UNITED STATES MARINE CORPS
MARINE CORPS INSTALLATIONS EAST-MARINE CORPS BASE
PSC BOX 20005
CAMP LEJEUNE NC 28542-0005

MCIEAST-MCB CAMLEJO 3721.1A
G-3-5/ATC T&R

MAR 0 9 2018

MARINE CORPS INSTALLATIONS EAST-MARINE CORPS BASE CAMP LEJEUNE ORDER 3721.1A

From: Commanding General
To: Distribution List

Subj: MARINE CORPS INSTALLATIONS EAST-MARINE CORPS BASE CAMP LEJEUNE REGIONAL AIR TRAFFIC CONTROL MAINTENANCE ORDER (SHORT TITLE: ATCM ORDER)

Ref: (a) NAVAIR 00-80T-114
(b) OPNAVINST 3721.5
(c) OPNAVINST 4790.4
(d) NAVSEAINST 4790.8
(e) MCIEAST-MCB CAMLEJO 3700.1
(f) OPNAVINST 5100.23
(g) MCO 4790.2 Ch 1
(h) NWP 1-03.1
(i) NAVAIR 16-1-520
(j) MCO 5530.14A
(k) MILHDBK 419A, Volume 1 & 2, "Military Handbook Grounding, Bonding, and Shielding for Electronic Equipment's and Facilities," December 29, 1987
(l) Title 29 CFR 1910
(m) OPNAV Manual OP 43P6B
(n) NAVSUP P485 Volume III
(o) NAVSUP P409
(p) MOU between MCIEAST-MCB CAMLEJ/MCINCR of 28 Oct 14

Encl: (1) ATCM ORDER

1. Situation. In accordance with the references, the Air Traffic Control (ATC) Training and Readiness (T&R) Office supports three Marine Corps Installations East-Marine Corps Base Camp Lejeune (MCIEAST-MCB CAMLEJ) air stations and Marine Corps Air Facility (MCAF) Quantico. ATC Maintenance information must be disseminated and procedures established within MCIEAST to ensure compliance with the references.

2. Cancellation. MCIEAST-MCB CAMLEJO 3721.1.

3. Mission

a. Promulgate information and establish procedures for the control of aircraft, training of air traffic controllers, the ATC Naval Air Training and Operating Procedures Standardization (NATOPS) Program, Air Station Terminal Instrument Procedures (TERPS) Program, Air Station

Airspace Management Program, Air Station ATC Hazard Program, and the Air Station ATC Maintenance Program.

b. Summary of Revision. This Order has been completely revised and should be reviewed in its entirety.

4. Execution

a. Commander's Intent and Concept of Operations

(1) Commander's Intent. This Order promulgates standardization of maintenance and training across the Region for all ATC Maintenance Divisions to include MCAF Quantico.

(2) Concept of Operations. The rules, regulations, and procedures contained in this Order do not change or supersede existing instructions issued by higher headquarters.

b. Tasks

(1) Aviation Affiliated Installation Commands. Commanding officers (COs) and supervisors shall ensure all personnel concerned are thoroughly familiar with, and comply with, the rules and regulations set forth herein. Per reference (p), MCAF Quantico shall adhere to policies set forth within this document until Marine Corps Installations National Capital Region (MCINCR) can assume responsibility.

(2) Assistant Chief of Staff, G-3/5 (APP). Provide staff assistance to commands as necessary.

5. Administration and Logistics

a. The contents of this Order have been coordinated with the Commanding Generals (CGs) of MCIEAST-MCB CAMLEJ and 2d Marine Aircraft Wing (MAW), the COs of Marine Corps Air Stations (MCAS) Beaufort, New River, Cherry Point, MCINCR, and MCAF Quantico.

b. Recommendations concerning the contents of this Order should be forwarded to MCIEAST-MCB CAMLEJ ATC T&R Officer via the appropriate chain of command.

MAR 0 9 2018

6. Command and Signal

a. Command. This Order is applicable to MCIEAST-MCB CAMLEJ, MCAS Beaufort, MCAS New River, MCAS Cherry Point, and MCAF Quantico.

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

M. L. SCALISE
Deputy Commander

DISTRIBUTION: A/B/C

Copy to: CMC (APX-8)
CNO (N980A)
COMMCICOM (G3/5/7)
MCIEAST-MCB CAMLEJ AC/S, G-3/5
MCIWEST-MCB CAMPEN AC/S, G-3/5
MCIPAC-MCB CAMP BUTLER Japan AC/S, G-3/5
MCINCR-MCB QUANTICO AC/S, G-3/5
COMNAVAIRSYSCOM PATUXENT RIVER MD (PMA-213)
COMSPAWARSYSCEN San Diego CA
SPAWARSYSCEN Atlantic Charleston SC
SPAWARSYSCEN Pacific San Diego CA
COMNAVSAFCEN (Code 11)

RECORD OF CHANGES

Log completed change action as indicated.

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

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Chapter 1

General

1. Purpose and Scope. This Order prescribes the Air Traffic Control Maintenance Program within MCIEAST. Compliance with stipulated order requirements and procedures is mandatory except as authorized herein. The contents of this Order do not waive requirements for ATC maintenance technician qualifications and procedures mandated by other orders or instructions. All ATC technicians and personnel with cognizance over Naval Air Traffic Control Air Navigation Aids and Landing Systems (NAALS) equipment and functions are required to be familiar and comply with the provisions of this Order that pertain to their operational duties and responsibilities.

a. This Order provides standardized policy and procedures for the safe, day-to-day operation and maintenance of systems and equipment assigned to MCIEAST ATCM Divisions (ATCMD). The policies and procedures herein are designed to supplement the requirements and procedures set forth in the references governing maintenance of NAALS and meteorological systems equipment.

b. This Order applies to all NAALS and meteorological systems, associated support equipment, and maintenance personnel assigned to MCIEAST ATC facilities to include MCAS Beaufort, MCAS Cherry Point, MCAS New River, MCAF Quantico, and their associated auxiliary or outlying ATC equipment locations.

2. Distribution. This Order is distributed to all Airfield Operations departments, Air Traffic Control Facilities (ATCF) and ATCMD under the cognizance of the MCIEAST-MCB CAMLEJ ATC T&R Officer.

3. Changes and Updates. To remain effective this Order must be dynamic.

a. This Order shall be reviewed annually during the month of January. All proposed changes to this Order shall be submitted to the MCIEAST-MCB CAMLEJ ATC T&R office, via the change request form in Appendix A, no later than 31 December of the previous year. Results of the proposed changes will be disseminated to the distribution list, as appropriate, for review.

b. Adopted changes with briefing guide will be published 30 days prior to the effective date of the change.

c. Changes of an urgent nature shall be disseminated via message traffic.

4. Change Publication Dates. Changes to this Order shall be published as needed with yearly reviews accomplished in January of each year.

5. Waivers. Airfield Operations Departments and ATCMD requesting to deviate from this Order shall submit requested waivers to the MCIEAST-MCB CAMLEJ (AC/S G-3/5, APP), ATC T&R Officer via the chain of command. Where the need arises, special instructions or waivers will be promulgated by the ATC T&R Office.

6. Word Usage and Definitions

a. Word usage shall be in accordance with the references.

b. Definitions shall be in accordance with the references.

7. ATC Training & Readiness Office Responsibilities

a. The MCIEAST-MCB CAMLEJ ATC T&R office assists the CG, MCIEAST-MCB CAMLEJ and CO MCINCR on matters pertaining to airspace, ATC, and systems' maintenance. The office shall ensure standardized execution of airspace management; ATC plans and policies; NATOPS evaluations; ATC staffing, training and management; Naval Air Traffic Control Air NAALS program management; maintenance staffing and training; TERPS review; as well as other airspace or ATC issues the CG, MCIEAST-MCB CAMLEJ directs. The MCIEAST-MCB CAMLEJ ATC T&R office shall examine and share efficient procedures throughout the region.

b. The MCIEAST-MCB CAMLEJ ATC T&R office consists of the ATC Officer, Staff Noncommissioned Officer in Charge (SNCOIC), Regional Airspace Coordinator (RAC), and NAALS Program Manager. Responsibilities include but are not limited to:

(1) Maintaining overall awareness of ATC, airspace, and NAALS program issues that impact MCIEAST air stations and installations.

(2) Conducting NATOPS Evaluations, per reference (a) and this Order.

(3) Distributing ATC and ATC maintenance formal school quota assignments.

(4) Reviewing all Letters of Agreement and Memoranda of Understanding that impact air traffic, ATC maintenance, and aviation safety within MCIEAST's purview.

(5) Reviewing all Base Electronics Systems Engineering Plans (BESEP) for installations and upgrades of NAALS equipment.

(6) Reviewing all NAALS Operational Capability Improvement Requests (OCIR) and preparing for endorsement and forwarding.

(7) Assisting with personnel issues as necessary.

(8) Serving as a voting member for MCIEAST at ATC and ATC Maintenance conferences regarding Department of the Navy ATC policies and procedures.

(9) Endorsing requests for Military Occupational Specialty (MOS) waivers and requests for MOS revocations.

(10) Facilitating coordination between ATC facilities, Chief of Naval Operations (CNO) (N980A), and Commandant of the Marine Corps (CMC) (APX-8) for all matters pertaining to ATC. This includes the operational issues as well as those pertaining to equipment, funding matters, personnel issues, etc.

(11) Other issues as directed by the CG, MCIEAST-MCB CAMLEJ.

c. NAALS program management responsibilities are further addressed in references (b) through (d).

8. Awards. The submission of nominations for the Vice Admiral William P. Lawrence ATC Technician of the Year submissions shall be in accordance with reference (a).

a. Submissions are due to the ATC T&R office no later than 31 January for the previous calendar year.

b. The MCIEAST-MCB CAMLEJ ATC T&R office shall select one nominee and submit the individual's package per reference (a).

c. In the event that the MCIEAST nominee is not selected as the Department of the Navy (DON) nomination, the CG, MCIEAST-MCB CAMLEJ may present the Navy and Marine Corps Achievement Medal to the MCIEAST selected representative in recognition of his/her accomplishments.

9. ATC Facility (ATCF) Electronics Manual Format

a. General guidelines for development and maintenance of an ATCF Electronics Manual are located in reference (b).

b. Appendix B of this Order describes the standard format to be followed for all MCIEAST-MCB CAMLEJ ATC Facility Electronics Manuals.

c. In the event that a facility does not have an action/activity described or listed in Appendix B, that item may be deleted from their Facility Electronics Manual.

d. Requests for deviation from this format shall be forwarded to the MCIEAST-MCB CAMLEJ ATC T&R Officer (Attn: NAALS) via the chain of command for consideration.

Chapter 2

ATCMD Primary Billets and Responsibilities

1. ATC Maintenance Officer (ATCMO). The ATCMO is responsible for the overall maintenance management of air station NAALS equipment in accordance with references (a) through (d), and applicable Navy, Marine Corps, and FAA Orders and Directives. This includes the responsibility to plan, budget, and organize the resources necessary for equipment/systems maintenance and ensure maintenance practices meet stringent FAA system and equipment certification and performance standards necessary to operate ATC facilities and/or NAVAIDs in the National Airspace System (NAS).

a. Assignment. The station facility COs shall designate the ATCMO in writing. In accordance with references (b) and (e), the ATCMO shall be assigned as an active member of the local planning board whose actions may have an impact on the operation and signal coverage of NAALS equipment. The ATCMO billet shall be held by MOS 5950 or a limited duty officer MOS 5902.

b. Responsibilities. The ATCMO is responsible, for the readiness of all electronic equipment assigned, and for the administration of the Maintenance and Material Management (3-M) program. The ATCMO shall:

(1) Coordinate, manage, and supervise personnel and assets used to operate, certify, maintain, repair, secure, modify, and install assigned electronic equipment/systems, repair parts, and ancillary equipment used to support the ATC facility, and associated Fleet Area Control and Surveillance Facility (FACSFAC) if applicable.

(2) Establish and manage a facility maintenance plan to ensure adequate funding and resources to support timely equipment maintenance, test equipment calibration, and repair of assigned ATC systems and minimize the impact to operations.

(3) Prepare and submit Program Objective Memorandum (POM) and budget plans annually and adhere to the command funded ATCMD Operational Target (OPTAR) to ensure adequate resources are available to support installed systems, test equipment calibration, maintenance contracts, and temporary additional duty costs associated with technician training.

(4) Ensure Maintenance Division Table of Organization (T/O) manning levels are adequate to perform its assigned mission.

(5) Ensure proper installation, modification, and operation of ATC systems through coordination with the In-service Engineering Agents (ISEA) responsible for installed systems.

(6) Coordinate with the ATC Facility Officer (ATCFO) in the preparation and submission of OCIR in accordance with reference (b).

(7) Review BESEP for the installation and upgrade of ATC systems.

(8) Maintain cognizance of Letters of Agreement (LOA) or Memoranda of Understanding (MOU) between station ATCMD and outside agencies to provide ATC support (i.e., radar sharing agreements).

(9) Ensure the Airfield Operations Officer (AirOpsO) and ATCFO are apprised of equipment installations, maintenance scheduling, and repairs of ATC systems and their impact on airfield and facility operations.

(10) Coordinate with ATCFO, Facility Watch Officer (FWO), and AirOpsO when a scheduled or unscheduled FAA flight inspection is necessary.

(11) Manage the ATCMD 3-M Program comprised of a Planned Maintenance System (PMS) in accordance with reference (d) and a Maintenance Data System (MDS) in accordance with reference (b).

(12) Ensure all ATC equipment operates within the prescribed performance parameters as directed by enclosure (3) of reference (b), Air Traffic Control (ATC) Systems Maintenance Ashore.

(13) Ensure maintenance is performed on assigned equipment in accordance with references (b) and (d).

(14) Ensure maintenance division personnel maintain access to the Navy/Marine Corps ATC web site and contact information is current.

(15) Ensure the command NAALS equipment and software configuration data is current and accurately reported to the configuration data manager for shore ATC systems, Space and Naval Warfare Systems Center (SPAWARSYSCEN) Atlantic (SPAWAR Atlantic) Code 4.3.3.4.0.

(16) Ensure all records and reports supporting ATC maintenance, training, and administrative actions are properly maintained, accurate and current.

(17) Implement and manage a Technical Training Program that ensures division military and civilian technicians are competent and qualified to operate, perform planned or corrective maintenance, and as applicable, ground certify designated systems.

(18) Provide final qualification approval for designation of a Watch-Standing technician, a technician qualified (in writing) to perform Ground Inspection maintenance requirements, and a NAALS Subject Matter Expert (SME).

(19) Implement and manage an ATCMD Safety Program for personnel and equipment that is compliant with reference (f) and local air station safety directives.

(20) Implement and manage an ATCMD Test Equipment Program to ensure general and special purpose test equipment (GPETE/SPETE) is calibrated and readily available to accomplish maintenance requirements.

(21) Establish and manage an ATCMD Master Library Program to ensure currency and serviceability of all technical publications and required references.

(22) Establish and manage an ATCMD Tool Control Program to ensure availability of required tools necessary for maintenance of NAALS equipment.

(23) Administer an ATCMD Supply Program consistent with Navy Supply references, AAC-229 Memorandum of Agreement between the Department of Transportation Federal Aviation Administration and the Department of the Navy Naval Air Systems Command, and local Aviation Supply guidance.

c. All other responsibilities and duties of this position shall be outlined in local Standing Operating Procedures (SOP).

2. ATCMD 3-M System Coordinator. The ATCMO shall establish a 3-M System Coordinator position to serve as the functional manager of the ATCMD 3-M Program. The 3-M System Coordinator shall be responsible to the ATCMO for the coordination and direct supervision of all administrative facets of the ATCMD 3-M program. This position shall be assigned, in writing, as a primary duty of a Marine staff sergeant or above with MOS 595X or a civilian GS-0856 series. The assigned individual shall have adequate experience, training, and time to perform the responsibilities of the position effectively. This position shall be responsible for the functions and duties as identified in reference (d).

3. ATC Maintenance Chief (ATCMC). The ATCMC billet assists the ATCMO in all ATC maintenance-related responsibilities and duties as outlined in local SOP and at the ATCMO's discretion. This position shall be held by the senior MOS 595X or a civilian GS-0856 series. The ATCMC shall perform maintenance officer duties in the absence of the ATCMO. The ATCMC may be assigned the 3-M functional responsibilities and duties associated with the positions of Division Leading Chief Petty Officer (LCPO) as identified in reference (d). All other responsibilities and duties of this position shall be outlined in local SOP.

4. Work Center Supervisor (WCS). The ATCMO shall appoint WCS's to ensure the effective operation of the 3-M System within the respective work centers. The WCS position shall be held by a civilian GS-0856 series or a senior Marine MOS 595X assigned to the work center. The WCS shall be assigned in writing, have adequate experience, training, and time to effectively perform the responsibilities of the position. At a minimum, the WCS shall be qualified as outlined in Chapter 4 paragraph 5(b) of this reference on the equipment in the work center he/she is supervising. The WCS shall be responsible for the 3-M functional responsibilities and duties as identified in reference (d). All other responsibilities and duties shall be outlined in local SOP.

5. Duty Technician/Watch-Stander. ATCMD work centers shall be staffed with applicably trained and qualified military and civilian electronics technicians. The Duty Technician/Watch-Stander shall assume maintenance responsibility for assigned equipment consistent with technical qualification in accordance with reference (b) and maintain assigned equipment in accordance with established operating parameters. The technician shall be responsible for the functions and duties identified in reference (d) for maintenance personnel. All other responsibilities and duties shall be outlined in local SOP.

Chapter 3

Administration and General Operations

1. Purpose. This chapter addresses requirements and procedures to assist the ATCMO in the accomplishment of the ATCMD's primary mission to provide for continuous safe air operations through the timely repair of equipment and reporting of each maintenance effort.

2. Scope. The administration and management of ATC equipment, maintenance, and personnel is the primary responsibility of the ATCMO.

3. Turnover Folders/Desktop Procedures. Turnover folders and/or desktop procedures shall be established and maintained in accordance with reference (g) for the following:

a. Primary Positions

(1) ATCMO (TURNOVER)

(2) ATCMC (TURNOVER)

(3) 3-M Systems Coordinator (TURNOVER)

(4) WCS (TURNOVER)

(5) Supply Representative (DESKTOP)

(6) Test Equipment Coordinator (DESKTOP)

b. Collateral Duty Positions (including alternates when assigned)

(1) Training Representative (DESKTOP)

(2) Tools Representative (DESKTOP)

(3) Safety Representative (DESKTOP)

(4) Hazardous Material Representative (DESKTOP)

(5) Publications Representative (DESKTOP)

(6) Destructive Weather Representative (DESKTOP)

(7) Any other collateral duty the ATCMO directs.

c. The ATCMO shall approve all turnover/desktop procedures before implementation.

4. Signature List. To aid in identification of past and present personnel in logbook entries, training records, PMS accomplishment, maintenance actions, and requisitioning of parts, a roster of signatures and initials for the military and civilian personnel assigned to the ATCMD shall be maintained in the ATCF Electronics Manual. This roster should be reviewed and updated semi-annually to ensure currency.

5. Duty Logbooks. The purpose of the duty logbook is to provide ATCMD personnel with an accurate historical record of daily maintenance activities, facility status, certification, operation, equipment performance, scheduled or unscheduled interruptions/outages, trouble calls made to Base Telco and Facilities Maintenance, adverse weather warnings/effects, emergency back-up generator load tests. Information referring to the status and certification of equipment should correlate with the ATCF Log. Based on work center organizational structure, a Work Center Duty Logbook shall be centrally located in the respective work center maintenance area. These logbooks serve as facility control logs for all remote site activities. The duty technician shall ensure entries provide enough detail to clearly and concisely convey necessary information.

6. Site Logbooks. To provide uniformity, meet security requirements, and facilitate other site access needs, site logbooks shall be used at the discretion of the ATCMO.

7. Casualty Report (CASREP) Messages. When an equipment malfunction requires release of a CASREP message, the MCIEAST ATC T&R Office NAALS Program Manager shall be notified for situational awareness. CASREP messages shall be addressed and released in accordance with references (a), (b), (h), Navy/Marine Corps ATC web site, and this Order. Additional guidance for meteorological systems CASREP messages is provided on the Navy/Marine Corps ATC web site. "Pass to" codes are no longer required. When generating a CASREP message using Automated Message Handling System (AMHS), the following standard subject identification shall be used:

CASREP Description (Initial) (Update #) or (Correct) Serial Number (Year Number) Equipment Nomenclature (System) Originator (MCAS or MCAF XXX)

Example: CASREP INITIAL 2017001 AN/FPN-63 MCAS NEW RIVER

A CASREP log shall be maintained. A copy of all CASREP messages shall be retained for a period of two years.

8. General Administrative (GENADMIN) Messages. GENADMIN messages shall be used when directed by the supporting activity to request training or on-site technical support, part replacement during the interim support period prior to material support date, and replenishment or replacement of On-Board Repair Parts (OBRP). GENADMIN message addressing differs from the CASREP addressing requirements. A GENADMIN template is located on the Navy/Marine Corps ATC web site. Message PLAD CG MCIEAST MCB CAMLEJ ATC TR shall be included as an INFO addressee.

9. Operational Capability Improvement Requests (OCIR). A NAALS OCIR shall be initiated to identify a deficiency and describe the capability required to alleviate the deficiency. Any known or proposed solutions to the operational problem should be provided; however, specific equipment should not be requested. Impacts to manpower, operations, safety, or efficiency should be provided for each of the solutions.

a. The OCIR shall be prepared using the process identified in reference (b). The Navy/Marine Corps ATC website provides additional guidance.

b. The OCIR shall be submitted via the chain of command as an enclosure to a CO cover letter. CNO (N980A) will not accept OCIRs without proper "via" command endorsements.

c. Advance coordination with the MCIEAST NAALS Program Manager will ensure accurate OCIR addressing for MCIEAST First Endorsement and follow-on tracking.

d. The signed OCIR in Portable Document Format (PDF) shall be emailed to the MCIEAST NAALS Program Manager to expedite preparation of the First Endorsement.

10. Guiding References. Appendix C provides a minimum list of references and instructions relative to management of ATC systems maintenance. Applicable guiding references, instructions, and source links to various supporting documents are available on the Navy/Marine Corps ATC web site. The Maintenance Officer shall ensure compliance with the most current version. Additionally, Appendix D provides a list of useful source links with Uniform Resource Locators (URL).

11. Reports and Records. References (a) and (b) identify specific reports and records that are subject to review during a NATOPS Evaluation. Appendix E provides a list of required reports, records, and files to be maintained in accordance with guiding references and this Order.

12. Submission of Requirements and Reports. The requirements identified below shall be prepared and submitted as follows:

a. Biennial configuration validation package to SPAWAR Atlantic Configuration Data Management (CDM) Team. Individual equipment configuration changes shall be submitted to CDM Team as changes occur.

b. Annual NATOPS Self-Evaluation results to MCIEAST-MCB CAMLEJ ATC T&R Office.

c. Annual five-year Training Input Plan requirements to the MCIEAST NAALS Program Manager.

d. Annual fiscal year formal training requests to the MCIEAST NAALS Program Manager.

e. As needed to provide situational awareness to the MCIEAST NAALS Program Manager, any changes in ATCMD key personnel, changes in equipment operational status, equipment CASREP messages prior to release, and revisions of formal training requirements and reservation requests to allow for substitution to maximize quota utilization.

13. Technical Publications. A master library shall be established and maintained at the Maintenance Division level to ensure currency and serviceability of technical publications and references. Electronic or paper versions are acceptable. The Navy/Marine Corps ATC web site provides links to current equipment technical publications. A Publications Representative shall be assigned to ensure currency and serviceability of one master library copy. At least one working copy shall be available at the applicable equipment work site.

14. Recorders. Guidance for the use of recorders, retention and release of original voice and video recordings, maintenance and custody of voice/data recordings and making certified copies of recordings is provided in reference (a). The specific procedure for making a certified copy of voice and data recordings shall be included in local SOP.

15. Service Interruptions. All scheduled equipment outages shall be coordinated in advance with the ATCFO and Air Field Manager to issue required NOTAM's. Reference (a) provides advance notification time requirements for service interruptions.

a. Scheduled. When planned or corrective maintenance requires equipment shutdown that will affect the mission of MCAS/MCAF or any other agencies with whom there is a support agreement, the proper authority shall be notified and provide approval prior to the actual shutdown. When requesting permission to take control of any equipment for routine maintenance, the ATC Facility Watch Officer (ATCFWO) shall be provided an expected time of when the equipment will be returned to service. The ATCFWO's permission is required prior to routine maintenance, equipment change, or any action that may cause unexpected equipment interruptions. The ATCFWO's final approval to execute this type of action must be explicit and may not be assumed. The ATCFWO shall be notified when there is any reason equipment cannot be returned to service within the allotted time. The ATCFWO shall be notified when equipment is ready to be returned to service.

b. Unscheduled. An unanticipated shutdown caused accidentally or by circumstances beyond control shall be immediately reported to the ATCFWO. When a mission essential system gives erroneous information or operates outside published parameters, the ATCFWO shall be notified via recorded landline and the appropriate logbook entries shall be made. When an emergency shutdown is required to prevent failure or damage to a system or essential equipment, the ATCFWO shall be given as much notice as feasibly possible. If catastrophic failure is imminent, the system shall be shut down with immediate follow-up notification of actions taken. The impact a failed system has on its users determines the urgency of service restoration. If more than one system, subsystem, or equipment fails simultaneously and maintenance personnel cannot respond to all failures, the ATCFWO shall determine the order in which the equipment is repaired.

16. Service Restorations. Per reference (b), a system, subsystem, or piece of equipment that experiences a failure affecting its performance parameters shall not be operated outside the baseline performance parameters. It shall be removed from service until it is repaired. The senior qualified technician shall ensure the equipment is operating within the baseline performance parameters before allowing the equipment to be returned to service. Most ATC systems do not necessarily lose their certification when removed from service for repair. However, when systems having flight inspection criteria are removed from service for repair these systems can lose their certification to operate in the NAS if the repairs impact the requirements of reference (i) and the ISEA certification process for that system. The ATCMO must verify whether or not a FAA flight inspection is

required before placing that system back in service. Recertification via the Ground Inspection Program and a FAA flight inspection is required.

17. Flight Inspection. Per reference (b), a flight inspection is required for newly installed or relocated radar/navigational aids (to include replacement antenna). Special and periodic flight inspections shall be scheduled in accordance with the requirements and procedures set forth in reference (i). Qualified technicians shall be assigned to assist as applicable. Commissioning flight inspections and the most recent flight inspection report for ATC radars, landing systems, and NAVAIDS, as well as magnetic offset (variation) information shall be retained in the ATCF Electronics Manual.

18. Security. Physical security of ATCM work spaces and associated equipment is paramount. Guidance is provided by reference (j). All personnel share the responsibility for ensuring that equipment sites, gates, and cipher locks are secured. Access to ATCMD equipment shall be monitored. Visitors on official business should have a genuine need to receive access to ATC facilities. Unofficial visitors and tours must be escorted at all times. Observe, politely challenge, assist, and report any strangers in ATCMD areas as necessary. Security of the integrity and operation of ATCMD computer systems and associated software is of utmost importance. All personnel shall take the necessary precautions to safeguard both personal and organizational passwords from unauthorized access. In the event of any information system security incident notify ATCMO and follow local security directives.

19. Frequency Requests or Relocation of Transmitting Elements. Coordination with local Station and/or MCIEAST Spectrum Management Office shall be conducted, as necessary, when projects require new frequencies or changes to existing Radio Frequency Authorizations (RFA). This includes communications, navigational aids, and radar frequencies.

20. Relocation of NAALS Equipment. Relocation of NAVAIDS (i.e., TACAN, Radar, reflectors) shall comply with reference (b). Coordination shall be made with ATCFO, Resident Officer in Charge of Construction (ROICC), applicable ISEA, local and regional facility planners, and the comptroller to ensure resources and funding are available to support equipment relocation.

21. Facility Buildings and Grounds. Buildings, poles, generators, and other facilities utilized by the ATCMD are maintained by the Station/Base Facilities Maintenance/Public Works Department or under contract maintenance. A list of building numbers, purpose, phone numbers, size generator, and air conditioning requirements shall be compiled for immediate reference to ensure serviceability and maintenance of commercial power, auxiliary power including Uninterruptible Power Sources (UPS) and emergency generators; Environmental Control Units (ECU); Heating, Ventilating, and Air Conditioning units; and to effect building repairs to those sites supporting ATC equipment and systems. Local SOP shall address the submission process, prioritization, and subsequent response follow-up procedures to report emergency trouble calls and routine work requests.

22. Emergency Power. Per reference (a), auxiliary power sources must be maintained in optimum operational condition. Local SOP shall address routine and emergency maintenance of emergency power sources. A program of preventive maintenance and periodic load and no-load operation shall be

established to ensure maximum continuity of ATC services. When scheduled power outages occur, technicians shall man those sites without an UPS, automatic transfer switch (ATS), and remote power monitoring to ensure a smooth transfer of power from commercial power to generator and back to commercial power.

23. Environmental Control Units (ECU). It is imperative to operate electronic equipment within manufacturer specifications; most often this requires cooling to offset generated heat. ECU providing air-conditioning must be operational 24 hours a day. Local SOP shall address routine and emergency ECU maintenance. If ECUs cannot be repaired within a reasonable time frame, the ATCFWO shall prioritize systems that can be turned off to prevent damage while still enabling mission.

24. Grounding, Bonding/Shielding, and Lightning Protection. The grounding, bonding and shielding, and lightning protection of electronic equipment and systems shall be inspected in accordance with reference (k). The recommended periodicity for lightning protection inspection is 21 to 24 months.

25. Destructive Weather. The ATCMO shall establish an ATCMD destructive weather plan that has the approval of the ATCFO and AirOpsO and is consistent with the local station/facility Destructive Weather Order. The plan shall include equipment-specific procedures required to secure NAALS equipment for impending weather conditions. The ATCMO shall ensure supplies and materials necessary to appropriately secure equipment are readily available. All destructive weather notifications and subsequent actions taken shall be recorded in applicable duty logbook.

26. Vehicles. Based on location, span of control, system diversity and geographic/weather conditions, the ATCMO shall ensure availability of adequate quantity and type of vehicles required to assure timely access to all systems/equipment under his/her cognizance.

Chapter 4

Technical Training and Qualification Program

1. General. This chapter provides guidance to the ATCMO for the development and maintenance of a standardized technical training and qualification program that is both extensive and well-documented in accordance with references (a) and (b).

2. Purpose. The purpose of the ATCMD Technical Training and Qualification Program is to ensure technicians have attained the knowledge and ability on assigned NAALS equipment to: properly install and maintain; perform ground inspections; verify equipment/systems are operating within ISEA established performance parameters; and provide SME quality instruction.

3. Scope. To provide for continuing development of all technicians assigned to the ATCMD, progressive technical and qualification training shall include locally-developed Job Qualification Requirements (JQR) or On-the-Job-Training (OJT), applicable ISEA-developed JQR, available formal schools, training provided by ISEA upon equipment installation, applicable computer-based training, and recurrent safety training.

a. All locally-developed OJT lesson plans, guides, student handouts, and other materials to support the training program shall be reviewed against applicable equipment technical manuals and PMS MRCs to ensure currency prior to utilization.

b. Approved ISEA-developed JQR for applicable ATC systems shall be incorporated into the technician's technical training process in accordance with reference (b). These JQR shall be utilized concurrently with the locally-developed OJT to document technician qualifications to perform maintenance and ground inspections on the associated ATC systems. The ATCMO shall appoint, in writing, JQR Qualifiers to sign off individual JQR line items. At a minimum, JQR Qualifiers should be an Advance Maintenance Technician (AMT) or SME who has completed the JQR they are being authorized to sign off.

c. Formal school training promotes technical proficiency. ISEA-developed JQR may identify specific formal training requirements as a requisite to attain the final technical qualification. Formal school training opportunities should be maximized to the extent of available quotas. All requests for formal training at Naval Air Technical Training Center Pensacola shall be routed through the MCIEAST ATC T&R Office NAALS Program Manager for reservation coordination.

d. Monthly maintenance training topics shall be incorporated into the training process to enhance continued development of technical knowledge and skills. This training can be conducted at the division or work section level. Topic and attendance shall be documented in technician's technical training and qualification record.

4. Technical Training and Qualification Record. Appendix F provides sample documentation materials the ATCMO may utilize to establish a standardized Technical Training and Qualification Record. At a minimum, a technician's Technical Training and Qualification Record shall include a record of audit,

ATCM orientation checklist, applicable MOS Duty Summary tailored to reflect current equipment configuration, locally-developed technical training, applicable ISEA-developed JQR, knowledge testing results, formal school completion certificates, qualification level assigned, and appropriate designation letters. Recurrent annual safety training, follow-on formal training, computer-based training, on-line training completed via MarineNet, My Navy Portal (MNP), Enterprise Safety Applications Management System (ESAMS), and any off-duty courses relevant to primary duties should also be documented. Training records shall be maintained until the technician transfers or has reached end of active service at which time the training record will be given to the technician as evidence of experience.

a. All technical training shall be documented by the instructor as it occurs. This documentation will be used to track student progress, project training time, and substantiate the information recorded in the technician's Technical Training and Qualification Record.

b. For ATC systems with an approved ISEA-developed JQR, all line items shall be initialed by the designated JQR qualifier after the student has shown sufficient knowledge of the requirement. Once the student completes the JQR levels, the JQR qualifier shall recommend qualification to the ATCMO.

c. The MOS Duty Summary page should identify the equipment/system for which training has been completed, date of applicable level review, and the qualification designation assigned by the ATCMO.

5. Training Progression. The ATCMD Technical Training and Qualification Program is a progressive training process to develop a technician's proficiency to maintain NAALS equipment within prescribed parameters. This process encompasses multiple single system qualifications at different levels to obtain the desired qualification designations. The process of single system qualification training begins as follows:

a. Trainee. This is the initial title/status of a new join who has not completed the Basic Maintenance Technician (BMT) training to obtain qualification as a Watch Stander on assigned NAALS equipment. Trainee will simply be referred to in this order as a technician. Depending upon MOS or civilian GS-0856 prior experience, the technician will be assigned to the appropriate work center and crew to begin a general overview of ATCMD. A technician will begin training on the topics of orientation and safety before starting to complete system line items on BMT requirements. A sample list of typical orientation topics is contained in Appendix F. Based off recommendations and progress documented in the technician's Technical Training and Qualification Record, the ATCMO may identify the technician as a Crew Stander or Watch Stander-in-Training with limited duties based on their completed line items or single system. For example, if Cardiac Pulmonary Resuscitation (CPR) qualified and orientation and safety training has been completed, the technician may be used as a safety person. However, the technician shall not be considered a qualified Watch Stander until complete with all required training.

b. Basic Maintenance Technician (BMT). Once the technician has completed the Work Center orientation training, they will begin training for BMT qualification on each system assigned to the Work Center. BMT is a single system qualification title applicable to a technician who has

completed all the BMT requirements for that specific system. In this phase, the technician will continually progress through each system to become BMT qualified on all NAALS equipment/systems assigned to the work center. BMT training will provide adequate instruction from system familiarization to the successful troubleshooting and replacement of faulty lowest replaceable unit (LRU), with the exception of component level repair. BMT training will include instruction on block diagram, signal flow, circuit description, controls/indicators, operating characteristics, PMS, and system troubleshooting and repair techniques. This training will be accomplished via locally-developed OJT and, as applicable, the ISEA-developed JQR. BMT shall be able to perform daily turn up/turn down procedures, complete PMS (exceptions are Ground Inspection and elaborate MRCs), demonstrate proficiency through practical application to determine operational status, and successfully troubleshoot problems to identify and replace faulty LRUs on a system. Qualification training may occur on multiple equipment/systems simultaneously. Progression shall be documented in the technician's training record as requirements are completed. Instructors shall initial completed line items and system SME shall evaluate and test the technician on fully completed system BMT training. Results from the evaluation and testing will be provided to the WCS. Training will continue until all BMT requirements have been satisfactorily completed on all assigned systems/equipment. Successful completion of BMT training and qualification requirements is the basis for designation as a Qualified Watch Stander.

c. Advanced Maintenance Technician (AMT). This is a single system qualification title applicable to a BMT who has completed all the AMT requirements for that system. In conjunction with locally developed OJT, if the system has a ground inspection requirement, the technician shall complete the ISEA-developed JQR thru the final qualification section to include formal school. Upon completion of AMT requirements, the technician will be able to perform full testing and alignment of assigned equipment/system; demonstrate proficiency through PMS (to include Ground Inspection MRCs) to ascertain equipment/systems are operating within established performance parameters and tolerances; successfully troubleshoot to component level; and perform subsequent repair to the level authorized. Qualification training may occur simultaneously on multiple equipment/systems. Progression shall be documented in the technician's Technical Training and Qualification Record as requirements are completed on assigned equipment/systems. A SME shall be the qualified instructor for AMT training, shall initial completed line items, and make recommendations for technician qualification. Successful completion of AMT training and qualification requirements is the basis for subsequent designation as a Qualified Ground Inspection Technician and/or Basic Maintenance Technician Instructor.

6. Time to Attain Watch Stander Qualification. The time required to complete the BMT training and qualification requirements for all systems assigned to a work center will vary based on organizational structure, manning, and equipment configuration. However, the time to attain qualification as a Watch Stander should take no longer than one year to accomplish. The following provides estimated times in which to complete the training and satisfy Watch Stander qualification requirements by work center.

a. Common Orientation Training is estimated to take one month to accomplish. If work centers are combined, it will only be included once.

b. Typical Communications Work Center – 4 to 6 months.

c. Typical Navigational Aids Work Center (TACAN and ILS) – 2 months.

d. Typical Radar Work Center - 9 to 12 Months.

e. Typical Weather Work Center (ASOS) - 1 Month. Weather systems may be consolidated within another Work Center as ATCMO deems appropriate.

f. If manning permits, it is recommended one month be allotted for shadowing an experienced technician prior to attaining final qualification.

g. At a minimum, within one year of attaining Watch Stander designation, qualified Watch Standers shall complete single-system AMT training and qualification requirements for at least one system. Attaining AMT qualification in multiple systems represents the ideal progression throughout a technician's time at station.

7. Qualification Designations. A qualification designation shall be consistent with documentation and include the prescribed responsibilities for maintenance and ground inspection of specified systems. The Appendix section of this Order provides sample designation letters that may be tailored for organizational and equipment configuration.

a. Watch Stander. The technician has completed the Basic Maintenance Technician training and qualification requirements on all equipment/systems within the Work Center to which they are assigned. On systems that have ISEA-developed JQR, the technician will have completed all JQR line items thru Section 301. The technician must meet all the requirements to obtain an airfield driver license. The WCS will provide the necessary documentation to the ATCMO, via the ATCMC as appropriate, for a designation in writing as a Watch Stander qualified to stand an independent watch and perform maintenance on all systems within that Work Center. Refer to Appendix G Sample Watch Stander Designation Letter.

b. Qualified Ground Inspection Technician. For specific NAALS equipment/systems having a ground inspection requirement, the technician has completed AMT training, applicable ISEA-developed JQR, and the required formal school. WCS will provide necessary documentation to the ATCMO, via the ATCMC as appropriate, for a designation in writing as a Qualified Ground Inspection Technician qualified to perform ground inspection and maintenance on the specified system. Refer to Appendix H Sample Qualified Ground Inspection Technician Designation Letter.

c. Basic Maintenance Technician Instructor. The technician has completed the AMT training on specified single equipment/systems within assigned work center. Formal school is not a requirement unless specifically identified. WCS will provide necessary documentation to the ATCMO, via the ATCMC as appropriate, for a designation in writing as a Basic Maintenance Technician Instructor qualified to provide instruction to BMTs on the specified equipment/system within that Work Center. Refer to Appendix I Sample Basic Maintenance Technician Instructor Designation Letter.

d. Subject Matter Expert. An AMT being considered for designation as a SME has completed the following: Advance Maintenance Technician training on

the specified equipment/system(s); if applicable, the ISEA-developed JQR through the required final qualification section; the applicable formal school or have five years of documented experience and provided peer-reviewed instruction on that system. System SMEs will provide necessary documentation and make recommendations to the ATCMO, via the ATCMC as appropriate, for a technician's designation in writing as a SME on the recommended system. Refer to Appendix J Sample Subject Matter Expert Designation Letter. Once designated, the SME shall develop and/or utilize lesson guides and applicable instruction material to conduct technical qualification training on systems for which they are SME Qualified.

8. Qualification Approval Authority. In accordance with reference (b), the ATCMO is the qualification approval authority. After consultation between the SME, WCS, and ATCMC, a recommendation will be made to the ATCMO for a technician's qualification designation based upon successful completion of all assigned technical training and qualification requirements for the specified systems. The ATCMO shall review the technician's documented training accomplishments and recommendations. The ATCMO shall designate maintenance technicians in writing as qualified to perform maintenance and ground inspections applicable to level of qualification attained.

9. Annual Audit. WCS and ATCMC shall audit technician training records as needed to ensure currency of training documentation. ATCMOs shall conduct a calendar year audit of all technician training records to ensure progression of training towards maximum qualification.

10. Qualification Review. Reference (b) requires technicians receive a qualification review on systems they are required to maintain at a minimum of every four years, or more often as directed by the ATCMO. Designated Watch Standers shall receive a qualification review annually. Designated AMTs and SMEs shall undergo a qualification review at least once every 4 years or as deemed necessary by the ATCMO. The qualification review shall include documented satisfactory completion of critical MRCs and may include a written examination and/or oral interview to further assess technical knowledge and understanding of station-unique ATC systems configurations. The qualification review shall be documented in the technician's training record.

11. Cross-training and Qualification. Technicians may be cross-trained and qualified on additional or secondary systems to the extent permitted by references (b) and (d).

12. Airfield Vehicle Operators Course. All ATCMD technicians shall attend the local Airfield Vehicle Operators Course established in accordance with reference (a). Attendance at the course shall be documented. Technicians shall possess a current local airfield driver's license and/or permit. Exceptions to this requirement may be made by ATCMO at his discretion.

13. Cardiac Pulmonary Resuscitation (CPR) Certification. All ATCMD electronic technicians shall maintain current CPR certification in accordance with reference (f). Attendance of course shall be documented. Technicians will be trained on Automated External Defibrillator if available for use within ATCMD.

14. Safety Training. Safety training shall be completed before working around or training on electrical equipment to include acting as a safety

person. Refresher training as required by reference (f) shall be conducted annually thereafter. Local Base Safety Office normally provides and tracks some of the required annual Navy Safety and Occupational Health (NAVOSH) Program training. Any additional NAVOSH required training may be locally generated and the content approved by the Safety Officer prior to use. Appendix K provides a list of applicable ATCMD safety training topics and may be used to document completion.

Chapter 5

Safety

1. General. This chapter identifies general requirements for working safely with electronic equipment and is meant to complement the Command's prescribed safety program.

2. Purpose. The safety directives identified in references (f), (l), and the station's prescribed safety program shall be utilized to develop an ATCMD Safety SOP applicable to maintenance of NAALS equipment. Additionally, manufacturer's operating or maintenance manuals may contain equipment specific safety criteria and guidelines.

3. Scope. Safety shall be a major responsibility of all personnel. Every person who works with electronic equipment shall be fully informed of the dangers and alert to the hazards of this equipment. Only competent, trained personnel shall be permitted to work on ATCMD electrical and electronic equipment/systems.

4. Division Safety Officer/NCO. The ATCMO shall assign a Marine NCO or civilian electronics technician as the Division Safety Officer/NCO to assist in safety related matters.

5. Qualifications. Only qualified personnel, or unqualified personnel under the direct supervision of a qualified person, shall perform maintenance (corrective or planned) on electrical and electronic systems and equipment. Qualification standards are contained in the training chapter of this Order.

6. Personal Protective Equipment (PPE). Applicable PPE shall be provided and used where there is a reasonable probability that the use of the equipment will prevent or reduce the severity of occupational injuries and/or illnesses. PPE procurement and enforcement of proper use and maintenance is the responsibility of each division. Local SOP shall outline the procurement process and enforce the proper use and maintenance of PPE.

7. Emergency Electronics Safety Equipment. Safety equipment shall be readily available to personnel. All personnel shall be advised and aware of its location. Safety equipment should include those items identified as necessary by the local safety manager and supervisor.

8. Electrical Panels, Circuit Breakers, Emergency Power Off (EPO) Switches. Covers on electrical panels and other types of wiring equipment and accessories shall be kept securely closed except when work is being performed on them. All circuit breakers shall be clearly marked as to their function. Personnel must be aware of the location of room EPO switches, if installed; circuit breaker powering the equipment/system; and the output of UPS on which they are performing maintenance. Electrical outlets, other than 120 volts, shall be clearly marked as to their voltage.

9. Danger, Caution, and Warning Signs. Danger, caution and warning signs or tags shall be posted to alert personnel to actual or potential hazardous conditions involving electricity, e.g., high voltage, Radio Frequency (RF) radiation, electron tubes, trip hazard, etc.

a. RF hazard signs shall be posted in all areas where such hazards exist. Caution must be taken in these areas to minimize the risk to personnel, flammable vapors, and ordnance.

b. Safety warning and caution signs, to include but not limited to, the use of power and hand tools, electrical shock, electronic safety, and hazardous materials are to be posted in conspicuous locations at work center spaces and equipment sites.

10. Ionizing Radiation. Warning signs shall be posted when working around electron tubes, such as high-power klystrons, magnetrons, thyratrons, cathode-ray tubes, and high voltage rectifiers. All warning signs must be observed and all applicable technical manual procedures followed when working on such systems.

11. Fire Safety. In the event of an electrical fire, all circuits affected shall be de-energized if possible and the local fire department contacted. Only approved fire-fighting equipment should be used when necessary for escape from workspace. A fire bill and viable evacuation route shall be posted in a conspicuous location at each work center and equipment site. An appropriately classed fire extinguisher shall be located at each work center and equipment site. Fire extinguishers shall be inspected on a monthly basis and replaced as needed.

12. Environmental/Temperature Alarm. Alarms are installed at each remote equipment site to alert a watch stander to take immediate action in the event a high temperature condition occurs at an unoccupied remote site.

13. Lighting. Each work center and site location shall have adequate lighting to permit planned and corrective maintenance. All lighting, to include emergency lighting, exterior lighting, and obstruction lights, must be checked periodically to ensure they are operating properly. Bulbs and lighting circuitry shall be repaired or replaced immediately to ensure minimal downtime and to prevent injuries or mishaps.

14. Working on Energized Circuits. The Occupational Safety and Health Administration (OSHA) electrical safety standards contained in reference (l) applicable to working on energized circuits shall be followed.

a. Repairs are not to be made on energized circuits except in an emergency and must be approved by the ATCMO.

b. Strict compliance with the "TWO-PERSON" safety rule shall be utilized while working on energized circuits.

(1) Do not work alone on energized equipment that can cause bodily harm or loss of life.

(2) A safety person is required anytime a technician performs a planned or corrective maintenance procedure that exposes him/her to "energized" or "hot" circuitry that can cause bodily harm or loss of life. A safety person is defined as an electronics technician, who is CPR-qualified, capable of rendering first aid for electrical shock, and aware of the main circuit breakers at the site or location at which he/she is assisting.

15. Control of Hazardous Energy (Lockout/Tagout). Local SOP shall include an approved Hazardous Energy Control program in accordance with reference (l).

16. Safety Posters and Periodicals. Safety posters and periodicals shall be posted where applicable and made available to all personnel. Recommended posters should include CPR, treatment for electrical shock, and other first aid treatment procedures.

17. Hazardous Materials (HAZMAT). ATCMD personnel shall be informed of the types and uses of hazardous materials found in workspaces. An ATCMD HAZMAT SOP shall include approved procedures for obtaining, marking, storing, and properly disposing of HAZMAT in accordance with local directives. Applicable Safety Data Sheets (SDS) shall be readily available to technicians.

18. First Aid and CPR. All personnel who perform maintenance on electrical or electronic equipment, or who supervise personnel who perform maintenance on such equipment, shall receive training in first aid procedures for electrical shock and maintain a current CPR qualification in accordance with reference (f). Refresher training shall be scheduled and completed as necessary to maintain current certification of the trained personnel.

19. Grounding, Bonding, and Shielding. Annual inspections to visually check for signs of markings, continuity, corrosion, and resistance shall be conducted on all grounding systems and lightning protection systems in accordance with reference (k).

Chapter 6

Maintenance and Material Management (3-M)

1. Purpose. To implement MCIEAST regional directive that enhances the maintenance management policy within MCIEAST.

2. Scope.The 3-M System as outlined in references (b) through (d), and the supplemental regional guidance in the following chapter shall apply to all MCIEAST stations.

3. Planned Maintenance System (PMS). PMS provides the tools for planning, scheduling, and accomplishing preventive maintenance to maintain equipment within specifications. SKED is the automated maintenance scheduling program used for PMS scheduling and constitutes full compliance with the administrative provisions in reference (d).

a. The ATCMO and 3-M Coordinator shall ensure the most current approved version of SKED is installed. Updates are distributed on the Force Revision disk.

b. SKED shall reflect all installed equipment as reported in configuration.

c. A 13-Week Accountability Log shall be maintained and contain the 13 previous weeks of the 13-Week report.

d. Three quarterly schedules (current plus last two archived quarters) shall be retained.

e. PMS maintenance requirements shall only be performed by a qualified technician or under the direct supervision of a qualified technician. When PMS maintenance requirements are performed under the direct supervision of a qualified technician, the qualified technician is ultimately responsible for the quality of work.

4. PMS Feedback Reports. The technician will inform the WCS if a procedure cannot be performed in accordance with the MRC, or if the technician determines there is a more efficient way to accomplish the procedure. The technician will assist the WCS with generating a PMS Technical Feedback Report (TFBR) using the SKED TFBR Wizard. ATCMO shall approve the TFBR prior to release. A history file shall be maintained in SKED.

5. PMS Self-Assessments. The ATCMO shall ensure an aggressive PMS self-assessment process is in place and spot checks are being completed as required. Appendix L contains MCIEAST standardized 3-M assessment materials and MRC Evaluation and PMS Spot Check Sheet.

a. The minimum number of spot checks required are as follows: ATCMO 1 per quarter, ATCMC 1 per work center per quarter, 3MC 1 per work center per month, WCS 3 per assigned work center per month. If multiple billets are held, the higher number of applicable spot checks shall be completed.

b. A flip page entry shall be made in SKED to record the spot check noting the MRC, date, technician, evaluator, and any pertinent information

relating to the spot check. The PMS Accomplishment Confidence Factor report shall at minimum reflect the required number of spot checks.

c. Retention of hard copy MRC Evaluation and Spot Check Sheets is optional, but highly recommended due to the character limits on the flip page.

d. The MRC Evaluation and Spot Check Sheet may also be used to record work center technician qualification/requalification spot checks. However, these checks shall not count toward fulfilling 3-M spot check requirements.

6. Corrective Maintenance. In accordance with reference (b), when equipment/system does not meet the required performance standards and tolerances, it shall be removed from service until repaired.

a. All corrective maintenance actions shall be documented in MDAT. An appropriate Maintenance Action Item (MAI) shall be generated to record all actions taken to return a piece of equipment to its established operating parameters or to correct any equipment malfunctions reported by ATC supervisory personnel. This does not include improper switch settings or operator error.

b. All equipment/systems not in operation to include spares shall be tagged as to their current status. Acceptable status includes Ready for Issue (RFI), Awaiting Maintenance (AWM), and Awaiting Parts (AWP). RFI tags shall include date and initials of technician who verified equipment status and tagged the equipment. AWM and AWP tags shall include MAI number, date, and initials of technician who tagged the equipment.

c. After considering the ATCMD's technical and material assets, the ATCMO may authorize "component level" repairs on equipment/systems under his/her cognizance. The following exclusions apply:

(1) Special and general-purpose electronic test equipment.

(2) Those special components and assemblies restricted to depot level maintenance by Coordinated Shore Based Allowance List (COSBAL), Source Maintenance and Recoverability (SMR) codes, and applicable User's Logistics Support Summary (ULSS).

7. Maintenance Data Analysis Tool (MDAT). MDAT, a web-based real-time maintenance data collection tool used for reporting system performance data, is the approved program for tracking, recording, and reporting maintenance actions to support the Maintenance Data System (MDS) requirement of references (c) and (d). MDAT is supported and accessible on the Navy/Marine Corps ATC web site. The ATCMO shall ensure accurate maintenance data is reported. Local SOP shall provide detailed guidance for maintenance action documentation in MDAT. All open MAI and requisitioned parts shall be reconciled weekly.

8. Configuration Data Management. At a minimum, an electronic validation of all NAALS equipment and software configuration data shall be completed every two years via CDM@navy.mil. Configuration data may be updated as necessary to capture additions or deletion of assets and changes to serial number and/or equipment location. A validation should be completed upon turnover of

ATCMOs. Additionally, the ATCMO shall maintain a log containing a list of software based systems, record of software changes and current versions, and current list of users and passwords in secure storage.

9. Field Changes and Modifications. Authorized field changes and modifications shall be installed and properly recorded through the CDM validation process. Unauthorized modification to ATC systems is not allowed. If a new or modified capability is required, an OCIR shall be prepared in accordance with reference (b) and submitted for approval.

10. Locally Purchased Equipment. Any equipment or system purchased locally or regionally to support other missions that are maintained by the ATCMD (e.g., squadron radio assets), shall to the maximum extent practical be standardized with current ATC systems to minimize support requirements such as logistics, test equipment, and technician training. This equipment may be added to MDAT as a local configuration item.

11. Test Equipment. Coordination with SPAWAR Atlantic ensures accurate test equipment allowance based on site configuration is available. Site specific Test Equipment Allowance Process (TEAP) report is available on the Navy/Marine Corps ATC web site.

a. Calibration of Test Equipment. All test equipment shall be added to the Metrology Automated System for Uniform Recall and Reporting (MEASURE) system via the MEASURE Interactive Query (MIQ) Program. Test equipment shall be calibrated on schedule in accordance with reference (m). Test equipment is normally calibrated by a Navy or Marine Corps calibration lab. A civilian calibration lab is authorized as long as the test equipment is calibrated within periodicity with standards and procedures that are traceable to National Institute Standards and Technology, and returned with a calibration letter. Current calibration records shall be retained.

b. Test equipment shall be properly used, stored, and maintained. Test equipment shall be inspected before each use to ensure serviceability and verify a current calibration sticker is affixed. Test equipment that is unserviceable or out of calibration is not authorized for use. Test equipment shall be inventoried monthly within the work centers and quarterly within the division.

12. Tools. An ATCMD tool control program shall be established in a local SOP. Tools and toolboxes shall be identifiably marked. Tools shall be inventoried and checked for serviceability monthly within the work centers and quarterly within the division. Local SOP shall identify the process to report and replace unserviceable or missing tools.

Chapter 7

Equipment Certification

1. Introduction. Enclosure (3) of reference (b) Air Traffic Control (ATC) Systems Maintenance Ashore provides guidance for equipment certification.

2. Federal Aviation Administration Flight Inspection. The FAA conducts flight inspections in accordance with reference (i). When a system requires a FAA flight inspection, the ATCMO shall coordinate with ATC to schedule.

3. Ground Inspection. Ground inspection of ATC systems and equipment is accomplished in accordance with reference (b) and applicable MRCs.

a. Ground inspections shall be performed as follows:

(1) as required by PMS,

(2) as required to verify the proper operation of systems within the performance parameters established by the ISEA,

(3) after any maintenance activity affecting a certification parameter,

(4) prior to returning the system to service, and

(5) after an aircraft accident or incident.

b. Ground inspections shall only be performed by qualified technicians with documented evidence of their capability to verify that a system is operating within baseline performance standards and tolerances. The ATCMO is the sole qualification approval authority. Maintenance technicians shall be designated in writing as qualified to perform ground inspection and maintenance for each system on which they are qualified.

c. In accordance with reference (b), completed equipment performance standards shall be retained on file for at least two years. This documentation is a critical element of the ATC NATOPS evaluation required by reference (a).

Chapter 8

Supply Process

1. Purpose. Utilizing references (n) and (o), a local supply SOP shall identify the process of requisitioning and receiving parts in support of ATC equipment maintenance.

2. Requisition Preparation. Parts shall be requisitioned in a timely manner using standard MILSTRIP in accordance with references (n), (o), and locally established and approved supply procedures. Requisitioned parts shall be associated with an applicable maintenance action item documented in MDAT to capture data contributing to total ownership costs. Requisition priority shall be assigned based on system failure and mission. Any priority "03" CASREP parts shall be assigned a "W" document number and be identified on the associated CASREP message.

3. Depot Level Repairable (DLR) Requisitions and Carcass Tracking. All DLR requisitions shall be submitted through the Navy Supply System using standard MILSTRIP in accordance with references (n) and (o). This ensures that maintenance deficiencies are reported to validate Navy Supply (NAVSUP) Weapons System Support (WSS) Mechanicsburg sparing by tracking supply/demand usage data. DLR carcass tracking is performed by NAVSUP WSS Mechanicsburg in accordance with reference (n). To ensure timely carcass tracking and applicable net price billing for each DLR, the original requisition number shall be utilized when returning the failed carcass.

4. Reconciliation. Status of all outstanding requisitions shall be regularly reconciled with Station Supply until received. Frequent reconciliation with Station Supply and Comptroller shall occur until proper credit for DLR carcass is accounted for. Final liquidated price shall be updated in MDAT prior to MAI closure.

5. On Board Repairable Parts (OBRP). Equipment User Logistics Support Summary (ULSS) and BESEP identify a list of authorized OBRP, site spares, and consumables to support critical failures and/or long lead items. A current inventory of OBRP shall be maintained. Unauthorized DLR parts shall not be stocked as spares.

Chapter 9

MCIEAST ATCM NATOPS Evaluation Program

1. Purpose. This Chapter provides standardized procedures for evaluating functional areas within the ATCMD per references (a).

2. Goal. The overall goal of the MCIEAST-MCB CAMLEJ ATC NATOPS Evaluation Program is to evaluate, train, and assist MCIEAST-MCB CAMLEJ ATC Facilities and Maintenance Divisions to ensure compliance with applicable Naval, Marine Corps, and FAA policies and/or directives.

3. Scope. The MCIEAST-MCB CAMLEJ ATC T&R office is tasked with identifying and documenting problem areas as well as providing training and assistance to the functional areas by making recommendations for improving deficient areas.

4. MCIEAST-MCB CAMLEJ ATCM NATOPS Evaluation Team. MCIEAST-MCB CAMLEJ ATCM NATOPS evaluation team shall fall under the cognizance of the MCIEAST-MCB CAMLEJ ATC T&R Officer. Qualified ATCM personnel from a facility not being evaluated may be selected by the MCIEAST NAALS Program Manager to augment the NATOPS evaluation team. Advance coordination shall be made with the supporting ATCMO(s).

a. Due to the complexity of equipment configuration and SME qualifications, the following are prerequisites for selection of ATCM augments:

(1) minimum staff sergeant or civilian GS-0856;

(2) SME qualified in respective functional area; and

(3) minimum of five years of experience.

b. The following ATCM functional areas shall be evaluated:

(1) ATC Maintenance Administration (A) (NAALS Program Manager)

(2) ATC Maintenance Training (G) (NAALS Program Manager)

(3) ATC Maintenance Communications (C) (Applicable Augment)

(4) ATC Maintenance Radar (H) (Applicable Augment)

(5) ATC Maintenance Navigational Aids (NAVAIDS)(N) (Applicable Augment)

(6) ATC Maintenance Weather (W) (Applicable augment) Note: This functional area may be co-assigned to a Communications, NAVAIDS, or Radar evaluator augment.

5. MCIEAST-MCB CAMLEJ ATCM NATOPS Evaluations

a. NATOPS Evaluation. Conducted on an 18-month cycle but may be extended to a maximum of 24 months by the NATOPS evaluation unit for

facilities whose previous evaluations indicate a high degree of NATOPS effectiveness.

b. Internal Annual Evaluation. An internal ATCM NATOPS evaluation utilizing reference (a) and Appendix M of this order shall be conducted between 9-12 months after the last NATOPS evaluation. This evaluation shall be performed by an ATCM representative designated by the ATCMO. The MCIEAST NAALS Program Manager shall be notified upon completion. The results shall be forwarded to the MCIEAST ATC T&R Office via the AirOpsO or as locally directed in order to be coordinated with the internal inspections of ATC and Flight Planning.

c. Follow-up Evaluation. Follow-up evaluations are conducted when the MCIEAST-MCB CAMLEJ ATC T&R Officer deems outstanding problems/deficiencies identified during the NATOPS evaluation require further evaluation via an on-site visit. The follow-up evaluation should be conducted no more than nine months after the NATOPS evaluation.

d. ATCM NATOPS Assist Evaluation. At any time the installation CO, AirOpsO, ATCFO, or ATCMO may request an assist evaluation via AMHS. Areas to be evaluated and evaluation team makeup shall be determined by the MCIEAST-MCB CAMLEJ ATC T&R Officer and tailored to the specific request.

6. MCIEAST-MCB CAMLEJ ATCM NATOPS Evaluation Grading. Grading criteria in reference (a) shall be utilized during ATCM NATOPS Evaluations.

7. Grading Definitions. Grading definitions are outlined in reference (a). The following additional definitions may be used, as applicable, during MCIEAST-MCB CAMLEJ ATCM NATOPS Evaluations.

a. Not Applicable. This designation will be used to identify checklist items that do not apply to the facility being evaluated.

b. Not Observed. This designation will be used to identify checklist items that apply to the facility but which could not be observed (e.g., absence of specific events, weather phenomena) during the evaluation. These items will be discussed with facility personnel and affixed a grade based on the individual's knowledge.

c. Observed Event. This term identifies a situation witnessed by a member of the evaluation team and determined by the team to be significant. Observed events shall be addressed in the evaluation report.

d. Off-Checklist Item. Occasionally evaluators will observe an item not specifically identified on the checklist. The evaluator will denote the item in the report, identifying it as off-checklist and assign a control number.

8. MCIEAST-MCB CAMLEJ ATC/ATCM NATOPS Evaluation Reports

a. MCIEAST-MCB CAMLEJ ATC/ATCM NATOPS Evaluation Report. The results of the ATCM NATOPS Evaluation will be combined with those of the ATC Facility and Base Operations evaluations to produce a singular NATOPS evaluation report. The MCIEAST-MCB CAMLEJ ATC T&R Officer shall submit the evaluation report to the installation CO describing the effectiveness of the Air Traffic

Control Facility, ATC Maintenance, and Base Operations within 15 working days following the ATC NATOPS Evaluation. This report shall include:

(1) Evaluation team members.

(2) Synopsis of Findings and Discrepancies for each area evaluated, to include rating of Mission Capable or Non-Mission Capable.

(3) Discussion of Findings and Discrepancies for each area evaluated in the following format:

(a) Control Number;

(b) Checklist number and question (Per reference (a) and Appendix M of this Order);

(c) Non-Compliance (Cite source document/directive);

(d) Discussion (Include background and current status),

(e) Recommendation (Include resolution if accomplished during evaluation), and

(4) Comments, Observed Events, Off-Checklist items and remarks as applicable for each area evaluated.

b. Internal Off-cycle Annual Evaluation Reports. The report shall be prepared in accordance with the requirements of paragraph 8a.

c. Follow-up and assist evaluations shall be documented by the MCIEAST-MCB CAMLEJ ATC T&R office and shall cite the reason for the visit, the scope, and the recommendations/actions resulting from the visit.

9. Control Numbers. Control numbers shall be assigned to and preceded by the identifier Findings and Discrepancies in each functional area of the report. The control number is a nine character label that identifies (e.g., A17-XXX-100):

a. The functional area (A) and 2-digit Calendar Year of evaluation (17).

b. The 3-letter Facility identifier (XXX).

c. The numerical sequence number of the item beginning with 100 for findings and 200 for discrepancies.

10. MCIEAST-MCB CAMLEJ ATC/ATCM NATOPS Evaluation After Action Requirements. The CO shall forward a Corrective Action Report (CAR) in accordance with reference (a) that contains the control number and current status of each finding and discrepancy identified in the evaluation report. The initial CAR shall be sent to the MCIEAST-MCB CAMLEJ ATC T&R Officer within 30 days after receiving the final evaluation report. Format is contained in reference (a). Commands shall conduct the following actions for submission of subsequent CAR:

a. The resolution of findings and discrepancies shall be implemented and documented in the CAR.

b. Each area evaluated shall submit a brief summary pertaining to the evaluation, to include positive experiences, problem areas, recommendations to improve evaluation processes, and overall impressions. The summary shall be submitted as an enclosure to the CAR.

c. A CAR is required to arrive at the MCIEAST-MCB CAMLEJ ATC T&R office on the 5th of each month following receipt of the final NATOPS report until all findings and discrepancies are closed.

d. The MCIEAST-MCB CAMLEJ ATC T&R Officer is required to submit a Status Report to the installation CO no later than 15 days after the receipt of the most current CAR.

e. This process shall continue until each finding and discrepancy has been corrected, is deemed closed, or the next NATOPS Evaluation occurs

11. Closure Process. All corrective actions in the process must be complete prior to closing the item. Actions that indicate futurity will result in the item remaining open.

APPENDIX A

MCIEAST-MCB CAMLEJ ATCM ORDER CHANGE REQUEST FORM

TO BE FILLED IN BY ORIGINATOR AND FORWARDED TO MCIEAST-MCB CAMLEJ ATC T&R OFFICER					
FROM (Originator)			**Unit**		
TO T&R Officer **Marine Corps Installations East-Marine Corps Base Camp Lejeune, ATC**			**Unit** **MCIEAST-MCB CAMLEJ ATCM Order Revision**		
Complete Name of Manual/Checklist MCIEAST-MCB CAMLEJO 3721.1A	**Revision Date**	**Change Date**	**Section/Chapter**	**Page**	**Paragraph**
Recommendation (be specific)					

CHEC☐ IF CONTINUED ON BACK

Justification

Signature	**Rank**	**Title**
Address of Unit or Command		

TO BE FILLED IN BY ATC T&R Office *(Return to Originator)*

FROM	**DATE**
TO	

REFERENCE
(a) Your Change Recommendation Dated _____

☐ **Your change recommendation dated _____ is acknowledged. It will be held for action of**
☐ **the review conference planned for _____ to be held at _____**
Your change recommendation is reclassified URGENT and forwarded for approval to _____
_____ by my DTG _____.

/S/ _____ ATC T&R Officer	**_____ ATC T&R SNCOIC**

APPENDIX B

AIR TRAFFIC CONTROL FACILITY ELECTRONICS MANUAL GUIDELINES

Chapter 1. Introduction. Assigns applicability, procedures for changes, and other matters of a general nature.

a. General.

b. Terms of Reference.

c. NATOPS Evaluation.

d. Air traffic control technician of the year submission process.

Chapter 2. Mission and Organization. Description of mission and organizational structure to support requirements of references (a) and (b).

a. Mission.

b. Organization.

Chapter 3. Billet Responsibilities and Duties. Description of billets with training qualification standards and assigned responsibilities and duties.

a. ATC Maintenance Officer (ATCMO) (Turnover).

b. ATC Maintenance Chief (ATCMC) (Turnover).

c. 3-M System Coordinator (3MC) (Turnover).

d. Maintenance Manager (if assigned) (Turnover).

e. Supervisory Electronic Technician (if assigned) (Turnover).

f. Work Center Supervisor (Turnover).

g. Duty Technician/Watch-stander.

h. Supply Representative (Desktop).

i. Test Equipment Coordinator (Desktop).

j. Collateral Duty Assignments, primary and alternate.

(a) Training NCO (Military Training) (Desktop).

(b) Technical Training Representative (Desktop).

(c) Safety Representative (Desktop).

(d) Hazardous Material Representative (Desktop).

(e) Tools Representative (Desktop).

(f) Publications Representative (Desktop).

(g) Destructive Weather Representative (Desktop).

Chapter 4. Airfield

a. Airfield Specific Information.

b. Commissioning Flight Inspection Reports, the most recent flight inspection reports, and magnetic offset (variation) information.

Chapter 5. Administration. Local instructions and information pertaining to the maintenance organization and its personnel to implement a recall by system qualification to restore equipment casualties to normal operation.

a. Turnover Folder/Desktop Procedures for applicable billets.

b. Daily Crew Turnover.

c. Duty Logbooks (Work Center).

d. Site Logbooks.

e. Monthly Maintenance Plan (MMP), if implemented.

Chapter 6. Training. Description of local technical training program and qualification requirements to support flight operations required by references (a).

a. Orientation training.

b. Military training.

c. Equipment On-the-Job Technical Training.

(1) ATCMD Orientation Checklist.

(2) Basic Maintenance Technician resulting in Watch Stander Qualification.

(3) Advance Maintenance Technician resulting in Qualified Ground Inspection Technician and/or BMT Instructor.

(4) Subject Matter Expert.

(5) Qualification Review and Recertification.

d. Formal Training Opportunities and Request Process.

e. Airfield Vehicle Operators Indoctrination Course.

f. CPR certification.

g. Annual safety training.

Chapter 7. General Operations and Maintenance. Compilation of Standard Operating Procedures providing local guidance.

a. Administrative procedures.

(1) Casualty Report (CASREP) Message preparation.

(2) General Administrative (GENADMIN) Message preparation.

(3) Submission of Reports/Requirements.

b. SOPs for day-to-day operation of ATC systems maintenance organization, including daily checks, performed in conjunction with ATC personnel if required, to verify proper operation of systems prior to opening the airfield each day. This SOP shall require ATC personnel to log systems into and out of service to ensure the sequence of events regarding system availability and system performance is documented.

(1) Routine

(a) Turn-up and turn-down procedures (based on airfield hours).

(b) Daily checks and reporting of equipment status.

(2) Maintenance and Material Management (3-M) System

(a) Planned Maintenance (Implementation of 3-M).

(b) Corrective Maintenance.

(c) Local Configuration Item Maintenance.

(3) Validation of Equipment Configuration

(4) Maintenance Data Analysis Tool Procedures

(a) Maintenance Action Item Process.

(b) MAI Review Process.

(c) Reports.

(5) Test Equipment Program

(a) TEAP.

(b) MEASURE Program and Calibration.

(c) Test equipment inventory.

(6) Supply Process

(a) Requisitioning parts thru Navy Supply System.

(b) AAC-229.

(c) DLR Carcass Turn-in and Carcass Tracking.

(d) Requisitioning thru Local Open Purchase.

(e) Status.

(f) Receiving.

(g) Updating MDAT with final pricing information.

(h) Reconciliation.

(i) Pre-expended Bin (PEB) usage and replenishment.

(7) Tool Control Program

(8) Key Control Program

(9) Technical Publications Program.

(10) Safety and HAZMAT Program.

(11) Vehicles.

c. Procedures that describe ATC systems trouble call process including points of contact, response actions, and documentation of corrective actions. Contact information shall be included where needed to isolate problems with equipment not directly maintained by the ATC systems maintenance organization, but affects airfield operations; i.e., landline or phone circuits that interconnect systems.

(1) Work Requests.

(2) Telephone Service Requests.

(3) Service Interruptions.

(4) Service Restorations.

(5) Certification of NAALS Equipment.

(6) Facilities / Buildings and Grounds Inspection.

(7) Emergency Essential Personnel.

(8) Air Conditioning.

(9) Emergency Power.

(10) Station Property.

(11) Security.

d. Memorandums of Understanding (MOU) or Memorandums of Agreement (MOA) that affect the maintenance and support of ATC systems.

e. Emergency procedures relating to aircraft mishaps and incidents, bomb threats, terrorist activity, catastrophic site failures, etc.

(1) Aircraft Accidents/Incidents.

(2) Recording/Tape Check-in/Check-out Procedures.

(3) Bomb Threat.

(4) Terrorist Activity.

(5) Destructive Weather SOP delineating work center responsibilities.

f. Procedures covering infrequent tasks that may or may not occur on a regular basis but have compliance and/or advance planning requirements and.

(1) Operational Capability Improvement Requests.

(2) Frequency Requests.

(3) Hazards of electromagnetic radiation to ordnance, electromagnetic radiation hazards, and safety.

(4) Equipment Relocations.

(5) MILCON Planning.

APPENDIX C

MINIMUM REQUIRED GUIDING REFERENCES
(Verify most current version)

29 CFR 1910	Code of Federal Regulations
AAC-229	FAA/Navy MOA for Logistic Support
BESEP	NAVAIR BESEP Policy and Procedures
CLSIS	Configuration and Logistics Support Information System [ATC Community Web]
FAAO JO 6000.6_	United States Interagency Ground Inspection Manual for ATC and Navigation Aids
FACMAN & SOP	Local Facility Electronics Manual with Standing Operating Procedures and Facility Directives
JQR N65236-ASR11-TRNG-0002	AN/GPN-30 DASR Job Qualification Requirements
JQR 3721-PAR-002	AN/FPN-63 PAR Job Qualification Requirements
JQR 1280-TACAN-032	AN/URN-32 TACAN Job Qualification Requirements
MCIEAST-MCB CAMLEJO 3721.1_	MCIEAST-MCB CAMLEJO ATC Maintenance Order
MCIEAST-MCB CAMLEJO 3722.3_	MCIEAST-MCB CAMLEJO ATC Order
MILHNBK 419 Vol 1 & 2	Grounding, Bonding, and Shielding of Electronic Equipment and Facilities
NAVAIR 00-80T-114	NATOPS ATC Manual
NAVAIR 16-1-520	United States Standard Flight Inspection Manual
NAVEDTRA 10500	Catalog of Navy Training Courses (CANTRAC)
NAVICPINST 4441.170_	COSAL Use and Maintenance Manual
NAVSEAINST 4790.8_	Ship’s Maintenance and Material Management (3-M) Manual
NAVSEA OP 5	Ammunition and Explosives Safety Ashore
NAVSEA OP 3565/NAVAIR 16-1-529 Vol 1	Electromagnetic Radiation Hazards (U) (Hazards to Personnel, Fuel and Other Flammable Material) (U) Distribution Statement C
NAVSEA OP 3565	Electromagnetic Radiation Hazards (U) (Hazards to Ordnance) (U)

NAVSUP PUB 409	MILSTRIP/MILSTRAP Guide
NAVSUP PUB 485 VOL III	Ashore Supply Procedures
NWP 1-03.1	Operational Reports (CASREP)
OPNAVINST 3500.34_	Personnel Qualification Standards (PQS)
OPNAVINST 3721.5_	Naval ATC Air Navigation Aids and Landing Systems (NAALS) Program
OPNAVINST 3960.16B	Navy Test, Measurement, and Diagnostic Equipment, Automatic Test Systems, and Metrology and Calibration
OPNAVINST 4441.13_	Approval and Funding Policy for Coordinated Shore-Based Allowance List (COSBAL)
OPNAVINST 4790.4_	Maintenance and Material Management (3-M) System Policy
OPNAVINST 5100.23_	Naval Shore Safety Manual
OPNAVINST 11010.20_	Facilities Project Instruction Manual
OP 43P6B	MEASURE User's Manual
SPAWAR FRD	SPAWAR Facility Requirement Document
Technical Manuals on all supported equipment	(Electronic or paper version is acceptable). See Navy/Marine Corps ATC Web System Support Pages https://atc.navy.mil
UFC-2-000-05N	Facilities Planning Factor Criteria for Navy and Marine Corps Shore Installation
UFC 4-133-01N	Design: Navy ATC Facilities
UFC 4-141-10N	Design: Aviation Operation and Support Facilities

APPENDIX D

USEFUL LINKS

Some sites may require registration and submission of a System Authorization Access Request (SAAR).

EDUCATION AND TRAINING

Army Knowledge On-Line
https://www.us.army.mil

Defense Acquisition University Learning Management System (LMS) Solution
https://learn.dau.mil/

My Navy Portal (MNP)
https://my.navy.mil/

Marine Net
https://www.marinenet.usmc.mil

LOGISTICS

DoD E-Mall
https://dod-emall.dla.mil

DoD – Logistics Tool Box
http://www.logtool.net/

FAA – Logistics Center
https://www.faa.gov/about/office_org/regions_centers/mmac/logistics/

GSA Advantage
https://www.gsaadvantage.gov/

Navy One Touch
https://www.onetouch.navy.mil/

USMC ServMart
https://www.USMCServMart.gsa.gov

PUBLICATIONS

DoD – DoD Issuances
http://www.dtic.mil/whs/directives/index.html

DoN – DON Issuances: OPNAV, SECNAV, Directives
https://doni.daps.dla.mil/default.aspx

FAA – Aeronautical Data Exchange
https://www.adx.faa.gov

FAA – Airport Data Sheets
http://webdatasheet.faa.gov/

PUBLICATIONS (contd)

FAA – DASR Support
https://www.faa.gov/aos/aos232/main.cfm

FAA – NASE DoD Navy - Marines Community
https://www.nasedod.faa.gov

NAVAIR – NATEC Technical Data Website
https://mynatec.navair.navy.mil/

Naval Logistics Library
https://nll2.ahf.nmci.navy.mil/

NAVSEA - Technical Data Management Information System
https://mercury.tdmis.navy.mil/

USMC – Publications and Directives
http://www.marines.mil/News/Publications.aspx

SYSTEMS MANAGEMENT

Automated Message Handling System
https://lejeune.amhs.usmc.mil/Amhs/

MCIEAST GeoFidelis System
https://maps.geofi-east.usmc.mil/

MEASURE Operational Control Center
https://measure.navair.navy.mil/

SPAWAR - ATC Web
https://atc.navy.mil/atc

APPENDIX E

REPORTS AND RECORDS

The following list of reports, records, and files that support ATC maintenance activities in accordance with guiding references, local SOP and this Order shall be maintained.

1. General

a. NATOPS Evaluation Reports for evaluations conducted during the preceding 6 years including corrective actions taken to resolve any identified findings and discrepancies. [NAVAIR 00-80T-114]

b. Air traffic control technician of the year recognition/awards. [NAVAIR 00-80T-114]

2. Mission and Organization [OPNAVINST 3721.5]

a. Equipment organizational structure.

b. Personnel organizational diagram including collateral duties.

3. Personnel

a. Billet turnover folders and/desktop procedures.

b. Appointment letters.

c. Collateral duty assignment letters.

d. Table of Organization and Equipment (TO/E) for officers, enlisted, and civilian identifying MOSs required to support installed equipment. [NAVAIR 00-80T-114]

e. Command staffing report. [NAVAIR 00-80T-114]

f. Recall rosters.

g. Current crew schedules by work center. [NAVAIR 00-80T-114]

h. Civilian Position Descriptions or contracts (as applicable). [NAVAIR 00-80T-114]

i. Authorization letters.

4. Training [OPNAVINST 3721.5]

a. Training Records for all technicians.

b. Monthly training reports.

c. PQS/JQR applicable to installed equipment.

d. List of personnel authorized to sign PQS/JQR.

e. Summary of technicians designated as qualified watch standers, ground inspection technicians, BMT instructors, and subject matter experts.

f. Designation letters for all qualified technicians (includes watch stander, ground inspection technician, BMT instructor, and subject matter expert).

g. List of ATCM personnel having attended Airfield Vehicle Operators Indoctrination Course.

h. List of CPR certified personnel including expiration dates.

i. List of annual formal training requirements submitted to MCIEAST NAALS Program Manager for regional consolidation and submission to TECOM for development of the Five Year Training Input Plan (TIP).

j. Formal training reservation requests submitted to MCIEAST NAALS Program Manager for regional consolidation and submission to NATTC Pensacola.

5. General Operations

a. Work Center Log Books.

b. Site Log Books (if applicable).

c. Signature Lists.

d. Casualty Reports Log.

e. GENADMIN Messages Log.

f. MOU/LOA for inter-agency, inter-service support and radar sharing.

g. Daily Equipment Status Checklist.

h. Local Airfield Information.

i. Commissioning flight inspection reports, the most recent flight inspection reports, and magnetic offset (variation) information.

j. Authorization letter to release recordings.

k. List of equipment location building numbers (including local and remote sites).

l. Generators, UPS, ECU testing periodicity and applicable emergency contacts.

m. Grounding and lightning protection system inspection results.

n. Work Request Log.

o. Telephone Service Request Log.

p. Telecommunications Service Order records to support connectivity requirements.

q. Frequency Requests.

r. Current Radio Frequency Authorizations (RFA) and renewal requests.

s. List of supported frequencies and users.

6. Infrequent Records. Includes files and records of infrequent tasks that may or may not occur on a regular basis but have compliance and/or an advance planning requirement.

a. Airfield/IFLOLS/FLOLS Certification, if supported by the Maintenance Division (12 months). [NAVAIRINST 13800.13]

b. 2-M Recertification, if applicable (18 Months). [NAVAIR 4790-PLN-001/2M]

c. Hazards of electromagnetic radiation to ordnance, electromagnetic radiation hazards, and safety (HERP/HERF/HERO).

7. Equipment Records

a. Files that document current and planned installations with BESEPs for those systems. [OPNAVINST 3721.5]

b. History files that document equipment acceptance, upgrades, removals, transfers, Defense Re-Utilization and Marketing Office (DRMO), and shipment. [OPNAVINST 3721.5]

c. Inter-facility and intra-facility landline connectivity reports including connectivity diagrams, labeled demarcation points, designation labels on each circuit, and maintenance responsibility information, and telecommunications service requires and telecommunications service order records to support connectivity requirements. [OPNAVINST 3721.5]

d. Current installation and cross-connect records, red-line drawings, as-built drawings, and applicable ATC Facility Drawing Package for equipment/systems installed. [OPNAVINST 3721.5]

e. Status of all ATC systems (including backup), emergency generator operational checks, and any changes in status reported to the ATCFO throughout the day. [NAVAIR 00-80T-114]

f. CASREP history files shall be maintained for at least two years, ensuring accurate reporting information with timely updates and corrections that are consistent with records listed on the ATC Community Web. [NWP 1-03.1]

g. Copies of all command generated OCIRs including chain of command endorsements and current status (i.e., pending, approved/disapproved, and completed). [OPNAVINST 3721.5]

h. A listing of angle voltages and photograph representations of video presentations for all runways served by the AN/FPN-63 Precision Approach Radar (PAR) shall be maintained. PAR alignment photographs shall be readily available to final controllers and posted in PAR maintenance areas for

technician use. Photographs shall be reviewed annually and updated as per reference (a). [NAVAIR 00-80T-114]

8. Equipment Maintenance and Material Management (3-M) Program

a. Planned Maintenance System (PMS) records applicable to all installed equipment. [OPNAVINST 4790.4; NAVSEAINST 4790.8]

b. 13-week Accountability Log posted and current for each work center. [OPNAVINST 4790.4; NAVSEAINST 4790.8]

c. Completed Equipment Performance Forms for the last two years. [OPNAVINST 3721.5]

d. Maintenance data reported via MDAT. [OPNAVINST 3721.5]

d. Current configuration data reported under command profile on the Navy/Marine Corps ATC web site. [OPNAVINST 3721.5]

e. Site specific Coordinated Shore Based Allowance List (COSBAL).

f. Current Test Equipment Allowance Process (TEAP) Report. [OPNAVINST 3721.5; OP 43P6A]

g. Current reports identifying all General Purpose Electronic Test Equipment (GPETE) items covered under the MEASURE Calibration Program. [NAVSEA OD 45845; OPNAVINST 3721.5]

h. Test Equipment Calibration Records.

i. Tool Inventory.

9. Supply Records

a. OPTAR status (requirement versus budget).

b. List of outstanding repair parts requisitions with current status.

c. List of all authorized site spares and On-Board Repair Parts (OBRP) for associated NAALS equipment.

d. Inventory of authorized PEB parts (if applicable).

10. Safety Records

a. Lock Out/Tag Out Log.

b. Safety Data Sheets (SDS).

c. Workplace Inspection Results.

d. List of outstanding safety deficiency work requests.

APPENDIX F

ATC MAINTENANCE TRAINING RECORDS

RECORD OF AUDIT			
Name			
This training record shall be reviewed by the following: 1. Upon reporting to a Unit – Maintenance Officer (MO), Maintenance Chief (MC), Work Center Supervisor (WCS) 2. Annually – MO 3. Quarterly - MC and WCS 4. As Required – WCS			
Unit	**Reviewer's Rank/Name**	**Date of Review**	**Purpose and Results of Review**

ATCMD Orientation Checklist		
Name		
Tasks identified below provide a sample of recommended ATCMD Orientation topics. ATCMO may tailor this list for station specific orientation. Note: Tasks must be completed prior to any sign-off.		
Task	**Student Initials**	**Supervisor Initials**
Read and understands ATCMD SOP		
Understands chain of command (Equipment and Marine Corps)		
Understands site locations		
Received door combinations		
Received site phone numbers		
Understands location of main power shut-off for each room/system		
Understands emergency power procedures for all sites		
Read and understands Work Center turn-over folder		
Understands logbook procedures		
Understands crew hours		
Received recall roster		
Understands recall procedures		
Understands test equipment check out/in procedures		
Understands tool check out/in procedures		
Understands location of publications and check out/in procedures		
Understands supply ordering procedures		
Understands use of SDS		
Understands collateral duties		
Read and understands NAVAIR 00-80T-114 Chapter 4.5, Electronics Maintenance.		
Read and understands OPNAVINST 3721.5L Enclosure (3) Air Traffic Control (ATC) Systems Maintenance Ashore		
Understands phone procedures (bomb threat log)		
Acquire Government Drivers License, if applicable		
Acquire MCAS Airfield Operators License		

Navigational Aids Duty Summary applicable to Primary MOS 5952

Section 1 General

Duty	Description	Basic Maint Tech		Advance Maint Tech	
		WCS/Date	ATCMC/Date	WCS/Date	ATCMC/Date
A	Orientation				
B	Safety				
C	Air Operations				
D	Corrosion Control				
E	Electronics Fundamentals				
F	Maintenance Administration				
G	Facility Emergency Power				

Section 2 Navigational Aids General Knowledge

Duty	Description	Basic Maint Tech		Advance Maint Tech	
		WCS/Date	ATCMC/Date	WCS/Date	ATCMC/Date
A	Tactical Aid Navigation (TACAN) Theory				
B	Instrument Landing Systems (ILS) Theory				
C	Computer Theory				
D	Facility Cable Plant				

Section 3 Navigational Aids Systems and Equipment
(To be tailored/updated to reflect current configuration)

Duty	Description	Basic Maint Tech		Advance Maint Tech	
		WCS/Date	ATCMC/Date	WCS/Date	ATCMC/Date
A	AN/URN-32 TACAN, including OE-258A Antenna				
B	MK-20A ILS				
C	END-FIRE GLIDESLOPE				
D	AN/FYC-22B VIDS, if applicable to work center				
E	ASOS, if applicable to work center				

Section 4 Recommendations for Qualification Designation

	Designation	SME Date	WCS Date	ATCMC Date	ATCMO Date
A	Watch Stander				
B	Advance Maintenance Technician				
C	AN/URN-32 Qualified Ground Inspection Technician				
D	Basic Maintenance Technician Instructor				
E	Subject Matter Expert				

Radar Duty Summary applicable to Primary MOS 5953

Section 1 General

Duty	Description	Basic Maint Tech		Advance Maint Tech	
		WCS/Date	ATCMC/Date	WCS/Date	ATCMC/Date
A	Orientation				
B	Safety				
C	Air Operations				
D	Corrosion Control				
E	Electronics Fundamentals				
F	Maintenance Administration				
G	Facility Emergency Power				

Section 2 Radar General Knowledge

Duty	Description	Basic Maint Tech		Advance Maint Tech	
		WCS/Date	ATCMC/Date	WCS/Date	ATCMC/Date
A	Radio Detection and Ranging Theory				
B	RF Cable Assembly				
C	Facility Cable Plant				

Section 3 Radar Systems and Equipment
(To be tailored/updated to reflect current configuration)

Duty	Description	Basic Maint Tech		Advance Maint Tech	
		WCS/Date	ATCMC/Date	WCS/Date	ATCMC/Date
A	AN/FPN-63 PAR				
B	AN/FAC-6(V)1 FOIS				
C	AN/GPN-30 DASR				
D	AN/FSQ-204 STARS (or STARS ELITE)				
E	AN/FYC-22B VIDS, if applicable to work center				
F	ASOS, if applicable to work center				

Section 4 Recommendations for Qualification Designation

	Designation	SME Date	WCS Date	ATCMC Date	ATCMO Date
A	Watch Stander				
B	Advance Maintenance Technician				
C	AN/FPN-63 Qualified Ground Inspection Technician				
D	AN/GPN-30 Qualified Ground Inspection Technician				
E	Basic Maintenance Technician Instructor				
F	Subject Matter Expert				

Communications Duty Summary applicable to Primary MOS 5954

Section 1 General

Duty	Description	Basic Maint Tech		Advance Maint Tech	
		WCS/Date	ATCMC/Date	WCS/Date	ATCMC/Date
A	Orientation				
B	Safety				
C	Air Operations				
D	Corrosion Control				
E	Electronics Fundamentals				
F	Maintenance Administration				
G	Facility Emergency Power				

Section 2 Communications General Knowledge

Duty	Description	Basic Maint Tech		Advance Maint Tech	
		WCS/Date	ATCMC/Date	WCS/Date	ATCMC/Date
A	Transmitter Theory				
B	Receiver Theory				
C	Computer Theory				
D	Cable Assembly				

Section 3 Communications Systems and Equipment
(To be tailored/updated to reflect current configuration)

Duty	Description	Basic Maint Tech		Advance Maint Tech	
		WCS/Date	ATCMC/Date	WCS/Date	ATCMC/Date
A	CM-200 Transmitter				
B	CM-200 Receiver				
C	CM-300(V)2 Transmitter				
D	CM-300(V)2 Receiver				
E	AN/GRC-258				
F	AN/GRC-171				
G	AN/GRC-211				
H	AN/GRC-260				
I	AN/GRC-261				
J	AN/FSC-127 ETVS				
K	AN/FSC-119, if applicable				
L	AN/FSC-127A ECS				
M	DALR				
N	FDIO PC-RCU				
O	FOCIS				
P	Antennas				
Q	System Interconnectivity				
R	Telephone Lines				
S	AN/FSN-7 AFLCS				
T	ASOS, if applicable to work center				

Section 4 Recommendations for Qualification Designation

	Designation	SME Date	WCS Date	ATCMC Date	ATCMO Date
A	Watch Stander				
B	Advance Maintenance Technician				
C	Basic Maintenance Technician Instructor				
D	Subject Matter Expert				

Formal Training Summary

Name

Formal Training is considered a military course of instruction, FAA Academy Course, factory training or approved computer-based instruction (CBI). For those systems without formal schools, instruction provided by system ISEA upon equipment installation will satisfy this requirement.

School	Completion Date

MARINE NET/MY NAVY PORTAL/ESAMS/Off-Duty Courses			
Name			
Course Title	**School**	**Date Enrolled**	**Date Completed**

ATC Maintenance Training Roster				
Subject		**Instructor**	**Date**	**Hours**
Rank	**Name**	**Signature**		

ATC Maintenance Student Training Report

Student

Date	M/H	System/Subject	Remarks	Instructor

APPENDIX G

SAMPLE WATCH STANDER DESIGNATION LETTER

UNITED STATES MARINE CORPS
AIR TRAFFIC CONTROL MAINTENANCE DIVISION
PSC BOX 00000
MARINE CORPS AIR STATION, EAST COAST 00000-0000

SSIC
Office Code
DD Mon YY

From: Air Traffic Control Maintenance Officer, Marine Corps Air Station, _____
To: Lance Corporal Firstname MI. LName EDIPI/MOS USMC -or-
Mr. Im A. Civilian, GS-0856-Grade

Subj: DESIGNATION AS A WATCH STANDER

Ref: (a) MCIEAST-MCB CAMLEJO 3721.1A
(b) Local ATCMD SOP

1. With satisfactory completion of all Basic Maintenance Technician (BMT) training and qualification requirements on all the systems and associated equipment assigned to the (insert applicable) Work Center, you have demonstrated the knowledge and skill level expected of a Watch Stander for the Air Traffic Control Maintenance Division.

2. In accordance with the references, I hereby certify you are qualified to stand an independent watch on your assigned crew and perform maintenance on all systems within your assigned Work Center.

3. In the performance of your duties, you will be guided by the references and specific directions provided by your Work Center Supervisor and/or ATC Maintenance Chief.

4. Training and advanced qualifications do not stop with BMT. I challenge you to continue your training to attain qualification as Advance Maintenance Technician on your assigned systems.

A. T. CMO

APPENDIX H

SAMPLE QUALIFIED GROUND INSPECTION TECHNICIAN DESIGNATION LETTER

UNITED STATES MARINE CORPS
AIR TRAFFIC CONTROL MAINTENANCE DIVISION
PSC BOX 00000
MARINE CORPS AIR STATION, EAST COAST 00000-0000

SSIC
Office Code
DD Mon YY

From: Air Traffic Control Maintenance Officer, Marine Corps Air Station, _____
To: Sergeant Firstname MI. LName EDIPI/MOS USMC –or-
Mr. Im A. Civilian, GS-0856-Grade

Subj: DESIGNATION AS QUALIFIED GROUND INSPECTION TECHNICIAN

Ref: (a) OPNAVINST 3721.5_
(b) NAVSEAINST 4790.8_
(c) FAAO 6006.6B
(d) MCIEAST-MCB CAMLEJO 3721.1A

1. I hereby certify that you have successfully completed the Advanced Maintenance Technician training and qualification requirements, including the applicable ISEA-developed JQR and formal school for the NAALS equipment/system(s) identified below. You are hereby designated as a Qualified Ground Inspection Technician authorized to perform ground inspection and maintenance on the following: <identify specific equipment/system(s) as applicable >:

a. AN/FPN-63 Precision Approach Radar (PAR)

b. AN/GPN-30 Digital Airport Surveillance Radar (DASR)

c. AN/URN-32 Tactical Air Navigation (TACAN)

2. You will be guided by the references and all applicable maintenance requirement cards relative to the performance of ground inspection and maintenance on the above listed equipment.

3. Any questions that arise about the ATCM Ground Inspection Program should be referred to the ATC Maintenance Officer.

A. T. CMO

APPENDIX I

SAMPLE BASIC MAINTENANCE TECHNICIAN INSTRUCTOR DESIGNATION LETTER

UNITED STATES MARINE CORPS
AIR TRAFFIC CONTROL MAINTENANCE DIVISION
PSC BOX 00000
MARINE CORPS AIR STATION, EAST COAST 00000-0000

SSIC
Office Code
DD Mon YY

From: Air Traffic Control Maintenance Officer, Marine Corps Air Station, _____
To: Corporal Firstname MI. LName EDIPI/MOS USMC –or-
Mr. Im A. Civilian, GS-0856-Grade

Subj: DESIGNATION AS A BASIC MAINTENANCE TECHNICIAN INSTRUCTOR

Ref: (a) MCIEAST-MCB CAMLEJO 3721.1A

1. I hereby certify that per the references you have completed the training and qualification requirements for Advanced Maintenance Technician (AMT) on the below specified equipment/system(s) within your assigned work center. As such you are hereby designated as a Basic Maintenance Technician (BMT) Instructor for the following: < identify the specific equipment/system(s) as applicable to the AMT qualifications and work center organization >:

a. CM-200 Radio

b. AN/GRC-260/261 Transceiver

c. AN/FSC-127 Enhanced Terminal Voice Switch (ETVS)

d. Digital Audio Legal Recorder (DALR)

2. As a BMT Instructor you may be utilized to conduct BMT training on systems for which you are signed off as an AMT.

3. This appointment shall remain in effect until it is changed, modified, or revoked by the issuing authority.

A. T. CMO

I hereby acknowledge designation as a BMT Instructor and accept the associated responsibilities.

T. O. MARINE –or- I. A. CIVILIAN

APPENDIX J

SAMPLE SUBJECT MATTER EXPERT DESIGNATION LETTER

UNITED STATES MARINE CORPS
AIR TRAFFIC CONTROL MAINTENANCE DIVISION
PSC BOX 00000
MARINE CORPS AIR STATION, EAST COAST 00000-0000

SSIC
Office Code
DD Mon YY

From: Air Traffic Control Maintenance Officer, Marine Corps Air Station, _____
To: Staff Sergeant Firstname MI. LName EDIPI/MOS USMC –or-
Mr. Im A. Civilian, GS-0856-Grade

Subj: DESIGNATION AS A SUBJECT MATTER EXPERT

Ref: (a) MCIEAST-MCB CAMLEJO 3721.1A

1. I hereby certify that per the references you have met the training and qualification criteria for designation as a Subject Matter Expert (SME) for the following equipment/system(s): < identify as applicable to AMT qualification and work center organization >

a. AN/GPN-30 Digital Airport Surveillance Radar (DASR)

b. AN/FSQ-204 Standard Terminal Automation Replacement System (STARS)

2. As a SME, you will review associated technical manuals, Job Qualification Requirements (JQR), and maintenance requirement cards (MRC) to ensure the most current information is utilized to develop and/or update local OJT lesson guides and applicable instruction material; conduct technician on-the-job training (OJT) and applicable JQR knowledge testing; evaluate technician knowledge by written and/or oral exam and practical performance of MRC; and recommend the appropriate level of qualification designation for technicians on the assigned systems.

3. This appointment shall remain in effect until it is changed, modified, or revoked by the issuing authority.

A. T. CMO

I hereby acknowledge designation as a Subject Matter Expert on the specified systems and accept the associated SME responsibilities.

T. O. MARINE –or- I. A. CIVILIAN

APPENDIX K

SAMPLE SAFETY TRAINING CHECKLIST

NAME: _____ RANK: _____ DATE ARRIVED: _____

TOPIC	**INSTRUCTOR/DATE**	**INSTRUCTOR/DATE**	**INSTRUCTOR/DATE**
NAVOSH Program (Annually)			
Safety Precautions and Standards (Annually)			
Hearing Conservation (Annually)			
Sight Conservation (Annually)			
First Aid (Annually)			
Fire Prevention Equipment (Annually)			
Radio Frequency Radiation (Annually)			
Cardiac Pulmonary Resuscitation (CPR) (verify expiration date)			
HAZARD Communication (Annually)			
HAZMAT (Annually)			
Lockout/Tagout (Annually)			
Fall Protection (Annually)			
Personal Protective Equipment (PPE) (Annually)			
Electrical/Electronic Safety (Annually)			
Airfield Safety (Annually)			
Asbestos Control (Annually)			
Operational Risk Management (ORM) (Annually)			

APPENDIX L

MATERIALS FOR ATCMD 3-M PMS SELF ASSESSMENT AND PMS SPOT CHECK

3-M PMS Administration Assessment Checklist

Station_____ Date _____

References: (a) NAVSEAINST 4790.8C, Ships' Maintenance and Material Management 3-M Manual
(b) OPNAVINST 3721.5L, Enclosure (3) Air Traffic Control (ATC) Systems Maintenance Ashore
(c) MCIEAST-MCB CAMLEJO 3721.1A, Marine Corps Installations East Air Traffic Control Maintenance Order

1. All roles in the SKED 3-M "Admin Chain of Command" are filled and the personnel meet the qualifications outlined for their 3-M role.

(1) ATC Maintenance Officer [Reference (b) § 2.b.1.a & b]

(2) 3-M Coordinator [Reference (a) § 1-2.3]

(3) Division Leading Chief Petty Officer [Reference (a) § 1-2.7]

(4) WC Supervisor [Reference (a) § 1-2.9]

(5) Maintenance Personnel [reference (a) § 1-2.10]

2. Does the 3-M System Coordinator maintain the most current versions of the following items in the PMS Master file?

a. NAVY PMS disk [Force Revision (FR)] [Reference (a) § § 2-4.1.a]

b. MIP to Work Center (WC) indices (PMS-4) [Reference (a) § 2-4.1.b]

c. WC List of Effective Pages (LOEP) [Reference (a) § 2-4.1.c]

d. WC Maintenance Index Pages (MIPs) [Reference (a) § 2-4.4]

e. Advance Change Notices (ACN) [Reference (a) § 2.4.1.e and 2-4.10]

f. Equipment Guide List, for applicable MRCs [Reference (a) F-14]

g. Tag Guide List, for applicable MRCs [Reference (a)]

h. Change Service Accountability Log [Reference (a) § 2-7.c]

i. Local planned maintenance procedures [Reference (b) § 2.b.1.d]

j. Letter designating the ATC Maintenance Officer [Reference (b) § 2.a.1]

k. Letter assigning the 3-M Coordinator [Reference (a) § 1-2.3; Reference (c)]

m. Letter assigning Work Center Supervisors [Reference (a) § 1-2.9]

SAT / UNSAT

3. Is there a traceable (paper and/or electronic) means of communicating PMS documentation changes (i.e. PMS change routing sheet or task list)? [Reference (a) § 2-4.10 and 2-7.c]

SAT / UNSAT

4. Upon review of current and randomly selected archived SKED quarters,

a. Is the most current approved version of SKED installed and properly utilized? [Reference (a)]

b. Are Force Revisions (FR) being installed in a timely manner? [Reference (a) § 2-7]

c. Has Work Center retained the first Quarter after PMS Cycle reset and the previous four Quarters in archive at a minimum? (Shore stations will reset after 20 quarters.) [Reference (a) § F-3.e]

d. Is the Division PMS Performance Report (PPR) is > 80 percent? [Reference (a) § F-20]

e. Do the Division Spot Check Accomplishment Confidence Factors (ACF) confirm MCIEAST spot check requirements are being met? [Reference (a) § 2.8.a]

f. Has the Division created, maintained and published Equipment Guide Lists where necessary? [Reference (a) § F-14]

g. Are Technical Feed Back Reports (TFBR) are updated and properly tracked in SKED? [Reference (a) § 2-6 and F-15; Reference (c)]

SAT / UNSAT

5. For equipment not included in the PMS system, have locally-generated MRCs been developed using manufacturer’s maintenance specifications and technical data? [Reference (b) Encl (3) § 2.b.(1)(d); Ref (c)]

SAT / UNSAT

6. Has 3-M System training been integrated into the ATCMD training and certification program? [Reference (a) § 1-2.1; 1-2.3, 1-2.6; 1-2.9; 1-2.10; Ref (c)]

SAT / UNSAT

7. Overall effectiveness of 3-M PMS Administration is evaluated and meets the intent and goals of guiding orders and directives.

SAT / UNSAT

Remarks are required for all UNSAT ratings. Provide remarks of this assessment below.

Evaluator: _____

3-M PMS Work Center Assessment Checklist

Station_____ Date_____ Work Center_____

References: (a) NAVSEAINST 4790.8C, Ships' Maintenance and Material Management 3-M Manual
(b) OPNAVINST 3721.5L, Air Traffic Control (ATC) Systems Maintenance Ashore Enclosure (3)
(c) MCIEAST-MCB CAMLEJO 3721.1A, Marine Corps Installations East Air Traffic Control Maintenance Order

1. Does a review of the Work Center (WC) published PMS working materials indicate the following?

a. NAVSEA LOEP properly reflects WC configuration. [Reference (a) F-10]

b. Local planned maintenance procedures for non-CDM managed CI are accurate and up to date and maintained separately from CDM managed CI. [Reference (a) § 2-9.2.c; Reference (b) § 2.b.1.d]

c. MIP "line-outs" accurately reflect the WC configuration and operational requirements. [Reference (a)]

d. MIP "line-outs" are reviewed and initialed by the Maintenance Chief or properly appointed designee. [Reference (a)]

e. MRC routinely used in the work center are maintained and current. [Reference (a)]

f. MRC periodicities are properly scheduled and unchanged, except in the case of increasing periodicity to meet local requirements. [Reference (a)]

g. MRC "line-outs" accurately reflects the WC configuration and operational requirements. [Reference (a) § F-10.b]

h. MRC "line-outs" are reviewed and initialed by the Maintenance Chief or properly appointed designee. [Reference (a)]

i. 13 weeks of completed 13 Week Accountability Logs are maintained. [Reference (a)]

j. Maintenance actions are assigned to technicians and the senior person assigned is signing the 13 Week Accountability Log. [Reference (a)]

k. 13 Week Accountability Logs are signed by the ATCMO and WC Supervisor. [Reference (a)]

l. Advance Change Notices (ACN) for applicable changes not yet published on the PMS disk are properly maintained. [Reference (a)]

m. Equipment Guide Lists (EGL) are generated and published when the controlling MRC applies to multiple identical items meeting EGL requirements. [Reference (a)]

n. EGL are properly serialized and numbered. [Reference (a)]

o. Tag Guide Lists (TGL) are generated and published for MRC requiring Tag-out. [Reference (a)]

p. Tag-out tags are utilized and properly entered on the 13 Week Report. [Reference (a)]

q. WC personnel are qualified to perform assigned MRC tasks.

(1) Watch Standers [Reference (c) § 6.8.b; Ref (c)]

(2) Personnel performing MRC designated as Ground Inspection [Reference (b) § 4.b]

SAT / UNSAT

2. Do current and randomly selected archived Quarters in SKED indicate the following?

a. Force Revisions are being installed in a timely manner. [Reference (a)]

b. WC PMS Performance Report (PPR) is >80 percent. [Reference (a)]

c. WC Spot Check Accomplishment Confidence Factors (ACF) confirms MCIEAST spot check requirements are being met (3 per WC per month). [Reference (c)]

d. Situational MRC are scheduled properly and in accordance with operational requirements. [Reference (a) § 2-4.5.d.(6)]

e. Related MRC are properly scheduled. [Reference (a) § 2—4.4.b.(13) and 2-4.5.d.(6)]

f. SKED scheduling notations and verifications are current and properly performed (i.e., Completion, Re-scheduling, and Deletion mark ups). [Reference (a) § F-4.b]

g. Lost or partially completed MRC have an accompanying flip page entry in SKED, and if within last 13 weeks the report on file reflects this entry. [Reference (a) § F-6.a & b]

h. Scheduled and Re-scheduled MRC are within periodicity as indicated by a Schedule Verification report. [Reference (a) § F-6.c & d]

SAT / UNSAT

3. Overall effectiveness of 3-M PMS Administration is evaluated and meets the intent and goals of guiding orders and directives.

SAT / UNSAT

Remarks are required for all UNSAT ratings. Provide remarks of this assessment below.

Evaluator: _____

MRC Evaluation and PMS Spot Check Sheet

Work Center: _____ Date of Spot Check: _____ Evaluator: _____

1. Select a maintenance requirement that has been marked as being Fully Accomplished.

Equipment Nomenclature: _____ MIP: _____ MRC: ____ EGL#: ____

PMS accomplished date: _____ Wk: ____ Qtr: ____ By Technician: _____

2. Contact the technician who accomplished the above MRC that a spot check is being conducted on. Determine the following by questions and/or personal observation.

	Circle One
a. Is the technician qualified to perform the MR?	YES/NO**
b. Technician validated the MRC using the WC PMS Manual?	YES/NO
c. Technician reviewed the MRC before accomplishment and	
(1) Discussed the appropriate safety precautions, e.g., HAZMAT, PPE, Tagout/Lockout, etc?	YES/NO
(2) Presented the correct tools and materials?	YES/NO/NA
(3) Presented the correct parts and calibrated test equipment?	YES/NO/NA**
(4) Properly identified the equipment?	YES/NO**
d. Technician demonstrated the following:	
(1) Followed all safety precautions?	YES/NO*
(2) Followed all steps of the MRC?	YES/NO
(3) Correctly demonstrated use and disposal of HAZMAT?	YES/NO/NA
(4) Correctly performed equipment Tagout/Lockout?	YES/NO/NA*
(5) Used proper PPE?	YES/NO/NA
(6) If an EGL is used, was the MRC performed on all equipment listed?	YES/NO/NA**
e. Can the technician demonstrate/explain what each MR is accomplishing?	YES/NO
f. After accomplishment, check MRC for the following:	
(1) Are the safety precautions complete as listed?	YES/NO
(2) Is the man-hour estimate correct? If not, what is the correct estimate?	YES/NO
(3) Is the tool/material list complete as written? If not, what should be changed?	YES/NO
(4) Is the MRC able to be completed as written?	YES/NO
g. Has a Technical Feedback Report been submitted for any noted discrepancies in section f above?	YES/NO/NA
h. Does the equipment condition reflect accomplishment of the MRC?	YES/NO
(1) If disassembly is part of the procedure, was the equipment properly disassembled?	YES/NO/NA
(2) If so, was the equipment reassembled correctly?	YES/NO/NA

i. Review the following administrative actions:	
(1) Was the WCS notified of any discrepancies?	YES/NO/NA
(2) Was the MRC properly annotated on the 13-Week Report?	YES/NO
(3) Was a flip page entry completed?	YES/NO/NA
(4) Has the PM, and CM if necessary, been properly documented in MDS?	YES/NO

Notes:

a. If any item annotated with a single asterisk (*) is answered "NO", the Spot Check is automatically considered UNSAT.
b. If any item annotated with two asterisks (**) is answered "NO", the MRC is automatically considered Not Fully Accomplished.
c. If "NO" is marked for any item, the evaluator is to provide guidance to ensure future compliance. Comments are required for any discrepancies.

3. Overall effectiveness of the MRC accomplishment is evaluated to be:

_____
(SAT/UNSAT)

4. Comments:

_____

_____

_____

_____

_____

_____

_____

_____

_____

5. Spot Check sheets shall be submitted to the 3-M Coordinator when the below signatures are complete.

Evaluator: _____

Work Center Supervisor: _____

Maintenance Officer: _____

APPENDIX M

MCIEAST-MCB CAMLEJ ATCM ADDENDUM CHECKLIST

This checklist contains directed items and shall be utilized by MCIEAST NATOPS Evaluation Unit in addition to the checklists listed in the NAVAIR 00-80T-114. Directed items are the result of a requirement determined by the ATC T&R Officer and are of enough importance to require evaluation.

1. ATC Maintenance Administration

a. Administration. Reserved.

b. ATCMD Material. Reserved.

c. ATCMD Publications, Records, and Reports. Reserved.

d. ATCMD Training

(1) Does the Maintenance Officer or Maintenance Chief secure formal in-service, factory, or Federal Aviation Administration (FAA) school quotas in order to provide for the professional development of maintenance personnel? [OPNAVINST 3721.5; MCIEAST-MCB CAMLEJO 3721.1A]

(2) Has the Maintenance Officer implemented a quality, progressive, and well-documented technical qualification on-the-job training (OJT) program that ensures the timely qualification of military and civilian technical personnel as independent watch standers and maintenance technicians? [MCIEAST-MCB CAMLEJO 3721.1A]

(3) Have goals and timelines been identified to qualify sufficient numbers of technicians on each task to ensure complete and continuous coverage (i.e., enough qualified technicians for on-duty, on-call, standby, and during periods when personnel are on leave, TAD, sick, etc.)? [MCIEAST-MCB CAMLEJO 3721.1A]

(4) Is training on Operations and Maintenance Administration functions (e.g., 3-M, PMS, SKED, MDAT, Supply, CASREP, NOTAM, Flight Inspections, etc.) included? [MCIEAST-MCB CAMLEJO 3721.1A]

(5) Is training on ancillary equipment (e.g., test equipment, UPS, back-up emergency generator, etc.) included? [MCIEAST-MCB CAMLEJO 3721.1A]

(6) Does the OJT program incorporate elements of applicable ISEA-approved JQR? [MCIEAST-MCB CAMLEJO 3721.1A]

(7) Are current and relevant materials (e.g., lesson guides, student handouts, and training aids) utilized? [MCIEAST-MCB CAMLEJO 3721.1A]

(8) Do the SME instructors, Work Center Supervisor, and Maintenance Chief make recommendations to the Maintenance Officer for a technician’s qualification status? [MCIEAST-MCB CAMLEJO 3721.1A]

(9) Has the ATCMO designated, in writing, work center personnel qualified to perform system and equipment maintenance? [MCIEAST-MCB CAMLEJO 3721.1A]

(10) Do the SME instructors, Work Center Supervisor, and Maintenance Chief make recommendations to the Maintenance Officer for qualified technicians to become Ground Inspection Technicians, Basic Maintenance Technician Instructors, and SME? [MCIEAST-MCB CAMLEJO 3721.1A]

(11) Does the Maintenance Officer conduct and document an annual audit of technician training records to access current training status, progression thru training objectives, and documented qualifications of all assigned technicians? [MCIEAST-MCB CAMLEJO 3721.1A]

(12) Does technician qualification review include a written and/or oral interview and satisfactory completion of critical PMS MRCs? [MCIEAST-MCB CAMLEJO 3721.1A]

(13) Is annual training on hazardous energy control (Lock Out/Tag Out) conducted and documented in training records? [OPNAVINST 5100.23, MCIEAST-MCB CAMLEJO 3721.1A]

e. Safety. Applicable reference (a) safety related questions may be included in work center functional area checklists to ascertain the overall effectiveness of the ATCMD Safety program.

(1) Has the Maintenance Officer designated a Safety NCO and is he/she knowledgeable of the duties and responsibilities associated with this collateral duty? [MCIEAST-MCB CAMLEJO 3721.1A]

(2) Does the Maintenance Officer retain a copy of the most recent annual base safety inspection of ATCMD? [MCIEAST-MCB CAMLEJO 3721.1A]

(3) Are hazardous material Safety Data Sheets readily available? [OPNAVINST 5100.23; MCIEAST-MCB CAMLEJO 3721.1A]

(4) Has the Maintenance Officer coordinated with Public Works to implement a planned maintenance process to exercise and document the grounding systems, electrical systems and lightning protection systems every 18 – 24 months? [MILHDBK 419; NFPA 780-most recent; MIP C-952 001 18M-1R]

f. ATCMD Maintenance Procedures

(1) Do division personnel perform maintenance actions in accordance with the 3-M system? [OPNAVINST 4790.4; NAVSEAINST 4790.8, Evaluator will complete MCIEAST-MCB CAMLEJO 3721.1A Appendix L 3-M PMS Assessment Checklist ATCMD Administration]

(a) Has the Maintenance Officer implemented an aggressive self-assessment program to include material condition assessments as well as conducting assessments of the maintenance technician’s ability to perform maintenance as prescribed by PMS MRC? [NAVSEAINST 4790.8; conduct review of PMS spot check sheets]

(b) Are PMS assignments given to personnel possessing the corresponding equipment MOS (USMC)/equivalent rating (civilian) as set forth in equipment Maintenance Requirement Cards (MRC)? [NAVAIR 00-80T-114; OPNAV 4790.4; NAVSEAINST 4790.8]

(2) Do technicians perform corrective and preventive maintenance as well as daily checks in accordance with existing maintenance policies and philosophies? [NAVAIR 00-80T-114]

(3) Is equipment that does not meet the safety of flight and flight check tolerances as set forth in the MRC removed from service and repaired? [OPNAVINST 3721.5]

(4) Are the responsible ATCMD personnel knowledgeable of and proficient in execution of their prescribed duties to support FAA Flight Inspections? [NAVAIR 00-80T-114; NAVAIR 16-1-520/FAA O 8200.1C; MCIEAST-MCB CAMLEJO 3721.1A]

(5) Are logbooks used to document and pass information between crews in an effort to provide continuity of the maintenance effort? [MCIEAST-MCB CAMLEJO 3721.1A]

(6) Has the Maintenance Officer directed utilization of Maintenance Data Analysis Tool (MDAT) to generate and track maintenance actions, preventive and corrective maintenance man-hours, and equipment costs? [MCIEAST-MCB CAMLEJO 3721.1A]

(7) Has the Maintenance Officer established an adequate Tool Control Program? [MCIEAST-MCB CAMLEJO 3721.1A]

(a) Are tools inventoried for accountability and inspected for serviceability? [MCIEAST-MCB CAMLEJO 3721.1A]

(b) Does local SOP identify the process to report and replace unserviceable or missing tools? [MCIEAST-MCB CAMLEJO 3721.1A]

g. Supply Procedures. Reserved.

h. ATCMD Overview. Reserved.

2. ATCMD Work Center Functional Area Evaluation. [Applicable to Communications, Navigational Aids, Radar, and Weather Work Centers]

a. Work Center Maintenance Administration

(1) Has the branch/work center supervisor effectively implemented the maintenance and material management (3-M) system and ensured maintenance is appropriately planned, conducted, and documented for work center? [OPNAVINST 4790.4, NAVSEAINST 4790.8, OPNAVINST 3721.5; MCIEAST-MCB CAMLEJO 3721.1A – Evaluator Completes Appendix L 3-M PMS Administration Assessment Checklist ATCMD Work Center]

(2) Are Equipment Performance Forms utilized to document equipment operating condition at specified intervals in order to assist in certification and determining any performance trends? [OPNAVINST 3721.5]

(3) Are work center logbooks used to document and pass information between crews in an effort to provide continuity of the maintenance effort? [MCIEAST-MCB CAMLEJO 3721.1A]

(4) Is Maintenance Data Analysis Tool (MDAT) utilized by the work center to generate and track maintenance actions? [MCIEAST-MCB CAMLEJO 3721.1A]

(a) Are Maintenance Action Items (MAI) opened for all equipment requiring maintenance? [MCIEAST-MCB CAMLEJO 3721.1A]

(b) Are man-hours tracked and documented for preventive and corrective maintenance in accordance with the 3-M system? [NAVSEAINST 4790.8]

(c) Are all equipment/systems not in use tagged indicating operational status and referencing applicable maintenance (AWM) and supply (AWP) action? [NAVSEAINST 4790.8; MCIEAST-MCB CAMLEJO 3721.1A]

(d) Do MAI and document numbers match the equipment tagged awaiting parts (AWP)? [MCIEAST-MCB CAMLEJO 3721.1A]

(5) Has the branch/work center supervisor ensured corrective maintenance is accomplished according to technical manuals, assigned echelon of maintenance, and equipment Source, Maintenance and Recoverability (SM&R) codes? [NAVSEAINST 4790.8B; MCIEAST-MCB CAMLEJO 3721.1A]

(6) Is there an established work center procedure to order replacement or repair parts? [MCIEAST-MCB CAMLEJO 3721.1A]

(a) Is parts information associated with an applicable maintenance action item documented and regularly updated in MDAT and local supply program to track parts failure and cost data? [MCIEAST-MCB CAMLEJO 3721.1A]

(b) Is the status of parts on order routinely monitored by the work center supervisor?

(c) Can received parts be traced to the equipment requiring the part?

(7) If the branch/work center maintains an approved On-Board Repair Parts (OBRP) kit to support specific equipment, is the inventory accurate? [ULSS, MCIEAST-MCB CAMLEJO 3721.1A]

b. Work Site Condition Evaluation

(1) Are there any siting or equipment installation/design problems known or suspected to exist that may negatively impact (as applicable to work center) communications, navigational aids, or radar reliability, availability or maintainability? [Applicable Tech Manual]

(2) Is the associated antenna field free of items that could cause radiation pattern problems? [Applicable Tech Manual]

(3) Is vegetation groomed such that it does not interfere with antenna, antenna mast, and guy wire maintenance? [Applicable Tech Manual]

(4) Is outside lighting adequate at the applicable work center remote sites to ensure access after dark? [MCIEAST-MCB CAMLEJO 3721.1A]

(5) Are obstruction lights operational? [NAVAIR 51-50AAA-2]

c. Equipment Material Condition Evaluation [NAVAIR 00-80T-114]

Communications equipment to include: AN/FSC-127 ETVS or AN/FSC-119 IVCSS; AN/GRC-171/-211 or AN/GRC-260/-261 Transceivers; CM-200 or CM-300(V)2 UHF/VHF Transmitters and Receivers; AN/FFC-1 FOCIS; AN/FAC-6(V)1,2,4 FOIS; DALR.

Radar equipment to include: AN/FPN-63 PAR; AN/GPN-30 DASR; AN/FSQ-204 STARS; and AN/FYC-22B VIDS, if maintained by Radar Work Center.

Navigational Aids Equipment to include: AN/URN-32 TACAN; OE-258A FC2 Antenna; MK20A Instrument Landing System Localizer and Glideslope; AN/FYC-22B VIDS, if maintained by NAVAIDS Work Center.

Weather Equipment: ASOS.

(1) Upon performing a visual inspection to assess NAALS equipment condition, is the material condition of the system satisfactory? [OPNAVINST 3721.5]

(a) Is equipment clean?

(b) Are all access panels and hardware installed?

(c) Are all lamps and alarms in proper working condition?

(d) Are all buttons and switches in good condition (not cracked or missing)?

(e) Are wires and cables in good condition (not visibly broken, torn or frayed)?

(f) Are all ATC equipment and facilities properly grounded to ensure personnel and equipment protection?

(g) Is weatherproofing on external cable connectors in good condition?

(h) If applicable, is lubrication adequate?

(i) Free of rust and corrosion?

(j) Free of cracked or peeling paint?

d. Equipment Technical Evaluation. [NAVAIR 00-80T-114]

Note: Past two years of equipment performance standards and maintenance documentation, applicable equipment technical manuals, PMS MRC's, and

baseline performance parameters shall be utilized to verify equipment performance, operation, and maintenance of ATC Communications, Radar, Navigational Aids, and Weather equipment. Evaluators will also spot check maintenance technicians in the performance of selected PMS to ascertain technical knowledge to access the effectiveness of the training program. (Record the process and results on PMS Spot Check Form).

(1) ATC Communications Equipment

(a) If installed, is PMS being performed on the AN/FSC-127 Enhanced Terminal Voice Switch (ETVS) and does the system meet all specified tolerances? [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(b) If installed, is PMS being performed on the AN/FSC-119(V) Integrated Voice Communications Switching System (IVCSS) and does the system meet all specified tolerances? [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(c) Is PMS being performed on the AN/FSC-127A Emergency Voice Switch (EVS), and does the system meet all specified tolerances? [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(d) Is PMS being performed on all ATC Communications antennae and do they meet all specified tolerances? [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(e) Are PMS and equipment performance forms being completed on radio transmitters, CM-200VT/UT or CM-300(V)2 VT/UT, and does the equipment meet all specified tolerances? [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(f) (XMIT) Have a randomly selected technician switch transmitter spares on-line and perform MRC S-1. [MCIEAST-MCB CAMLEJO 3721.1A]

(g) Are PMS and equipment performance forms being completed on radio receivers, CM-200VR/UR or CM-300(V)2 VR/UR, and does the equipment meet all specified tolerances? [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(h) (RCVR) Have a randomly selected technician switch receiver spares on-line and perform MRC S2. [MCIEAST-MCB CAMLEJO 3721.1A]

(i) Is PMS being performed on the multi-channel UHF radio set, AN/GRC-171 or AN/GRC-261 and VHF radio set AN/GRC-211 or AN/GRC-260, and does the equipment meet all specified tolerances? [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(j) Is PMS being performed on the Digital Audio Legal Recorder (DALR), and does it meet all specified tolerances? [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(k) Does the Automatic Terminal Information Service (ATIS) provide adequate audio quality and coverage? [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(l) Monitor randomly selected technicians perform PMS procedures designated by the Evaluator. Record process and results on PMS Spot Check Form. [MCIEAST-MCB CAMLEJO 3721.1A]

(2) ATC Radar Equipment

(a) Observe daily AN/FPN-63 Precision Approach Radar (PAR) turn-up procedures and system checks. [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(b) Is the bailout alarm tested daily? [NAVAIR 00-80T-114]

(c) Are current PAR alignment photographs readily available to final controllers and posted in PAR maintenance areas for technician use? [NAVAIR 00-80T-114]

(d) Do PAR indicators display proper operation? [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(e) Per applicable technical manual, are PAR antenna reflectors:

1. Well mounted and secure?

2. Free of rust and corrosion?

3. Line of sight to the radar?

4. Visible on indicators in the MTI mode?

(f) Are PMS and equipment certifications being performed on the Precision Approach Radar (PAR), AN/FPN-63, and does the system meet all specified tolerances? [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(g) Observe randomly selected technicians perform PMS MRC R-1D, W-1, W-2, W-3, and W-4 on the AN/FPN-63 PAR. Record the process and results on PMS Spot Check Form. [NAVAIR 00-80T-114; OPNAVINST 3721.5; MCIEAST-MCB CAMLEJO 3721.1A]

(h) Are all PAR systems and services currently operational, flight checked, and ground certified? [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(i) Are all PAR key performance parameters and critical inspection elements within operating tolerance? [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(j) Observe AN/GPN-30 Digital Airport Surveillance Radar (DASR) turn-up procedures and system checks. [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(k) Do DASR indicators display proper operation? [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(l) As applicable to site configuration, per applicable technical manual, is the MSSR Dual Channel Site Monitor (PARROT):

1. Well mounted and secure?

2. Free of rust and corrosion?

3. Line of sight to the radar?

4. Displaying proper site specific identification, altitude, range, and azimuth on TCWs?

(m) Observe randomly selected technicians perform AN/GPN-30 DASR PMS procedures designated by the Evaluator. Record the process and results on PMS Spot Check Form. [NAVAIR 00-80T-114; OPNAVINST 3721.5; MCIEAST-MCB CAMLEJO 3721.1A]

(n) Are all DASR systems and services currently operational, flight checked, and ground certified? [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(o) Are all DASR key performance parameters and critical inspection elements within operating tolerance? [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(p) Are PMS and equipment certifications being performed on the AN/FSQ-204 Standard Terminal Automation Replacement System (STARS), or STARS ELITE if so configured, and does the equipment meet all specified tolerances? [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(q) Observe randomly selected technicians perform PMS MRC W-1, M-2, M-3 on the AN/FSQ-204 STARS or STARS ELITE. Record the process and results on PMS Spot Check Form. [MCIEAST-MCB CAMLEJO 3721.1A]

(r) If installed and radar technicians are responsible for the maintenance, are PMS and equipment certifications being performed on the AN/FYC-22 Visual Information Display System (VIDS) and does the equipment meet all specified tolerances? [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(s) Observe randomly selected technicians perform PMS procedures designated by the Evaluator. Record the process and results on PMS Spot Check Form. [MCIEAST-MCB CAMLEJO 3721.1A]

(3) ATC Maintenance NAVAIDS

(a) Observe daily turn-up procedures and system checks. [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(b) Are PMS and equipment certifications being performed on the TACAN system, AN/URN-32 and does the system meet all specified tolerances? [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(c) Observe randomly selected technicians perform the PMS MRC identified as a ground inspection for the AN/URN-32 TACAN. Record the

process and results on PMS Spot Check Form. [OPNAVINST 3721.5, MCIEAST-MCB CAMLEJO 3721.1A]

(d) Are PMS and equipment certifications being performed on the TACAN Antenna system, OE-258A FC2 and does the system meet all specified tolerances? [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(e) Observe randomly selected technicians perform PMS MRC Q-1 for OE-258A FC2. Record the process and results on PMS Spot Check Form. [OPNAVINST 3721.5, MCIEAST-MCB CAMLEJO 3721.1A]

(f) Are PMS and equipment certifications being performed on the ILS and does the system meet all specified tolerances? [FAA Order 6750.49A, [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(g) Do the localizer and glide slope sites have adequate backup power? [NAVAIR 00-80T-114]

(h) Observe randomly selected technicians perform ILS PMS procedures designated by the Evaluator. Record the process and results on PMS Spot Check Form. [MCIEAST-MCB CAMLEJO 3721.1A]

(i) If installed and NAVAIDS technicians are responsible for the maintenance, are PMS and equipment certifications being performed on the AN/FYC-22B Visual Information Display System (VIDS) and does the equipment meet all specified tolerances? [Applicable Technical Manual, PMS MRC, baseline performance parameters]

(j) Observe randomly selected technicians perform VIDS PMS procedures designated by the Evaluator. Record the process and results on PMS Spot Check Form. [MCIEAST-MCB CAMLEJO 3721.1A]

(4) ATC Maintenance Weather

(a) Are PMS and equipment certifications being performed on Automated Surface Observation System (ASOS) and do they meet all specified tolerances? [MCIEAST-MCB CAMLEJO 3721.1A]

(b) Weather conditions permitting, observe randomly selected technicians perform PMS MRC S-5, S-8, and S-13 on the ASOS. Record the process and results on PMS Spot Check Form. [OPNAVINST 3721.5; MCIEAST-MCB CAMLEJO 3721.1A]

(c) Are there any siting or equipment installation/design problems known or suspected to exist that may negatively impact Weather systems reliability, availability or maintainability? [MCIEAST-MCB CAMLEJO 3721.1A]

e. Work Center Functional Area Overview.
(Prepare a summary statement for each functional area.)

(1) Does the overall equipment condition and operation indicate that good maintenance techniques are being utilized?

(2) Are there any recurring or unusual equipment problems?

(3) Is functional area mission capable?