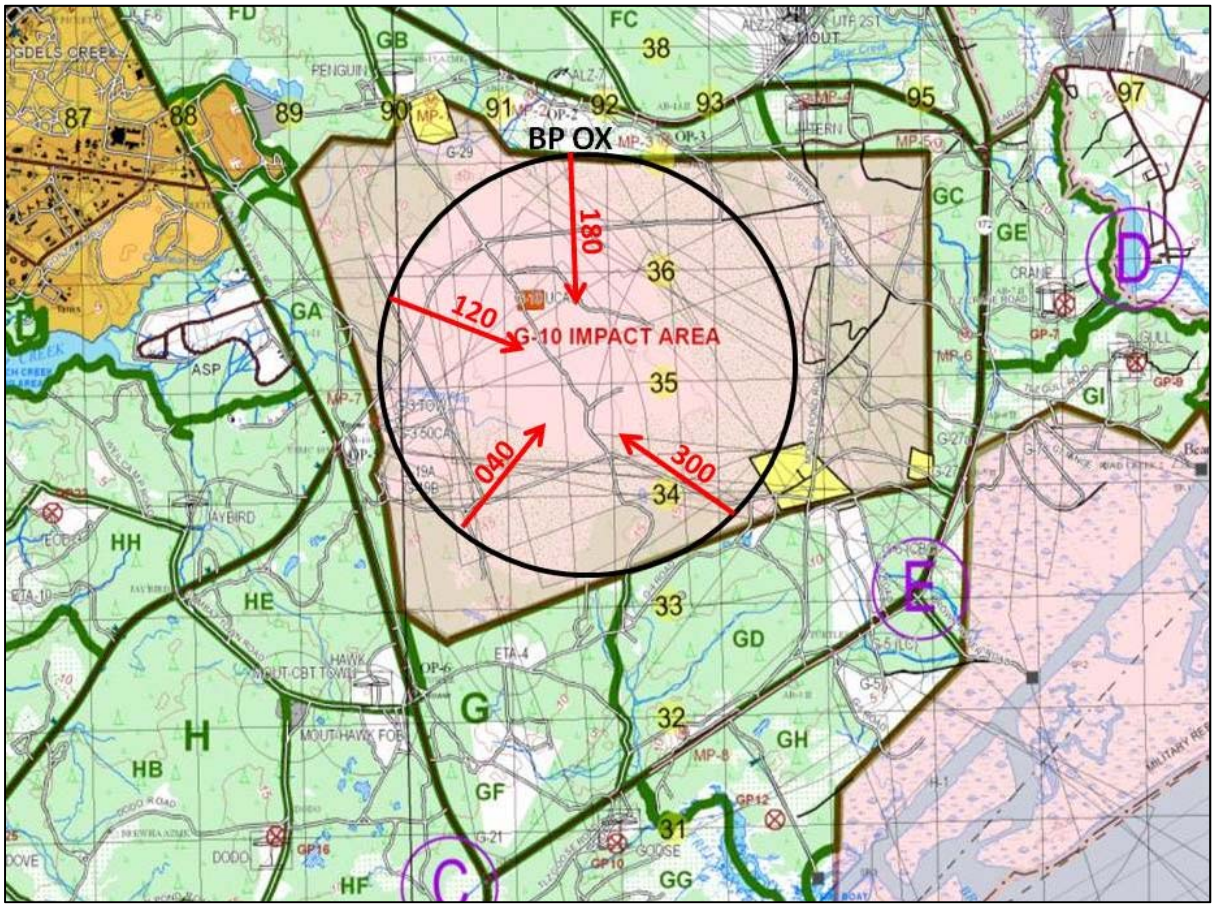


Figure B-4.--Battle Position Ox

G-10 Impact Area

Primary Impact Area	155 PDA
18S TD 89041-36879	18S TD 89920-36540
18S TD 89411-37246	18S TD 92010-36330
18S TD 89939-37193	18S TD 94390-36330
18S TD 90090-37496	18S TD 94350-34620
18S TD 90390-37595	18S TD 93530-34480
18S TD 90831-37396	18S TD 90800-33600
18S TD 91064-37095	18S TD 90400-35270
18S TD 92050-36995	
18S TD 95040-36995	
18S TD 94991-34045	
18S TD 93661-33826	
18S TD 90389-32716	
18S TD 89961-33008	
18S TD 89688-34994	

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. Targets outside

this area will not be engaged by a 120mm mortar system, 105mm/155mm cannon artillery or rockets (HIMARS) fire. Artillery safety computations will be computed within the boundaries of this area.

6. K-2 Impact Area

IMPACT AREA:	K-2
DESCRIPTION:	High Hazard Impact Area
PRIMARY RANGE USE:	Training Range
ALTERNATE RANGE USES:	1. Infantry Weapons Range (5.56mm and below only) 2. Mortar Range 3. Rocket Range 4. MK-19 and GL Range 5. Field Artillery Indirect Range (Formal SRR Only) 6. Rotary/Fixed Wing air to ground weapons (Limited)(Pre-Approved)
STATUS:	Active
LOCATION:	Center of Camp Lejeune West of New River (Verona Loop Training Areas)
PRIMARY DIRECTION OF FIRE:	
WEAPONS ACCOMMODATED:	All military pistols All 12 gauge Shotguns All Rifles M249 LMG/M27 IAR 5.56 Machineguns Only M203/M32A1/M320 40mm GL 60/81/120mm Mortars Rotary Wing Weapons (TP/TP-T) MK153 83mm SMAW AT-4/M72A7 LAW/M-3 MAAWS MK-19 40mm (K-500 Only) Artillery 155mm/105mm (Limited)
AMMUNITION AUTHORIZED:	All Pistol DODICs All Shotgun DODICs All Rifle DODICs All 5.56 Machinegun DODICs 60/81/120mm Mortars (All DODICs) 20mm (TP/TP-T) 40mm HE/HEDP/TP (Single/Linked) 2.75 inch Rocket (Inert only) MK76 Practice Bomb MK80 Series Bombs (Inert)

M781 Practice Round or M576
155mm HE, WP, Illum,

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 and OP-12 serve the K-2 high hazard impact area.

(2) Maneuver is not authorized down range into the K-2 impact area unless EOD support is scheduled and provided.

(3) Night use is authorized if properly scheduled.

(4) Lasers are authorized in accordance with Chapter 7 of this Order and the Laser Range Certification/Survey (provided by Range Control upon checkout of laser ranges). Certified RLSO is required if using any laser system.

(5) Field artillery is authorized for the K-2. A formal SRR letter is required, sent via the chain of command, requesting to fire into K-2 with artillery must be sent to the CG MCIEAST-MCB CAMLEJ (G-3/5 RCB), 30 working days prior to date of the event.

(6) This range requires observers at SP-33 watching the New River when firing artillery in order to ensure that the gun target line is clear.

b. Other Considerations: None

c. Special Instructions

(1) General. Be familiar with the contents of Chapter 5 of this Order and this Appendix.

(2) Air Operations

(a) Authorized ammunition for helicopter and tiltrotor aircraft is 7.62mm (Angle Down) with a SRR and WDZ approval.

(b) Squadrons submit request for the range airspace (K-2 Helo, K-2 Laser) and an OP (OP-12) in RFMSS up to 90 days prior but NLT 48 hours prior to the event.

(c) Submit SRR (Chapter 3 of this Order and Appendix F).

K-2 Impact Area

Primary Impact Area	**155 PDA**
18S TD 77668-35570	18S TD 78315-34885
18S TD 77867-35613	18S TD 78906-35138
18S TD 78424-35606	18S TD 79210-35483
18S TD 78593-35739	18S TD 81214-35488
18S TD 78685-36071	18S TD 82067-34932
18S TD 78671-36293	18S TD 81880-33948
18S TD 78966-36287	18S TD 80251-32854
18S TD 79464-36179	18S TD 78185-34208
18S TD 80384-36299	
18S TD 81882-35839	
18S TD 81491-36187	
18S TD 82041-36013	
18S TD 82399-35696	
18S TD 82597-35523	
18S TD 82819-35300	
18S TD 82500-33531	
18S TD 80271-32040	
18S TD 77419-33949	
18S TD 77739-35307	
18S TD 77363-33599	

PIA: Primary Impact Area; designated on the Camp Lejeune Military Information Map (MIM) as the red area, no target outside this area will be engaged with any weapon system. No access authorized without EOD escort/support. Targets outside this are will not be engaged by a 120mm mortar system, 105mm/155mm cannon artillery. Mortar/Artillery safety computations will be computed within the boundaries of this ar

APPENDIX C

GREATER SANDY RUN AREA (GSRA) TRAINING COMPLEX

1. General

a. Background. The GSRA Training Complex is a 41,000 plus acres of training areas. Within the GSRA (southern part) is Camp Davis, an old WWII Army Airfield (Camp Davis North and South Runways) and training facilities and live-fire ranges. The airfield consists of a road network and two runways with supporting taxiways. The impact area supporting GSRA is a Dedicated Impact Area, not a High Hazard Impact Area. **THERFORE, NO DUD PRODUCING ORDNANCE/GROUND AND AIR PYROTECHNICS, SMOKE, AND CS GRENADES ARE AUTHORIZED IN THE GSRA TRAINING COMPLEX.**

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.

c. Ranges, TAs, and Training Facilities

(1) General. The GSRA Training Complex presently contains 6 live-fire ranges (SR-6, SR-7, SR-8, SR-9, SR-10, and SR-11), 22 training and maneuvering areas, 12 tactical landing zones, 1 para-drop zone, and 2 airfield seizure complexes (AFSC North and AFSC South), 1 Forward Operating Base (GSRA FOB) and the Home Station Lane Training Complex (CIED HSLTC/SR-12).

(2) Training and Maneuver Areas (listed North to South)

SA	SI	SQ
SB	SJ	SR
SC	SK	ST
SD	SL	SU
SE	SM	SV
SF	SN	SW
SG	SO	
SH	SP	

(3) Tactical Landing Zones. There are a total of 12 designated Tactical Landing Zones (TLZs) within the GSRA. These are distributed evenly throughout the GSRA to give complete access for

various training scenarios and for medical evacuation in case of medical emergencies. These TLZs are addressed in Table 4-5. An access road serves each TLZ. 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.

(4) Airfield Seizure Complex (AFSC North). There are 5 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, aircraft, a mock control tower, a mock terminal building, and a mock maintenance building evenly distributed along the two airfields. Units are not authorized to move these aircraft. For more information on the AFSC North see the Range Card(s) for that site.

(a) Building SR-25 (Mock Tower) grid 662-226.

(b) Building SR-26 (Mock Hangar #1) grid 661-222.

(c) Building SR-27 (Mock Hangar #2) grid 660-222.

(d) Building SR-28 (Mock Maintenance Bldg.) grid 662-226.

(e) Building SR-29 (Mock Terminal) grid 665-232.

(5) Airfield Seizure Facility (AFSC South) Buildings/Structures have the following: Internal and external stairways, external ladders, balconies, roof hatches, entrance doors, windows, internal and external lights. It also has a mock power station, fuel farm, and guard towers. Runway 05/23 Camp Davis South is about 100 meters away and Northwest from this site. Highway 17 is about 500 meters Southeast. Note: Units conducting air operations will have conflicts with PDZ Pheasant, Camp Davis North & South runways, Air Field Seizure (North), TLZ Phoenix, TLZ Duck, and TLZ Swallow. This list would include TLZ Kingfisher and TLZ Turkey if parachute operations are conducted. Units should refer to the Range Card for this site for additional information.

(a) Building 1, Entry Sentry Point

(b) Building 2, Airport Administration

(c) Building 3, Power Station (1)

(d) Building 4, Power Station (2)

(e) Building 5, Security HQ

(f) Building 6, Passenger Terminal

(g) Building 7, Office Building (1)

(h) Building 8, Office Building (2)

(i) Building 9, Aircraft Hanger (1)

(j) Building 10, Machine Shop (1)

(k) Building 11, Machine Shop (2)

(l) Building 12, Aircraft Hanger (2)

(m) Building 13, Warehouse (1)

(n) Building 14, Warehouse (2)

(o) Building 15, Factory

(p) Building 16, Fuel Farm (1)

(q) Building 17, Fuel Farm (2)

(r) Building 18-19, Guard Towers (2)

(6) Observation Posts. There are a total of 4 observation posts (OPs) distributed throughout the GSRA. These consist of 125 foot metal towers with a small-enclosed observation room at the top. These OPs are not served by any utilities other than communications, power for electrical receptacles, and illumination lights. OPs are located to maximize the view of major TAs as well as other key elements, such as roads, both military and civilian. See Table 5-3 for detailed OP information.

(7) Forward Operating Base (GSRA FOB). Containers/ structures with Walls/Guard Towers, billeting, command, and control rooms, logistic rooms/containers, ECP/VCP and, gates. Forward Operating Base (GSRA FOB) is not a MOUT Training Facility. It was not designed-for nor does it support MOUT type training skill sets or force-on-force type training events. All units using this FOB must ensure that all tactical vehicles entering or exiting this site use extreme caution due to the high volume of civilian traffic on Highway 17. At no time will military vehicles disrupt the flow of civilian traffic on Highway 17. Rotary wing aircraft are not authorized to land or fast rope personnel onto containers/structures at this FOB. Units should refer to the Range Card for this site for additional information.

(8) Restricted Areas

(a) Vehicle Movement. Any and all Vehicle movement off graded gravel maintained roads in all TAs in the GSRA is not authorized unless within the official TVMA of the GSRA. POVs are not authorized in TAs without RCB permission/issued Range Control POV passes. Hunters during the hunting season with an approved, valid hunting pass from the Conservation Law Enforcement Officer (CLEO) office that must be properly displayed on vehicle dashboard are authorized. Hunters may use registered off-road recreational vehicles to travel to authorized hunting areas designated by the CLEO. No one shall drive around a locked gate.

(b) Tracked Vehicles. Tracked vehicles are not authorized to travel within the interior of the GSRA unless maneuvering on a designated range or tank trail and scheduled by the unit in RFMSS unless in the official Tactical Vehicle Maneuver Area (TVMA). Support vehicles must use gravel/graded roads while operating in the GSRA. Off-road travel in TAs 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 Range Control. Tracked vehicles are not authorized on the Camp Davis North/South Runways/Taxiways and surrounding training areas. Tracked vehicles are not authorized south of TLZ Swallow/northern part of Camp Davis North Runway. Traveling along the tank trail along Highway 50 is not authorized. Tracked vehicles traveling from Verona Loop will use an underpass.

(c) Tactical Vehicles. Tactical vehicle movement is allowed, however, movement is restricted to gravel/graded 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). Speed limits must be enforced, supervised, and proper road crossing procedures must be in place, enforced, and supervised by the command at all times.

(d) The GSRA Wetland Mitigation Bank within the SL training area must be protected and is off-limits to all military training activities. No tactical vehicles or any type of ground disturbance is permitted within the GSRA Wetland Mitigation Bank boundaries. No tactical vehicles are permitted on Watershed Road, Blue Heron Road, Ditches Road or South Pocosin Road.

(10) Combat Vehicle Operators Training (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 6 standard used/controlled check points. Range Control will provide a map on request of the site/routes.

APPENDIX D

RISK MANAGEMENT (RM)

1. Purpose. To establish RM procedures in accordance with references (f), (bn), and (bo) 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 RM procedures and develop safety control measures for all phases of training and must complete an RM Worksheet that is signed, reviewed, and onsite/on the range for the training event.

2. RM 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 RM for all high risk training.

3. These instructions apply to all Marine Corps units and other service units that use Camp Lejeune live-fire ranges, non-live-fire training in all TAs, and other related training facilities.

4. Basic Principles of RM/RM Process

a. Identify the hazard. (Accept risk when the benefits outweigh the cost).

b. Assess the hazard. (Accept no unnecessary risk).

c. Make Risk Decisions. (Anticipate and manage risk by planning).

d. Implement Controls. (Make risk decisions at the appropriate command level).

e. Supervise/Evaluate.

5. Unit Commanders will:

a. Implement the RM process within their command when conducting live-fire, non-live-fire, and training in training facilities during all other phases of training aboard Camp Lejeune.

b. Incorporate identified hazards, risk assessments, and controls into written operation orders and plans for live-fire and non-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 RM process in safety, training, and lessons learned reports to the RSS as directed.

e. Inform the chain of command as to what hazard cannot be controlled or mitigated at their command level.

f. Submit to Range Control a reviewed/signed RM worksheet with each formal letter for a Special Range Request/Jane and John Wayne Day/Warrior Night/Field Mess Night/A Day in Their Boots Day or any other letters being submitted to Range Control. All pages of the RM worksheet must be signed by unit CO or “By direction.”

g. Review references (f), (bn), and (bo) for additional information/guidance on the RM process.

6. Sources of Cause Factors from Accidents and Injuries. Individual 48 percent, Leader 18 percent, Standards 18 percent, Training Standards 8 percent, and Support 8 percent.

HAZARD PROBABILITY

DEGREE OF PROBABILITY	DESCRIPTION
Likely (A)	**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.**
Probably (B)	**Probability will occur in time. Expected to occur several times to an individual item or person or frequently to a fleet, inventory, or group.**
May (C)	**May occur in time. Can reasonably be expected to occur sometime to an individual item or person or several times to a fleet, inventory, or group.**
Unlikely (D)	**Unlikely to occur.**

HAZARD SEVERITY

CATEGORY	DEGREE OF SEVERITY
CATEGORY I	The hazard may cause death, loss of facility/asset, or result in grave damage to national interests.
CATEGORY II	The hazard may cause severe injury, illness, property damage, damage to national or service interests, or degradation to efficient use of assets.
CATEGORY III	The hazard may cause minor injury, illness, property damage, damage to national, service or command interests, or degradation to efficient use of assets.
CATEGORY IV	The hazard presents a minimal threat to personnel safety or health, property, national, service or command interests, or efficient use of assets.

RISK ASSESSMENT MATRIX

	PROBABILITY				
SEVERITY	CATEGORY	A	B	C	D
	I	1	1	2	3
	II	1	2	3	4
	III	2	3	4	5
	IV	3	4	5	5

RISK ASSESSMENT CODE (RAC)

Number	Corresponding Level of Risk
1	Critical
2	Serious
3	Moderate
4	Minor

5	Negligible

NOTE: See next page. This is to allow the removal of this document for reproduction as needed. **This is only an example of the form. Units are authorized other formats for the RM worksheet as per unit/command SOP. All pages of the RM worksheet must be signed by the person that prepared the worksheet and the person that reviewed it. Risk Decision Authority Signature/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).**

A. Mission or Task		B. Date/Time Group Begin: End:		C. Date Prepared:	
D. Prepared By:					
E. Task	F. Identify Hazards	G. Assess Hazards	H. Develop Controls	I. Determine Residual Risk	J. Implement Controls (“How To”)
K. Determine overall mission/task risk level after controls are implemented (circle one) LOW(L) MODERATE(M) HIGH(H) EXTREMELY HIGH(E)					
L. SUPERVISE AND EVALUATE					

A-D	Self-explanatory
E	Identify task relating to the Mission or Task in Block A
F	Identify Hazards - Identify hazards by reviewing METT-T factors for the Mission or Tasks. Additional factors include historical lessons learned, experience, judgment, equipment/weapon characteristics and warnings, and environmental considerations.
G	Assess Hazards – Assessment includes historical lessons learned, intuitive analyses, experience, judgment, equipment/weapon characteristics and warnings, and environmental considerations. Determine initial risk for each hazard by applying risk assessment matrix. Enter the risk level for each hazard into the worksheet.
H	Develop Controls – Develop one or more controls for each hazard that will either eliminate the hazard or reduce the risk (probability and/or severity) of a hazardous incident. Specify who, what, where, why, when, and how for each control. Enter controls into the worksheet.
I	Determine Residual Risk – Determine the residual risk for each hazard by applying the risk assessment matrix. Enter the residual risk level for each hazard into the worksheet.
J	Implement Controls – Decide how each control will be put into effect or communicated to the personnel who will make it happen (written or verbal instruction: tactical, safety, garrison, SOPs, rehearsals, battle drills). Enter controls into the worksheet.
K	Determine Overall Mission/Task Risk Level – Select the highest residual risk level and circle it. This becomes the overall mission or task risk level. The Commander decides whether the controls are sufficient to accept the level of residual risk. If the risk is too great to continue the mission or task, the commander directs development of additional controls or modifies, changes, or rejects the courses of action.
L	Supervise and Evaluate - The last step is not on the worksheet. Plan how each control will be monitored for implementation (continuous supervise, spot-checks, inspect, command presence, after action review) and reassess hazards as the situation changes. Determine if the controls worked and if they can be improved. Pass on the lessons learned.

7. Overall Mission/Task Risk Level

(1) Extremely High: Loss of ability to accomplish the mission if hazards occur during mission execution. A frequent or likely

probability of catastrophic loss or frequent probability of critical loss exists.

(2) 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 too seldom probability exists of a critical loss exists. Frequent probability of marginal losses exists.

(3) Moderate: Expected degraded mission capabilities in terms of the required mission standard; will have a reduced mission capability if hazards occur during mission. An unlikely probability of catastrophic loss exists.

(4) 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

WAIVER OF LIABILITY AND ASSUMPTION OF RISK MANAGEMENT

UNITED STATES MARINE CORPS

In consideration of the privilege of participating/observing a live-fire/non live-fire exercise aboard 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 Installations East-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 General, Marine Corps Installations East-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 Installations East-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 General, Marine Corps Installations East-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 or found on the Range Control Web Page.

APPENDIX F

SPECIAL RANGE REQUEST (SRR) FORMAT

1. Purpose of a Special Range Requests. A SRR is required whenever the training unit desires to use a TA, training facility, or live-fire range for purposes other than what is identified in this Order or the current version of the Range Cards. The submission of a formal SRR shall be related to a truly unique training requirement or training standard/need.

2. Examples Requiring a Special Range Request

a. Conducting live-fire and maneuver training on static live-fire ranges or as per the Range Cards. (e.g., Fire and Maneuver on MOUT Sniper Tower, Mobile MOUT Live-Fire (Building Numbers 2, 24, 36, 40, 67, MAC-3, and K-402A). See individual Range Cards for detailed range requirements.

b. Firing large caliber dud/noise producing weapons (40mm and above) during published quiet hours.

c. Employing a weapon system/ammunition (DODIC) other than those identified in this Order and the Range Cards for a specific range based on the SDZ.

d. Requesting to use field expedient demolitions on an ETA, imprdvised demolitions or conducting night demolitions training.

e. Special events like Field Mess Nights (with or without alcoholic beverages, with or without underage drinking), Warrior Nights (with or without alcoholic beverages or with or without underage drinking), Family Days, A Day in Their Boots, and Jane/John Wayne Days or other family type special events within the training complex. Underage drinking must be approved via the unit’s chain of command (S-1/G-1) 30 days in advance as formal/separate correspondence to the MCIEAST-MCB G-1/Base Adj for final approval and a copy provided to Range Control at least 24 hours before the scheduled event for the underage drinking approval.

3. SRR Submission and Format

a. Prior to submitting the SRR, the unit must schedule the RTA/TLZ/Range or training facility via RFMSS. If it is a special event, the unit must ensure it is scheduled as a special event in RFMSS. This precludes Range Control from approving an SRR that conflicts with another unit’s scheduled training.

b. The SRR with reviewed and signed RM matrix/worksheet must be signed on all pages and submitted to the CG MCIEAST-MCB CAMLEJ (RCB).

All SRRs must be routed for endorsement through the Unit's chain of command. LIVE-FIRE SRRs MUST HAVE BATTALION/SQUADRON LEVEL OPERATIONS SECTION ENDORSEMENT WITH SIGNED AND REVIEWED RM WORKSHEET AND SHOULD BE RECEIVED AT RANGE CONTROL AT LEAST 10 WORKING DAYS PRIOR TO THE FIRST DAY OF INTENDED TRAINING. Warrior Night/Field Mess Night/John or Jane Wayne Day/A Day in Their Boots Day must be received by II MEF (G-37) at least 37 days and Range Control 30 days in advance. This lead-time provides the Range Control Range Safety Specialist adequate time to view the request and refine any safety parameters.

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 TA and nature of the SRR. State the range/training/area facility has been scheduled in RFMSS.

(a) Example. TLZ Falcon: TLZs are used for rotary-wing/tilt-rotary-wing operations. 2d Tank Bn requests to conduct tank maneuver training and command post operations. TLZ Falcon is scheduled for 12–15 December 20XX in RFMSS. G-29C is a live-fire and maneuver range. 1st Bn, 8th Mar requests to conduct live-fire and maneuver training on G-6 and is scheduled for 12–13 Jan 20XX in RFMSS.

(2) Paragraph 2. State the weapons/weapons system and all ammunition to be employed/used. 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) Enclosure (1). Provide a signed and approved RM matrix worksheet. Identify the increased risk that may be incurred and the steps to be taken that will mitigate/control the known risks. (Example of mitigation: Assigning an increased number of PSOs /Assistant RSOs (ARSO) during live-fire maneuver exercises). The RM matrix must be signed and reviewed by the command conducting the high risk event. An example RM worksheet can be found in this Order.

(5) Enclosure (2). 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.

Include the following information for SDZ:

(1) Map designation

(2) Originator's name/Unit

(3) Originator's rank/billet/phone number

(4) Weapons/Weapon System

(5) Ammunition type by DODIC

(6) Distance X

(7) List of appropriate grids

(8) List of appropriate azimuths (in degrees)

(9) Primary direction of fire (in degrees)

(10) SDZ/WDZ information if required

(b) Example. SDZ for the M240B, M16A2/M4, and MK-153 SMAW are provided as enclosures (1), (2), and (3) (of the SRR).

1. CAMLEJ 1:50,000

2. 1stLt Marine, I. M. /Unit

3. 1stLt/Platoon Commander/phone number

4. M249 (LMG) Weapon System

5. A064 DODIC

6. Distance X

7. (6 digit): firing point 735315

8. Lateral limits: 65 degrees magnetic; 98 degrees magnetic

9. PDF 085 degrees MAG/GRID

10. Area(s) (a, h, i, etc.) as appropriate

4. Review of SRR. SRRs shall be reviewed and endorsed by the appropriate unit's (Bn/Sqdn, Regt/MAG, Div/MAW/MEU, MEB, MEF G-3/7) S-3s/G-3s Operations/Training Sections. SRRs submitted by non-infantry units, shall be reviewed for correctness and accuracy by an Inter-Service Resident Range Safety Course graduate (Intermediate Level). Range Control can provide assistance in the conceptual development/planning phase of the unit's SRR and, in most cases, provide previously approved SRRs of a similar nature.

APPENDIX G

OIC/RSO RANK REQUIREMENTS

Type of Event	OIC (Note 1)			RSO (Note 1)			
	OFF	WO	SNCO	OFF	WO	SNCO/ NCO	Additional Req
Practice Hand Grenades; Training Simulators; Trip Flares, Blanks	X	X	X	X	X	E-5	Note 17
All MOUTs/FOBs/AFS/Structures/ Facilities Operations	X	X	E-6	X	X	E-5	
SESAMS (Simunition) Training	X	X	E-6	X	X	E-5	
Static Live Fire Only, Small Arms, Machineguns (.50 cal and Below) and Lasers Includes use of Short Range Training Ammo (SRTA)	X	X	E-6	X	X	E-5	
Chemical Agents (CS) Only 5711/5702 for all CS Events	X	X	E-6 Note 2	X	X	E-4 Note 2	
Fire and Movement/Maneuver Events, Combat Marksmanship Program (CMP) Aerial Gunnery and 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 ammunition)	X	X	E-7	X	X	E-6	Breaching requires Certified Breacher/ Demo (any rank); Hand Grenade Pit NCOs must be certified by unit Cmdr for duties
(Air) Fixed Wing/Rotary Wing Operations, DASC Operations	X	X	E-7 Note 3	X	X	E-6 Note 3	Either OIC or RSO must be FAC/JTAC
Naval Gunfire	X	X	E-7 Note 4	X	X	E-6 Note 4	NGLO or SFCP
Field Artillery. (105mm/155mm/HIMARS)	X	X	E-7 Note 5	X	X	E-6	Firing and observation
Mortars. (60mm/81mm/120mm)	X	X	E-7	X	X	E-5 Note 6	Firing and observation
Direct Fire Antitank Rockets, sub-cal training devices and	X	X	E-7	X	X	E-6	

Missiles (Inert and Live Ammunition)							
Live-Fire CMP/Maneuver/Movement Exercises/Events (Ground, Vehicles, and Air)	X	X	E-7	X	X	E-6	
Live-Fire Exercises with organic weapons; Fire Team through Company	X	X	E-7	X	X	E-6	
Combined Arms, Live-Fire Exercises with external Fire Support; Squad through Battalion or larger	X	X	E-7 Note 7	X	X	E-6	
EOD Operations, EOD Proficiency Training, Emergency Destruction only	X	X	E-7 Note 8	X	X	E-5 Note 8	EOD MOS Marines only
UASs with the capability of using LASERS and weapons	X	X	E-6 /E-5	X	X	E-6 /E-5	Note 9

Non-Live-Fire Events	**OIC (Note 1)**			Additional Requirements
CVOT Courses/Facilities Operations	X	X	E-5	Plus qualified CVOT/Facility Instructor
Dive Operations (Open Water/Pool)	X	X	E-5	Note 10
Parachute Operations (Includes Water Drop Zones)	X	X	E-5	Notes 11 & 12 See notes for Personnel and Cargo drops
HST Operations	X	X	E-5	Note 13
HRST Operations including Towers	X	X	E-5	Note 14
Water Survival Training (All Training Tanks)	X	X	E-5	Note 15 Plus separate MCIWS Marine
Helo Casting/Open Water Swim	X	X	E-5	Note 16
Use of Blanks and Pyro in Training Areas	X	X	E-5	Note 17 Sgt’s (E-5) without issued OIC/RSO Card must be on the Unit’s Command Cert Letter
Tactical Landing Zones (TLZ) and Troop Lift	X	X	E-5	Must have a RSO Card
All UAS Operations	X	X	E-5	Note 9
Beach Operations	X	X	E-5	Note 18

NOTES:

1. Civilians in the grade of GS-07/equivalent or above may act as the OIC and GS-05/equivalent or above as the RSO. Approved civilian

contractors may only act as RSOs when approved by Installation Commander via an annual formal letter that is endorsed and in accordance with SOW. OIC/RSO qualified civilian personnel must be listed on the Unit's CO Certification Letter.

2. The event OIC is the only person required to report to Range Control to sign for a CS type training event like an Open Air, Gas Chamber, Field Expedient Gas Chamber (In a Tent) event. The OIC must be Chemical, Biological, Radiological, Nuclear, and High Yield Explosives (CBRNE 5702, 5769, 5711) qualified when conducting CBRNE (CS) and be listed on the CO's certification letter. Unit must list all CBRNE MOS Marines on the Command Certification Letter regardless of rank. If unit does not have a SSgt or above 5711/5769/5702 Marine any MOS SSgt or above that is CAMLEJ OIC/RSO qualified can sign for the event but must have the names of two 5711/5769 Marines on a Command Certification Letter supporting the scheduled event and at least one must be a 5711 Cpl/E-4 or above.

3. OIC/RSO must be JTAC qualified, E-7 or above for DUD producing ammunition, E-6 or above for SIMCAS / Dry CAS, and listed in the CO's Certification Letter.

4. OIC and RSO must be a trained Naval Gunfire Liaison Officer, or Shore Fire Control Party (SFCP). Both the OIC and RSO must be listed in the CO's Certification letter as Naval Gunfire qualified.

5. Use of an E-7 or above as OIC is authorized only when approved by the Installation Commander.

6. Camp Lejeune requires an E-7 or above as the OIC and E-5 or above as the RSO for all mortar (60mm/81mm/120mm) live fire. Sgt/E-5 must have a Military Occupation Specialty of 0341 and not be the Section Leader of the firing section. An RSO shall have no other additional duties or responsibilities while performing the duties of RSO. An RSO is prohibited from participating in training and is strictly a safety supervisor.

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

8. Two persons are required; OIC who is E-7 or above and RSO who is E-5 or above for operational training. OIC may be E-6 or above when conducting EOD proficiency training on EOD Ranges (EOD-2/EOD-3). E-5s can perform emergency destruction operations only at EOD Ranges (EOD-2/EOD-3).

9. See Chapter 4 of this Order for additional guidance on UAS Operations. The OIC/PIC (Pilot in Charge) will be trained and certified by the commander on that type of UAS. The CO of that unit

will certify this in their Command Certification Letter by including a column to designate UAS OIC/Pilot-in-Charge (PIC) and another column for UAS Operators/Pilots certified and current in the enclosure to the letter. Unit must list all UAS Operators/Pilots with or without RSO numbers. TALSA-East (PMA-263) Contractor Instructors can act as OIC and sign for the UAS Event.

10. The OIC/Diving Supervisor (E-5 or above) will be the only person required to report to Range Control to sign for the dive event and must have a current OIC/RSO certification. This would include open water and Training Tank. Certified Divers (RSO) must be a Marine Combatant Diver/Navy Diver, any rank. A Dive Medical Technician or SARC must be on-hand for MK-25 dives. An NEC LO3A Corpsman must be on-hand for scuba dives. E-5 or above, qualified Diving Supervisors (OIC) and certified diver (RSO) must be listed in the CO’s Certification letter.

11. The OIC/Drop Zone Safety Officer (DZSO) or Malfunction Officer (MO) for jumpers will be the only person (E-5 or above) required to report to Range Control to sign for the parachute event. Jump Masters required, only one for cargo, and two for personnel events. The DZSO for jumpers will be certified per all requirements in the references (bp) and (bq). The DZSO must have a current OIC/RSO card and meet all the requirements set forth in this Order. The DZSO must be a certified/current DZSO. The DZSO must provide the names of two additional jumpmasters for personnel drops during the checkout process so Range Control can verify that they are on 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. DZSOs (OIC/RSO Qualified) or Malfunction Officer and jumpmasters (OIC/RSO qualification not necessary) are required to be listed in the CO’s certification letter. If U.S. 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.

12. The OIC/DZSO or Malfunction Officer 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 or Malfunction Officer must provide the name of one additional jumpmaster for cargo drops during the checkout process so Range Control can verify the person with the CO’s certification letter. DZSOs or Malfunction Officer (OIC/RSO Qualified) and jumpmasters (OIC/RSO qualification not necessary) are required to be listed in the CO’s certification letter. If U.S. Army, Air Force, or Navy jumpmasters/navigators are used in aircraft and may not be on the CO’s command certification letter, denote the military service when their names are requested by Range Scheduling.

13. The OIC/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. OIC must be SIO, RSO, and HST qualified. HST events require at least one E-4 or above certified HST individual (OIC/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 OICs/RSOs. All qualified/ certified SIOs and HST certified personnel must be on the unit’s Command Certification Letter.

14. The OIC/SIO (E-5 or above) for HRST/Hoisting events will be the only person required to report to Range Control to sign for the event. OIC must be SIO, RSO, and HRST Master qualified. HRST events require at least one E-4 or above and certified HRST individual on each rope (RSO qualification not necessary) in addition to the SIO. For hoisting events/operations the crew chief of the aircraft will be the qualified individual at the top. Other safety officers must be an 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.

15. The WSSO, of swim training events in training tanks must be OIC/RSO qualified. The event requires OIC (E-5 or above) to sign for the training tank. OIC must know the names of the MCIWS instructor(s) and the unit they are from to support the training. The OIC signing for training tank, regardless of his/her level of swim qualification cannot be the instructor conducting the training. All MCWIS instructors must be listed on the unit's Command Certification Letter.

16. The WSSO, of open water swim training events must be OIC/RSO qualified. Open water events require one individual to sign for the event. The OIC (E-5 or above) must be certified in one of the following; CWSS, MCIWS, MCITWS, Dive Supervisor or civilian equivalent certification. OIC 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 OIC is not authorized to take part in any training. 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. OIC must ensure safety boats are on hand prior to conducting open water training. All open water swim OICs and certified instructors (OIC/RSO qualification not necessary) must be listed on the unit's Command Certification Letter.

17. When utilizing small arm blanks, pyrotechnics, smoke, or other related training devices that are properly scheduled in RFMSS an E-5 (RSO qualification not necessary /required), but must be listed on the Command Certification Letter in the column called “Training Area” or above is not required to sign for the event and must be present on site for all training being conducted. All RSOs must be listed on the unit's Command Certification Letter. This footnote also allows approved/certified contactors to sign for non-live fire events when only an RSO is required.

18. When on loading/off loading amphibious ships via LCACs and LCUs a qualified 04XX will sign for the beach. OIC must fill out a Beach Checklist that can be found on the Range Control website prior to signing for the beach. The beach has only one access road and limited staging areas for vehicles and equipment. Unit should consider scheduling a nearby TLZ for staging vehicles and equipment. Only tactical vehicles conducting training and the Range Safety vehicle are allowed on the beach.

Appendix H

RSO and OIC Designation Letter

SERVICE BRANCH OR DEPARTMENT
LETTERHEAD GOES HERE
ENSURE PROPER FORMAT
SEAL TO LEFT, ADDRESS
AND ZIP CODE ETC…

SSIC CODE
OFFICE CODE
01 OCT 20

From: Billet, Unit Name
To: Range Control Officer, Camp LeJeune

Subj: ANNUAL APPOINTMENT OF OFFICERS IN CHARGE AND RANGE SAFETY OFFICERS FOR NAME OF COMMAND

Ref: (a) MCO 3550.9
(b) MCO 3570.1C/DA PAM 385-63
(c) MCIEAST-MCB CAMLEJO 3570.1B

1. Per reference (a), Commanders are required to appoint their Range Officers in Charge (OIC) and Range Safety Officers (RSO) in writing and should retain a signed, updated, by-name certified OIC/RSO roster at the unit level. Unit records of individual certifications for weapon systems, ammunition, and specialized training for which they will be responsible must also be maintained.

2. This letter verifies that any individual appointed to OIC and RSO duties by this Command is currently qualified per the references.

3. The point of contact for this correspondence is Rank/Name at EMAIL and PHONE NUMBER.

U. R. TRAINING

This would only be used by Tennant Commands that are assigned to Camp Lejeune and is required annually and due before 1 Oct of each year.

UNIT HEADING LETTERHEAD

3570
Office
7 Oct 20

From: Commanding Officer, ___ Unit (22/24/26 MEU/1st Bn, 2d Marines)
To: Commanding General, Marine Corps Installations East-Marine Corps Base, Camp Lejeune (Range Control Division)

Subj: COMMANDER'S SAFETY CERTIFICATION LETTER OF OFFICER-IN-CHARGE (OIC) AND RANGE SAFETY OFFICER (RSO) FOR 1ST QTR/FY21

Ref: (a) MCO 3570.1C/DA PAM 385-63
(b) MCO 3550.9A
(c) MCIEAST-MCB CAMLEJO 3570.1B/Range Cards

Encl: (1) List of OICs and qualifications

1. Per the references, I certify the personnel listed in the enclosure are current with all requirements necessary to perform the duties of the OIC and/or RSO. They have been thoroughly trained and have demonstrated complete knowledge of all weapons, ammunition, and hazards associated with ranges, facilities, and training areas assigned to Camp Lejeune Range Control.

2. I certify the personnel listed have completed the required Marine On-Line Range Safety Course "RTAMRSOCAA" and have attended the required Camp Lejeune's Range Control Safety Officer Course (classroom). The individuals named in the enclosure are familiar and understand all current requirements directed by the above references to include all applicable directives, messages, changes and updates.

3. This letter will be updated quarterly or when changes and/or additions warrant. Point of contact for this matter is Master Sergeant SCHEDULING at (910) 451-3065 or DSN 751.

U. S. MARINE
(Leave blank if CO or put By direction)

This is page #1 of 2 for all <u>Non-Tennant Commands</u>

RANK	NAME	RC #	SMALL ARMS STATIC	SMALL ARMS MOVEMENT	DEMO (D) / BREACHER (B)	GRENADES	MORTARS	R-ROCKETS / M-MISSILES	A-ARTILLERY / N-NAVAL GUN FIRE)	HS-HST / C-CAST / HR-HRST	LRSO	PARA Ops (D-DZSO / J-JUMP MASTER)	SWIM QUALS D-DIVE SUP / M-MCIWS / ETC)	UAS (C-CMDR / P-PILOT)	AIP (F-FAC / FU-FAC UAS QUALS	AIP (J-JTAC / JU-JTAC UAS QUALS	CBRN	BLANKS & PYRO INCL E-5	CVOT	ADD YOUR OWN
LTCOL	KLAUS	096738	X	X			X		A		X			C	F			X	X	
MGYSGT	MANFRE	573820	X	X												J		X		
SSGT	MILLER	011021	X	X				R		HR							X	X	X	
MGYSGT	PICKETT	135790	X	X	D/B				A		X	D	D			JU	X	X		
CWO5	RICHARDSON	543809	X	X													X	X	X	
MSGT	STEWART	214365	X	X				M			X	J		C	FU			X		
LTCOL	WALTRIP	099867	X	X				M	A			J		C				X		
MSGT	WANNEMACHER	213649	X	X					N	HS	X		D	P	FU			X		
MSGT	WILLIAMS	568703	X	X	D		X				X	J	M			JU		X		
MSGT	WILSEY	009742	X	X				M	A		X		D					X		
CWO4	PICKARTZ	102938	X	X		X	X											X		
SGT	GUNTER		X	X						C				P				X		

This is page #1 of 2 for all <u>Non-Tennant Commands</u>

APPENDIX I
OIC AND RSO CHECKLIST

OFFICER IN CHARGE (OIC) AND RANGE SAFETY OFFICER (RSO) CHECKLIST

(Duties listed are to be performed by the OIC and RSO as noted.)

This is only a guide and is subject to change.

PHASE I – BEFORE CONDUCTING ANY TRAINING/FIRING	
Officer in Charge (OIC) RESPONSIBILITIES	
	Checkout the assigned range(s)/facility/facilities from Range Control by noontime (1200) the day before (Monday-Friday), or up to 10 working days in advance. The OIC must have his/her OIC/RSO Card and be listed on the Unit's current command certification letter/roster.
	Assume responsibility for the scheduled live fire range/ETA in RFMSS, related airspace, and training facility and all gear assigned or signed for.
	Be completely familiar with the Camp Lejeune Special Military Installation Map (MIM), reference (a), MCIEAST-MCB CAMLEJO 3570.1B (RC SOP), current version of the Range Cards, Weapons TMs/TCs and other required orders/references before reporting to Range Control.
	Obtain or certify possession of required safety equipment (range regulations (SOP), range flag, and keys).
	Receive a briefing from Camp Lejeune, Range Control on conditions or events that may affect your range utilization such as any conflicts that must be deconflicted by the using unit.
	Certify that all pertinent range and safety regulations have been read, understood, and are complied with at all times.
	Ensure appropriate medical support (properly equipped Corpsman /Medic/Contractor EMT) and government safety vehicle/driver are present with the unit and all personnel are wearing the proper safety (PPE) equipment for the type of training being conducted.
	Ensure the impact area or range is clear of all personnel and all safety measures directed by this Order and the assigned Range Card have been taken (e.g., use of barriers, posting of air sentries, posting of range gate guards when necessary to deny access to the range/impact area).

	Ensure that two means of communication are utilized between the unit conducting training and Range Control (e.g., AN/PRC-152/AN/PRC-153 or unit assigned hand held radios with assigned Range Control Talk Group). The responsibility for proper communications with Range Control rests with the training unit/OIC/RSO. The frequencies used by Range Control can be found in this Order. If a cell phone is to be used, it will only be used as an alternate communication method.
	Ensure communications with BLANKBURN are continuously monitored and ensure radio checks are made to Range Control every 30 minutes, on the half-hour, while in a “HOT” status. The OIC/RSO will provide the final radio check when displacing. Training units will establish their own internal communications network for all administrative needs (road guards, etc.). Range Control will not provide radios or communication networks for internal communication needs. Mandatory radio checks are required with BLACKBURN at 0600, 1400, and 2200.
	Ensure all applicable range and general safety precautions are taken.
	Conduct a joint inventory of the A&E (Ammunition) at the range with personnel delivering the A&E.
	The OIC/RSO will compare their inventory against what is reflected on the appropriate ASP issue document and verify that the lot number on every container matches the lot number on the issue document.
	Open all containers that are not factory sealed and visually inspect the ammunition and explosives to ensure the contents correspond with what is indicated on the issuing document.
	Ensure ammunition and explosives are properly handled, transported, stored, and accounted for within the training complex from the time of receipt to the time of expenditure or turn-in in accordance with appropriate service level directives.
	The OIC will coordinate with BLACKBURN and units using adjacent ranges or facilities to ensure safe conduct of training. Deconfliction of airspace with the air detachment or any aircraft on-station will be conducted with the assistance of the unit Air Officer and BLACKBURN.
	Implement risk management in all phases of the training exercises. The OIC will have a detailed RM worksheet (or other DoD service equivalent) signed/reviewed by the unit CO that covers all phases of training to be conducted prior to checking out the range. The RM worksheet can be found in Appendix D of this Order. Event RM must be made available upon request to Range Control safety personnel.

	Obtain clearance from Range Control to go "HOT" and notify Range Control when going “COLD”.
	Anyone observing an unsafe condition (including aircraft, humans, or animals in the line of fire) during firing exercises shall give the command **CEASE FIRE**. When this command is given it will be relayed immediately to the control tower operator who will echo the command **CEASE FIRE** over the public address system. The RSO will investigate the unsafe condition, take necessary corrective action, and will report the correction of the unsafe condition to the OIC. **The OIC will resume firing when convinced that the RSO has corrected the unsafe condition.**
RECEIPT, CONTROL, ASSUMPTION OF RESPONSIBILITY FOR ALL AMMUNITION (OIC RESPONSIBILITY)	
	Ammunition separated by DODIC and provided proper/required security and the required safe separation distances as required.
	All delivered A&E physically inventoried with delivery ammo tech/ammo driver.
	Ammo DODICs are never mixed together during use or storage. Blank ammunition and live ammunition must be separate with all requirements are in place, enforced, and supervised at all times.
	Ammunition guard(s) supervised and instructed on A&E security procedures.
	Using unit briefed on ammo to be used on the range/TA.
	Training unit briefed on proper ammunition/weapon handling procedures.
	Shake-down (ammunition) procedures briefed.
	Only enough ammunition to accommodate each training phase is broken-out at a time.
	Ammunition Information Notices (AIN), Notices of Ammunition Reclassification (NAR) and Cleared for Overhead Fire Supplements must be included in the Range Safety Brief.
Range Safety Officer (RSO) RESPONSIBILITIES PRIOR TO FIRING	
	There is a designated RSO present and isn’t tasked or assigned to perform any other duty and is of the proper rank for that range or training activity. Points of interest and potential safety highlights outlined in RM have been addressed.

	Range regulations (RC SOP) and the (Range Cards) for the specific live fire Range/TA/Training Facility have been read/and understood.
	Range is inspected for any safety hazards.
	Range flag(s) erected (indicates the range is occupied with intention to fire ammunition or explosives).
	Target material inspected for safety hazards.
	Obtain personnel roster for the range from the OIC (includes first and last name, rank, and blood type).
	Safety personnel and proper safety equipment are present and used.
	Safety Field Medical Technician HM/8404 Corpsman/Army or Air Force Medic/Contractor EMT is present with required medical kit and equipment. The Corpsman/Medic and Safety Vehicle Driver must be staged in a safe area and able to respond as required.
	Government safety vehicle that is fully operational with qualified driver is present.
	Safety vehicle driver briefed on duties.
	Vehicles staged on the range to facilitate quick access to TA/range.
	Safety radio operator with communication gear is present.
	Communication gear checked to ensure it is in working condition.
	Extra batteries are present as required.
	Radio operator briefed on all procedures.
	Radio frequency confirmed.
	OE-254 erected (if necessary/required).
	Radio operator monitoring radio at all times.
	Safety road guards posted with positive two-way communication (in teams of two (pairs) as per unit SOP).
	Air sentries posted with positive two-way communication.
	Ammo guards posted (in teams of two) if required.

	All road/range guards briefed on post requirements/duties if required.
	All guards provided with meal(s) and water for post duration.
	Communication with Range Control established/maintained.
	Fire danger plan confirmed (Camp Lejeune’s Fire Danger Plan).
	Permission from Range Control requested to assume “HOT” status.
	Number of personnel on the range reported.
	Type(s) of weapons to be fired on range reported.
	Type(s) of rounds (DODICs) to be fired on the range reported and the number of rounds fired for each DODIC.
	OIC/RSO conducting radio checks (“HOT” status = every 30 minutes). Mandatory radio checks are required with BLACKBURN at 0600, 1400, and 2200.
	Receive the safety brief from the OIC on RSO duties and specific range regulations for that range/training facility.
	Conduct a joint inventory of the A&E at the range with personnel delivering the A&E.
	The RSO will compare their inventory against what is reflected on the appropriate ASP issue document and verify that the lot number on every container matches the lot number on the issue document.
	Open all containers that are not factory sealed and visually inspect the A&E to ensure the contents correspond with what is indicated on the issuing document.
	Conduct a safety brief for all personnel present using the Range Safety Card issued with the range can from Range Control.
	Ensure weapons are properly positioned at authorized firing sites as indicated by the Range Tables and overlays.
	Brief road guards and air sentries in their duties and positions, ensure that barriers or gates are properly positioned/secured and that road guards and air sentries have positive two-way communication with the RSO (radio, landline, cell phone, etc.).
	Communication must be maintained between the RSO, road guards, and air sentries at all times.

	Radio checks must be made to road guard and air sentries every 30 minutes.
	If communication is lost with BLACKBURN or Road Guards the range will go into a check-fire status until communication is re-established.
	The RSO conducts final coordination with the OIC. This coordination will include a summary of checks, inspections, and actions that the RSO has completed. Then the RSO will contact Range Control and request a “HOT” status.
	There are no unauthorized POVs on the range, mortar position, gun position, TLZ/ALZ, or training facility.
DESIGNATION AND ESTABLISHMENT OF A FIELD AMMUNITION SUPPLY POINT (FASP) or Ammunition Holding Area (AHA)	
	FASP establishment. (Security)
	Two-man ammo guard (100% alert) assigned for stored ammo in the FASP.
	Ammo guard(s) in condition four (with 15 rounds of ammo each).
	Site for dunnage consolidation point established.
	Site for trash collection established.
	Plastic trash bags used (for ease of inspection).
	Using unit briefed on trash and dunnage handling.
FASP/AHA REQUIREMENTS	
	Ammo stored 100 meters (m) or more from bivouac site, mess area
	No flame-producing items within 50m (i.e., lit cigarettes)
	Ammo sheltered with water-resistant cover (poncho/tarp)
	Ammo stored on pallets at all times
	No radio transmitters within 25 feet (ft.) of stored ammo
	All ammo, demolition, and pyrotechnics storage in compliance with FASP regulations
	Compliance with FASP regulations
ESTABLISHMENT OF TRAINING EVOLUTION SAFETY STANDARDS	

	Special safety considerations for the range/TA briefed
	Four safety rules for handling weapons briefed
	Weapons condition for each weapon system used on the range/TA briefed
	Misfire procedures for each weapon system used on the range/TA briefed
	Assistant Range Safety Officer (ARSO) or Position Safety Officer(PSO) designated and briefed if needed/required
	Safety brief which includes written/signed RM assessments is provided and on the range
PHASE II – DURING TRAINING/FIRING	
Officer-in-Charge (OIC) RESPONSIBILITIES	
	No misconduct occurs on the firing line/live fire range.
	All ordnance impacts are observed to ensure projectiles land within the prescribed impact area/surface danger zone/weapons danger zone. Firing will be stopped immediately and Range Control notified if ordnance impacts outside of prescribed impact areas.
	The impact area is constantly observed and controlled to ensure that it remains clear.
	Firing is stopped immediately when any unsafe act is observed or reported.
	All accidents, injuries, or fires, regardless of severity, are reported immediately to Range Control.
IN THE EVENT OF SERIOUS INJURY OR DEATH, THE OIC WILL:	
	Call an Immediate “Cease-Fire”
	Ensure medical aid is rendered as required.
	Contact Range Control and report the location, nature and category of the accident, and assistance required. If an evacuation is required, the senior service member from the using unit will be the on-scene commander and will initiate action for the MEDEVAC/CASEVAC.
	Preserve the range for accident investigation. (The site must be secured/controlled)

	Fill out a Training Accident Report (Chapter 1 of this Order) and provide a copy to the Range Control within 24 hours.
	In the event of a non-serious injury or near miss that could have resulted in a serious injury, the OIC will ensure that corrective action is taken to prevent the incident from happening again.
Range Safety Officer (RSO) RESPONSIBILITIES	
	Ensure "ONLY AUTHORIZED WEAPONS", as indicated by the Range Tables/RFMSS and signed for are utilized on the scheduled range.
	Allow "ONLY AUTHORIZED MUNITIONS" and ensure they are properly utilized in accordance with all applicable Regulations/Range Card.
	Verify that proper safety data is applied to all weapons systems.
	Monitor the communications network at all times. Make radio checks every 30 minutes on the half-hour to Range Control.
	Order an immediate cease-fire or check-fire when any unsafe condition is observed, including loss of communication.
	Enforce the safety regulations prescribed in this Range Control Order/Orders/Range Cards.
	Ensure the SDZ is clear and that personnel wear appropriate safety equipment and hearing protection.
	Ensure all ammunition found on the range is reported to Range Control immediately.
	RSO must supervise and minimize the number of personal on the firing line/hazard area to ensure safety.
SAFETY SUPERVISION DURING CONDUCT OF TRAINING	
	ARSO(s) or PSO(s) in place prior to beginning of training if required.
	Helmets, flak jackets, hearing, eye and any other PPE properly worn. Level O, Level 1, Level 2, Level 3 as per MCO 3570.1C/DA PAM 385-63.
	Final sweep of impact/TA conducted.
	Training unit conducted inspection for proper ammo and equipment.
	Targets and target materials placed in a safe location and direction.

	Blank firing attachments properly mounted (if applicable) or removed if conducting live-fire.
	Ammunition shake-down procedures supervised and conducted for each ammunition type transition (Check Magazines).
PHASE III – AFTER FIRING	
Officer in Charge (OIC) RESPONSIBILITIES	
	All weapons have been cleared, checked, and notification of going "COLD" is given to Range Control.
	An accurate count and type of all munitions expended is maintained and the count is turned in to Range Control upon completion of the exercise. Must be reported by DODIC.
CONTROL OF UNEXPENDED AMMO TO RECEIVING UNIT AMMO TECH TURN-OVER	
	Completed ammo expenditure report turned over to ammo tech.
	Joint inventory of unexpended ammo (with unit ammo tech) completed.
	Form 1348-1 completed with the ammo tech while on the range/TA.
	All Grade III ammo identified for turn-in.
	Ammo properly packaged.
	Only properly transported ammo allowed to leave the range/TA.
	The area is policed before leaving. Ensure all brass, cartridge cases, and reusable containers are removed from the range and returned to the appropriate facility.
	Range inspection conducted by a Range Inspector.
	All safety equipment and checked-out items are promptly returned to Range Control.
	Required paperwork associated with range utilization is completed and turned into Range Control.
	All check-out procedures are completed with Range Control and responsibility for the facility is relinquished.
UNEXPENDED AMMO AND EXPLOSIVES ACCOUNTABILITY	
	All unexpended ammo at the FASP consolidated.

	Each DODIC at the FASP physically counted.
	All dunnage and trash inspected.
	Clear plastic trash bags inspected; all dunnage for unexpended ammo physically inspected
	Supervise separation of dunnage from trash. (Brass/Links/Cans)
	Liaison made with training unit for removal of dunnage and trash from the range/TA
	Ammunition expenditure (to determine how much ammo was actually expended down range, on the training area) reconciled
	NAVMC 11381 Form completed.
	Responsible unit ammo tech contacted for ammunition turn-in.
RSO RESPONSIBILITIES	
	Verify all weapons are safe and cleared. (Check all magazines)
	Assist OIC in supervising the detail police call.
	Perform a shakedown on all personnel/vehicles.
	Account for all saved/expended munitions.
	Communication with Range Control maintained while occupied.
ESTABLISHMENT OF SHAKE-DOWN SITE AND SUPERVISION OF ALL AMMUNITION HANDLING	
	Three stations (with distance between each) established.
	Download station – all unexpended munitions are removed from magazines and equipment.
	Inspection station – supervised pat-downs and magazine/weapon checks.
	Issue point – supervised issuance of the correct type of ammunition for the next training evolution,
SUPERVISION OF CONDUCT OF DOWNLOAD SITE	
	Buddy-system used to download unexpended ammo from magazines, pouches, equipment, and uniforms.

	Participants received proper instructions.
	All participants accounted for at this station using the roster provided by the OIC of training.
	All munitions are segregated and stored in properly marked containers.
SUPERVISION OF CONDUCT OF INSPECTION STATION	
	ARSOs/PSOs received proper instructions/guidance/duties/functions.
	Thorough pat-down of all individual clothing and pockets, gear, pouches, magazines.
	Detailed magazine/feed tray check/chamber conducted for all weapon systems (Include all Stock Weapons/Crew-Served Weapons.
	Equipment displayed and inspected by RSO or ARSO.
	All participants accounted for at this station using the roster provided by the OIC/RSO of training.
SUPERVISION OF CONDUCT OF AMMO ISSUE POINT	
	Proper ammo issued for next training event.
	Participants have ensured all magazines are loaded with proper ammunition. (Note: Do not mix Blank Ammunition/Live Ammunition).
	Test-fire conducted (if feasible).
	All participants are accounted for at this station using the roster provided by the OIC/RSO of training.
CONDUCT RANGE INSPECTION	
	Sweeps range and/or TA for unexpended ammo and duds from misfires.
	Range Control contacted for disposal and EOD liaison requirements if required.
CONDUCT FINAL DOWNLOAD AT CONCLUSION OF TRAINING	
	Final shake-down inspection of all weapons/magazines conducted before participants depart the range/TA.
	All personnel (including safety personnel, observers, and participants) inspected for ammo and explosives.

	All personnel to be inspected are accounted for and supervised.
	Supervised and accounted for all personnel/weapons to be inspected.

The Four (4) Weapon Safety Rules

1. Treat every weapon as if it is loaded.

2. Never point a weapon at anything you do not intend to shoot.

3. Keep your finger straight and off the trigger until you are ready to fire.

4. Keep the weapon on safe until you intend to fire.

Learn to live with a loaded weapon.

Think Range/Weapon/Ammunition Safety at all times!

Common Safety Problems on Ranges

1. Lack of Self-Discipline.
2. Failure to enforce standards, policies, and orders.
3. Inadequate training.
4. Failure to follow procedures.
5. Improper or inadequate clearing.
6. Untimely loading/unloading, negligent discharge.
7. In the path of the recoil or back-blast.
8. Failure to properly observe safety features.
9. Inadequate planning and supervision.
10. Attention to detail

APPENDIX J

NOTAM PARA DROP WORKSHEET

NAME OF DROP ZONE (PDZ / WDZ) AND LAT/LONG
(REFER TO RANGE SOP CHAPTER 4 FOR LAT/LONG INFO)

RADIUS OF THE JUMP EX: 2-3 NM..

ALTITUDE OF THE JUMP EX: SFC TO 10,000 FEET.

DATE AND DURATION (LOCAL TIMES) 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:_____

PHONE NUMBER:_____

UNIT SUBMITTING THE REQUEST:_____

EMAIL:_____

ANY QUESTIONS CONTACT:
JEFF DILLON AT 252-466-2233

This is the "NOTAM Worksheet" units must fill this out and send it to CHPT_NOTAMS@USMC.MIL also CC OMBNEWRIVERBASEOPS@USMC.MIL LEJEUNERANGESCHEDULING@USMC.MIL

NO LATER THAN 4 WORKING DAYS PRIOR TO THE SCHEDULED EVENT.

Failure to submit the worksheet WILL STOP the aircraft from entering our airspace.
Any questions contact: Lejeune Range Scheduling at (910 451-3065/3066/4478

APPENDIX K

PERSONALLY OWNED VEHICLE (POV) QUICK REFERENCE GUIDE

Range	Is a POV Pass Required?
Training Areas	Yes
EB Training Area	No. Park at the SNCO Pavilion.
Tactical Landing Zones	Yes
Mortar Positions	POVs are not authorized.
Gun Positions - live fire	POVs are not authorized.
Gun Positions - non live fire	Yes
B-12	No
D-29A/B	No
ETA-1	No. Park at lot by MCES building #117A.
ETA-2/ETA-2 Line Charge	No. Park in the gravel lot at Mile Hammock Bay.
ETA-4	No. Park at fire tower.
ETA-5	No. Park at the gravel lot at ALZ-20 across from K-504.
ETA-6 (CVOT)	No
ETA-7/A/B/C/D	No. Park at lot by MCES building # 1658A.
ETA-8	No. Park at lot by MCES building #11.
ETA-9/ETA-10	No. Park at lot by Staff HQ building #16757A.
EOD-2	No. Park at the gravel lot at ALZ-20 across from K-504.
EOD-3	No. Park at gravel lot near TLZ Jaybird.
F-2	No
F-4	Yes
F-5	No
F-25T	No
F-6	POVs are not authorized.
F-11A/B	No
F-18/F-18 .50 CAL	No
G-3/G-3 TOW	No. Park at the pump house across Snead's Ferry Road.
G-6	No. Park on the cement pad at GH Training Area.
G-7	No

Range	Is a POV Pass Required?
G-19A/B	Yes
G-21	No
G-27	No
G-28	POVs are not authorized.
G-29A/B/C	No
G-30	No. Park across Lyman Road in the parking lot.
I-1	No. Park at the lot by MCES building #117A
K-325	No. Park at the gravel lot at ALZ-20 across from K-504.
K-402 to K-408	No. Park at the gravel lot at the entrance to K-400.
K-500, K-500A	No
K-502	No
K-503 to K-504A/B	No. Park at the gravel lot at ALZ-20 across from K-504.
K-505	No
K-506 to K-510	No. Park at the gravel lot at ALZ-20 across from K-504.
L-5	No
SR-6	No
SR-7	No
SR-8/SR-8A	No
SR-9	No
SR-10/11	No
SR-12	No. Park next to the classroom.
CP Davis N & S	No. Park at Davis South Runway parking ramp/apron.
MOUT Facility	No. Park in the designated lot outside of the MOUT facility.
GSRA FOB	No. Park at the gravel area outside of the compound.
Ash St. FOB	POVs are not authorized inside the compound.
TLZ Hawk/Hawk FOB/CBT Town	No. Park across Snead's Ferry Road by the fire tower.
CS Chambers	CBRN staff only at CBRN parking lot. No other POVs authorized.

- POV Passes are issued to E6s and above only. (E5s 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 a POV Pass unless pre-arranged with Range Control via e-mail / phone.

- Units are authorized to sign out a block of POV passes if pre-arranged with Range Control.

- Info required for a POV Pass: Owner name, rank, type of vehicle, license plate number, state assigned, dates needed, and location(s).

APPENDIX L

ELECTRONIC WARFARE/DEFENSIVE MEASURE

1. General. The East Coast Electronic Warfare Systems Branch (RS 25) of the Naval Surface Warfare Center (NSWC), Corona Division, located aboard MCAS Cherry Point, operates electronic warfare threat and signals simulators at approved locations within Camp Lejeune. Referred to as the Mid-Atlantic Electronic Warfare Range or MAEWR with callsign “Bull Run”, the purpose of RS 25 is to provide realistic Electronic Warfare (EW) training to combat aircrews.

2. Background. The MAEWR operates EW threat and signal simulators at MCOLF Atlantic, MCALF Bogue, BT-11 at Piney Island, Radio Island, Navy Dare, and Pinecastle Range in Florida. Continuously changing tactics, techniques, and procedures as a result of the lessons learned in Iraq and Afghanistan and the Navy and Marine Corps’ renewed emphasis on amphibious operations, as well as the introduction of UAS platforms into the training environment have increased the demand for EW training resources and areas at Camp Lejeune. The MAEWR EW Threat Systems Aircrew User’s Guide is available to all aircrews to faciliatate EW training. Contact the EW Mission Coordinators to request a copy.

a. Available EW Threats and Signals. The MAEWR’s Aircrew User’s Guide lists the assorted EW threat simulators available for training. EW threat simulators include early warning and long range acquisition radars, short and medium range Surface-to-Air Missiles (SAMs), various Anti-Aircraft Artillery (AAA) systems, as well as short range IR/UV missile simulators, MANPADS, and AAA Strobe light simulators.

b. Scheduling EW Training Sites/Events

(1) Units requesting electronic warfare training shall notify the Range Control Officer 10 working days before the scheduled training event. All EW training requests shall be entered into the Lejeune RFMSS by the requesting unit after coordination with EW Mission Coordinators at MCAS Cherry Point by calling 252-466-2123 or DSN 252-2123. All units are responsible for scheduling requested TAs using RFMSS. Adjacent or adjoining airspace coordination and scheduling is done through the Range Management Division, using MCAS Cherry Point RFMSS for other areas within the Cherry Point Operating Area and/or for use of the W122 by contacting Fleet Forces Atlantic Exercise Coordination Center (FACSFAC VACAPES), callsign “Giant Killer” at (757) 433-1320/1220 or DSN 433-1320/1220.

(2) At the discretion of the RCO, ground TAs may be scheduled on a co-user basis depending on the type of EW training conducted.

(3) Upon completion of training, units will report to BLACKBURN the type of aircraft that received EW training and the number of aircrew aboard.

c. Threat Emitter Sites. The selected sites listed below have been optimized for training support. Sites 1, 2, and 3 were created to support unit level training for the MCAS New River based squadrons and MEU/C2X/JTFEX training. Sites 4-14 were created to provide additional unit level training capabilities.

Mobile/Transportable EW Threat Systems Sites

Site #	Site Name	Lat/Long	Grid
1	OP-2	34.39.45N 077 16.25W	18S TD 915-375
2	MOUT Facility	34 39.82N 077 15.02W	18S TD 938-380
4	TLZ Hawk	34 36.54N 077 17.58W	18S TD 898-321
5	OP-5	34 37.89N 077 17.61W	18S TD 898-345
6	TLZ Falcon/ Onslow Beach Road	34 34.86N 077 16.70W	18S TD 911-288
7	Mock Up Road	34 34.19N 077 16.41W	18S TD 911-276
8	EOTG Site/Onslow Beach	34 33.70N 077 17.00W	18S TD 905-264
9	TLZ Albatross	34 34.06N 077 17.36W	18S TD 895-276
10	TLZ Bluebird	34 32.96N 077 18.90W	18S TD 696-391
11	Moore Road HA TA	34 37.41N 077 21.19W	18S TD 843-338
12	TLZ Kingfisher (GSRA)	34 35.69N 077 29.57W	18S TD 711-324
13	Davis Tram Road (GSRA)	34.35.38N 077 32.86W	18S TD 655-302
14	Bridge Road (GSRA)	34 33.19N 077 31.36W	18S TD 685-264

d. Chaff and Flares

(1) Chaff training is authorized aboard Camp Lejeune over the G-10 Impact Area only after proper coordination with Range Control /BLACKBURN.

(2) 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 Danger Plan 4 or higher.

(3) Training units must monitor wind speeds and directions to ensure that chaff and flare debris is contained within the scheduled impact area.

e. Tactical Shapes

(1) The MAEWR provides movable towed tactical shapes incorporating realistic size, color schemes, and multi-spectral cues, as a low-cost, light weight, environmentally-friendly target solution for various range applications. Due to the high replacement costs of these targets they shall not be used for live-fire training or be emplaced in live-fire areas. However, they may be used to simulate

OPFOR representations or provide a threat presence to ground personnel engaged in tactical training operations. Primarily they will be used in conjunction with electronic warfare and air reconnaissance. Photos of these shapes are in the MAEWR's Aircrew User's Guide.

(2) Multi-spectral cues include:

(a) Visual 3-D representation (full scale) created by using Solid (olive drab or desert sand) or Camouflage (forest or desert) paint.

(b) Radar signature (representative radar cross section (RCS).

(c) IR Signature created by using metal mesh under shape framing to generate heat differentials with ambient air.

(d) Doppler signature created by rotating antennas.

f. Use of GTR-18 (Smokey SAM) for Training

(1) The use of the Smokey SAM pyrotechnic simulator is authorized for use aboard Camp Lejeune during the conduct of defensive measures training for aircrews. The GTR-18 (Smokey SAM) provides a visual cue to aircrews undergoing defensive measures training. Requests to use the Smokey SAM will be submitted via an Email Special Range Request to Range Control. At no time will the Smokey SAM be utilized aboard Camp Lejeune without the express approval of the RCO.

(a) Responsibility. When conducting training with the GTR-18 (Smokey SAM) each CO will ensure that only qualified and certified personnel operate the Smokey SAM. The following safety requirements will be adhered to at all times. No deviations are authorized without the express approval of the RCO, RCOO, or RSS.

(b) Personnel Requirements. A minimum of two and a maximum of four certified and qualified Smokey SAM operators for each Smokey SAM launch site.

(c) Safety Requirements

1. Smoking and flame producing devices are prohibited at the Smokey SAM launch site and within a 50-ft perimeter of the launch site.

2. Two 10-pound A, B, or C fire extinguishers will be at each Smokey SAM launch site.

3. Each operator will wear gloves and safety glasses or face shields while at the Smokey SAM launch site.

4. Two-way radios to communicate with BLACKBURN.

5. One properly equipped hospital corpsman at each launch site.

g. Smokey SAM Operating Procedures

(1) Prior to the launch of a Smokey SAM radio communications will be established with BLACKBURN. Once communications have been established, permission will be requested to go hot.

(2) The 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 and azimuth in accordance with wind strength and direction. The Smokey SAM should have a trajectory elevation of 60-75 degrees and a trajectory azimuth away from the launch site (including wind effect of both).

(4) The Smokey SAM will be launched to obtain the best visual effect while minimizing foreign object damage to aircraft and personnel.

(5) The Smokey SAM will not be launched directly at any aircraft, vehicle, structure (permanent or temporary), or personnel. The flight path of a Smokey SAM 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.

h. Emergency Procedures

(1) Should property damage or personnel injury occur, or serious safety hazards be identified, all Smokey SAM simulator operations will be halted and BLACKBURN be notified immediately and the reason for halting training reported.

(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 onsite extinguishers and try to contain the fire at the site.

(4) Evacuate injured and non-essential personnel to a minimum of 500 ft.

(5) If a Smokey SAM hang-fire occurs, notify BLACKBURN and request EOD support.

(6) Unserviceable igniter rods for Smokey SAM will be replaced in their respective storage containers for later disposal by EOD.

i. Transportation and Temporary Storage. All vehicles, government owned or government furnished, transporting the Smokey SAM will be properly placarded with 1.3G explosive signs on all four sides of the vehicle and readily visible to traffic per NAVSEA SW020-AF-HBK-010. 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 shall be stored for easy access in the event of an emergency. The Smokey SAM 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 driver's course and have a valid government motor vehicle operator's permit with an explosives endorsement.

(2) Drivers Licensing Requirements for Civilian Employees. For off-base transportation of the Smokey SAM, civilian employees will possess a valid commercial driver's license with a HAZMAT endorsement. For on-base, they will attend explosives driver refresher training or attend the explosive driver's course and have a valid Government motor vehicle operator's permit.

(3) Government Contract Employees. For off-base and on-base transportation of the Smokey SAM, Government contract employees will possess a valid commercial driver's license with a HAZMAT endorsement.

APPENDIX M

LASER FIRING LOG

COMMAND	
RANGE	
DATE	
SYSTEM	
USER	
MISSION COMMANDER	

FIRING # TIME	TARGET LOCATION	FIRING POSITION/HEADING

APPENDIX N

RANGE CONTROL PHONE NUMBERS

1. Range Control Branch:

Points of Contacts	Number (Area Code (910))
Branch Head, Range Control Branch	451-3932
Range Control Officer	451-1235
Range Control Operations Officer	451-1236
Range Safety Specialist	451-1240
Range Control Operations Chief	451-5803
Range Control IT Specialist	450-7966
Scheduling Section	451-3065/3066/4478
FAX, Scheduling	451-9304
BLACKBURN/Fire Desk (East)	451-3064/4449
Navy Boat Crew	451-5046/9577 (FAX 1594)
Base EOD	449-0558/0334/2105 (FAX 0382)
MOUT Complex Staff	451-2364/0752/0508/0753
Training Tank Area 5	451-2027
Training Tank Courthouse Bay	440-6005
GSRA, SR-46/Blackburn West	449-6228/6205/6341
FAX, GSRA	449-6227
Range Inspectors East	450-5940
Range Inspectors West	451-6324

APPENDIX O

TACP OIC/RSO REQUIREMENTS

OP# AIR EVENT-G10/FORWARD AIR CONTROL
-Requires a designated FAC/JTAC (OIC)
-Requires a designated FAC/JTAC (RSO)
-May require a designated RLSO for LASERS
 -FAC/JTAC: (OIC/≥E6 dedicated impact area or ≥E7 high-hazard impact area) signs for OP#
 -FAC/JTAC: (OIC/≥E6 dedicated impact area or ≥E7 high-hazard impact area) signs for G-10 FW/RW
 -FAC/JTAC: (OIC/≥E6 dedicated impact area or ≥E7 high-hazard impact area) signs for G-10 UCAS
 -FAC/JTAC: (OIC/≥E6 dedicated impact area or ≥E7 high-hazard impact area) signs for RES-5306D/E if schd
 -RLSO: (OIC/≥E6) signs for LASERS trng if schd
 -UAS: (OIC/≥E5) signs for UAS trng if schd

OP# GRD EVENT-OBSERVE & ADJUST ARTILLERY LF
-Requires a designated Artillery FO (08XX)
-Requires a RSO (if stand-alone event / 08XX)
-Requires a designated RLSO for LASERS if schd
 -Artillery FO (OIC/08XX) signs for OP#
 -RLSO signs for LASERS if schd

OP# GRD EVENT-OBSERVE & ADJUST MORTAR LF
-Requires a designated Mortar FO team member
 -MP#: (OIC/≥E7) signs for the OP# & MP#
 -OP#: Requires no OIC/RSO
 -RLSO: (OIC/≥E7) signs for LASERS if schd

OP# AIR EVENT-UAS TRNG
-Requires a designated UAS OIC/PIC
-Requires a RSO (UAS Pilot)
-Requires a designated RLSO for LASERS if schd
 -UAS: (OIC/PIC/≥E5) or JTAC (if qual) signs for OP#
 -UAS RLSO: (OIC/PIC/≥E5) signs for LASERS (if schd)

OP# GRD EVENT-OBSERVE & ADJUST NAVAL GUNFIRE (NGF)
-Requires designated Naval Gunfire Liaison Officer (NGLO)
-Requires a RSO (NGLO) if not located on ship
-NLGO: (OIC/≥E7) signs for OP#

OP# AIR EVENT-FORWARD AIR CONTROL (ANGLICO Event ONLY)
-Requires a designated FAC/JTAC (OIC)
-Requires a designated FAC/JTAC (RSO)
 - OIC/≥E6 dedicated or ≥E7 high-hazard impact area) signs for OP#
 - OIC/≥E6 dedicated or ≥E7 high-hazard impact area) signs for G-10 RW/FW

- OIC/≥E6 dedicated or ≥E7 high-hazard impact area) signs for G-10 UCAS
- OIC/≥E6 dedicated or ≥E7 high-hazard impact area) signs for RES-5306D/E (if schd)
- RLSO (OIC/≥E6) signs for LASERS trng if schd
- UAS (OIC/≥E5) signs for UAS trng if schd

* if qualified, OIC/RSO may dual hat

Mortar Position (MP)
MP# OIC (≥E7)
-Signs for MP#
-Signs for OP# (if schd)
-Requires a RSO at MP# (≥E5)

Artillery Position (GP)
GP OIC (≥E7)
-Signs for GP
-Requires a RSO (≥E6)

UAS/VMU-2 & UAS/Navy
UAS OIC
-Signs for UAS Event
-Signs for LASERS (when schd)
-Requires a RSO (UAS Pilot)

Naval Gunfire
RSO-NGLO if available for US ships required on foreign ships

DASC Team/Chieftain (if schd)
-Requires designated DASC (OIC)
-Requires designated (RSO)
-OIC/RSO (both) signs for airspace(s)