

NAVAIR 00-80T-114

NATOPS AIR TRAFFIC CONTROL MANUAL

THIS MANUAL SUPERSEDES NAVAIR 00-80T-114
DATED 18 DECEMBER 1998.



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NATEC ELECTRONIC MANUAL



DEPARTMENT OF THE NAVY
CHIEF OF NAVAL OPERATIONS
2000 NAVY PENTAGON
WASHINGTON, D.C. 20350-2000

1 November 2002

LETTER OF PROMULGATION

1. The Naval Air Training and Operating Procedures Standardization (NATOPS) Program is a positive approach toward improving combat readiness and achieving a substantial reduction in the aircraft mishap rate. Standardization, based on professional knowledge and experience, provides the basis for development of an efficient and sound operational procedure. The standardization program is not planned to stifle individual initiative, but rather to aid the commanding officer in increasing the unit's combat potential without reducing command prestige or responsibility.
2. This manual standardizes ground and flight procedures but does not include tactical doctrine. Compliance with the stipulated manual requirements and procedures is mandatory except as authorized herein. In order to remain effective, NATOPS must be dynamic and stimulate rather than suppress individual thinking. Since aviation is a continuing, progressive profession, it is both desirable and necessary that new ideas and new techniques be expeditiously evaluated and incorporated if proven to be sound. To this end, commanding officers of aviation units are authorized to modify procedures contained herein, in accordance with the waiver provisions established by OPNAVINST 3710.7, for the purpose of assessing new ideas prior to initiating recommendations for permanent changes. This manual is prepared and kept current by the users in order to achieve maximum readiness and safety in the most efficient and economical manner. Should conflict exist between the training and operating procedures found in this manual and those found in other publications, this manual will govern.
3. Checklists and other pertinent extracts from this publication necessary to normal Air Traffic Control operations and training should be made and carried for use in naval aircraft.

A handwritten signature in black ink, appearing to read "M.J. McCABE", with a long horizontal flourish extending to the right.

M.J. McCABE
Rear Admiral, U.S. Navy
Director, Air Warfare

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The following Interim Changes have been cancelled or previously incorporated into this manual.

INTERIM CHANGE NUMBER(S)	REMARKS/PURPOSE
1	Previously Incorporated.

The following Interim Changes have been incorporated into this Change/Revision.

INTERIM CHANGE NUMBER(S)	REMARKS/PURPOSE
2	Hazard Reporting
3	ACWS Designations
4	ATC LCPO Requirements

Interim Changes Outstanding — To be maintained by the custodian of this manual.

INTERIM CHANGE NUMBER	ORIGINATOR/DATE (or DATE/TIME GROUP)	PAGES AFFECTED	REMARKS/PURPOSE

Summary of Applicable Technical Directives

Information relating to the following recent technical directives has been incorporated into this manual.

CHANGE NUMBER	DESCRIPTION	DATE INC. IN MANUAL	VISUAL IDENTIFICATION

Information relating to the following applicable technical directives will be incorporated in a future change.

CHANGE NUMBER	DESCRIPTION	DATE INC. IN MANUAL	VISUAL IDENTIFICATION

RECORD OF CHANGES

Change No. and Date of Change	Date of Entry	Page Count Verified by (Signature)

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LIST OF ACRONYMS/ABBREVIATIONS

A

- AAFIF.** Automated air facilities information file.
- AAO.** Assistant air operations officer.
- AATCFO.** Assistant air traffic control facility officer.
- ACA1.** Air traffic controller course.
- ACWS.** Air Traffic Control Watch Supervisor.
- AGL.** Above ground level.
- AICUZ.** Air installations compatible use zones.
- AIM.** Aeronautical information manual.
- AIROPS.** Air operations.
- **AIS.** Aeronautical Information System.
- ALF.** Auxiliary landing field.
- ALPA.** Air Line Pilots Association.
- ALTRV.** Altitude reservation.
- AMLIP.** Airfield marking and lighting improvement program.
- AMS.** Aircraft management system.
- **AO.** Air operations officer.
- AOPA.** Aircraft Owners and Pilots Association.
- AOWO.** Air operations watch officer.
- **AP.** Approach control.
- APA.** Allied Pilots Association.
- **AR.** Arrival control.
- ARP.** Airport reference point.
- **ARSR.** Air Route Surveillance Radar.
- ARTCC.** Air route traffic control center.
- ASC.** Assistant sector controller.
- ASOS.** Automated surface observing system. ■
- ASR.** Airport surveillance radar.
- ATA.** Air Transport Association of America.
- ATC.** Air traffic control.
- ATCA.** Air Traffic Control Association.
- ATCF.** Air traffic control facility.
- ATCAA.** Air traffic control assigned airspace. ■
- ATCFO.** Air traffic control facility officer.
- ATCFTSO.** Air traffic control facility training and standardization officer.
- ATCFWO.** Air traffic control facility watch officer.
- ATCNCOIC.** Air traffic control facility coordinator.
- ATCS.** Air traffic control specialist.
- ATCT.** Air traffic control tower.
- ATIS.** Automatic terminal information service.
- ATO.** Air transfer officer.
- ATPAC.** Air traffic procedures advisory committee.
- ATREP.** Air traffic representative.
- ATS.** Air traffic control training supervisor.

B

- BRANDS.** Bright radar alphanumeric display system.
- BRC.** Base recovery course.

C

- CA.** Conflict alert.
- CALO.** Command airspace liaison officer.
- CATCC.** Carrier air traffic control center.
- CCA.** Carrier controlled approach.
- CD.** Clearance delivery.
- CDC.** Combat direction center.
- CEB.** Controller evaluation board.
- CERAP.** Combined center and radar approach.
- CIC.** Combat information center.
- CMC.** Commandant of the Marine Corps.
- CNO.** Chief of Naval Operations.
- COMPLAN.** Communications plan.
- CONUS.** Continental United States.
- CP.** Command post.
- CV.** Aircraft carrier.
- CVIC.** Carrier intelligence center.

D

- DAIR.** Direct altitude identity readout.
- DASI.** Digital altimeter setting indicator
- DC.** Departure control.
- DH.** Decision height.
- DMAAC.** Defense Mapping Agency Aerospace Center.
- DMAHC.** Defense Mapping Agency Hydrographic Center.
- DOD.** Department of Defense.

DOD FLIPs. Department of Defense Flight Information publications.

- DON.** Department of the Navy.
- DOT.** Department of Transportation.
- DP.** Departure procedure.
- DRR.** Departure reference radial.
- DUATS.** Direct user access terminal service.

E

- EAF.** Expenditinary airfield.
- EAWS.** Enlisted aviation warfare specialist.
- ECN.** En route change notice.
- EDCT.** Expert departure clearance time.
- EIS.** Environmental impact statement.
- ELT.** Emergency locator transmitter.
- EMCON.** Electronic emission control.
- EPDS.** Evaluation, proficiency and development specialist.

F

- FAA.** Federal Aviation Administration.
- FACSFAC.** Fleet area control and surveillance facility.
- FACTS.** FACSFAC air control tracking system.
- FARs.** Federal aviation regulations.
- FC.** Final control.
- FCF.** Functional check flight.
- FCLP.** Field carrier landing practice.
- FD.** Flight data.
- FDIO.** Flight data input/output.
- FLIP.** Flight information publication.

■ **FLOLS.** Fresnel lens optical landing system.

FOD. Foreign object damage.

■ **FSDO.** Flight standards district office.

FSS. Flight service station.

FWS. Facility watch supervisor.

G

■ **GC.** Ground control.

GCA. Ground controlled approach.

■ **GEMD.** Ground electronics maintenance division.

GEMO. Ground electronics maintenance officer.

GENOTs. General notices.

H

HAI. Helicopter Association International.

■ **HAZREP.** Hazard report.

HDC. Helicopter direction center.

■ **HERO.** Hazards of Electromagnetic Radiation to Ordance.

HUMEVAC. Humanitarian evacuation.

I

IAPs. Instrument approach procedures.

ICAO. International Civil Aviation Organization.

■ **IFLOLS.** Improved fresnel lens optical landing system.

IFR. Instrument flight rules.

ILS. Instrument landing system.

■ **IMC.** Instrument meteorological conditions.

■ **IR.** IFR military training route.

IRAM. Individual Records Administration Manual.

ISIC. Immediate senior/superior in command.

ISIS. Integrated shipboard information system. ■

J

JOTS. Joint operational tactical system.

L

LC. Local control. ■

LHA. Amphibious assault ship.

LHD. Amphibious assault ship ■

LOA. Letter of agreement.

LOP. Letter of procedure. ■

LQS. Local qualification standards.

LSO. Landing signal officer.

LTG. Lesson topic guide. ■

M

MAP. Missed approach point.

MACS. Marine Air Control Squadron. ■

MC. Marshal Control. ■

MCAS. Marine Corps air station.

MEDEVAC. Medical evacuation flight.

MIJI. Meaconing, intrusion, jamming, and interference. ■

MILCON. Military construction.

MLS. Microwave landing system.

MOA. Memorandum of agreement; Military operations area.

MOU. Memorandum of understanding.

MRAALS. Marine remote area approach landing system.

MRU. Military radar unit.

NAVAIR 00-80T-114

MSAW. Minimum safe altitude warning.

MTI. Moving target indicator.

MTR. Military training route.

MVA. Minimum vectoring altitude.

N

NAALS. Naval air traffic control, air navigation aids and landing systems.

NAATS. National Association of Air Traffic Specialists.

NAF. Naval air facility.

NAS. National airspace system; Naval air station.

NATTC. Naval air technical training center.

NAVAID. Navigational aid.

NAVFIG. Naval Flight Information Group.

NAVREP. Navy representative.

NAWCAD. Naval Air Warfare Center, Aircraft Division.

NAWCWD. Naval Air Warfare Center, Weapons Division.

NBAA. National Business Aircraft Association.

NDB. Nondirectional beacon.

NFDC. National Flight Data Center.

NIMA. National Imagery and Mapping Agency.

NM. Nautical mile.

NMAC. Near midair collision.

NMCC. National Military Command Center.

NORAD. North American Aerospace Defense Command.

NOS. National Ocean Service.

NOTAM. Notice to airmen.

NOTMAR. Notice to Mariners.

NPQ. Not physically qualified.

NS. Naval station.

NTDS. Naval Tactical Data System.

NTSB. National transportation safety board.

O

OCC. Operation Control Center.

OCIR. Operational capability improvement request.

OJT. On-the-job training.

OJTI. On-the-job training instructor.

OLF. Outlying field.

OLS. Optical landing system.

OPAREA. Operating area.

OS. Operations specialist.

P

PALS. Precision approach landing system.

PAR. Precision approach radar.

PCN. Planning change notice.

PCS. Permanent change of station.

PEB. Procedure evaluation board.

PIA. Pierside incremental availability.

PIM. Position of intended movement.

POA&M. Plan of action and milestones.

PQS. Personnel qualification standards.

PRIFLY. Primary flight control.

PRIM. Personnel Reporting Instructions Manual.

PSD. Personnel support detachments.

R

- RAA.** Regional airline association.
- RAC.** Regional airspace coordinator.
- RAP.** Regional airspace plan.
- RAPCON.** Radar approach control.
- RATCF.** Radar air traffic control facility.

RCC. Rescue coordination center.

RDO. Runway duty officer.

RDT&E. Research, Development, Test and Evaluation.

RFC. Radar final controller.

ROC. Radar operations center

ROCC. Radar operations control center.

RS. Radar supervisor.

RVR. Runaway visual range.

S

SAR. Search and rescue.

SC. Sector controller.

SCATANA. Security control of air traffic and air navigation aids.

SDAP. Special duty assignment pay.

SIAP. Standard instrument approach and departure procedures.

SLEP. Service Life Extension Programs.

SM. Statute mile.

SOCC. Surface Operations Control Center.

SOP. Standard Operating Procedure.

SS. Surface supervisor.

STAR. Standard terminal arrival route.

STARS. Standard terminal automation replacement system.

SUA. Special use airspace.

SVFR. Special visual flight rules.

SWAP. Severe weather avoidance plan.

T

TACAN. Tactical air navigation aid.

TACC. Tactical air control center.

TACRON. Tactical air control squadron.

TCN. Terminal change notice.

TERPS. Terminal instrument procedures.

TFR. Temporary flight restriction.

TRACON. Terminal radar approach control.

TTH. Total training hours.

TYCOM. Type commander.

U

UCN. Urgent change notice.

UHF. Ultrahigh frequency.

UTC. Coordinated universal time.

V

VDB. Visual display board.

VFR. Visual flight rules.

VHF. Very high frequency.

VIP. Very important person.

VISCOM. Visual communications.

NAVAIR 00-80T-114

VLA. Visual landing aids.

■ **VMC.** Visual meteorological conditions.

VOD. Vertical on-board delivery.

■ **VOR.** Omnidirectional VHF navigational aid.

VORTAC. Co-located VOR and TACAN navigational aid.

VR. VFR military training route.

VTOL. Vertical takeoff and landing.

V/STOL. Vertical/short takeoff and landing.

PREFACE

SCOPE

The Naval Air Training and Operating Procedures Standardization (NATOPS) Manual is issued by the authority of the Chief of Naval Operations and under the direction of Commander, Naval Air Systems Command, in conjunction with the NATOPS program. This manual contains information on administrative and operational procedures for Navy and Marine Corps Air Traffic Control Facilities (ATCFs) and Fleet Area Control and Surveillance Facilities (FACSFACs), and applies on a worldwide basis. This manual is not intended to cover every contingency which may arise nor every rule of safety and good practice. To achieve maximum value, the contents of all directives cited must be studied and understood. Where the need arises, special instructions or waivers will be promulgated by Chief of Naval Operations. Paragraphs 2.3, 2.4, 2.6.1.4.1, 2.6.1.4.2, 3.1.1.2, 3.1.6, 3.3, 3.4.6, 3.4.7, 3.6.1, 3.6.2, 3.6.3, 3.7, 3.9.1, 5.2.2, 5.4.1.3, 5.4.2.4, 7.2.5.2, 10.2, 10.4.2, 10.4.3, Chapters 4, 8, 11, 12 and Appendix K are applicable to shipboard Carrier Air Traffic Control Centers (CATCCs), Amphibious Air Traffic Control Centers (AATCCs), and Tactical Air Control Squadrons (TACRONs), as appropriate.

Marine forces tactical air traffic control is provided by Marine Air Control Squadron Air Traffic Control Detachments (MACS ATC Dets). The units are tasked, organized, trained, and equipped to provide tower, ground controlled approach (GCA), radar/nonradar approach control, and navigational aid service in all-weather conditions. To the extent possible and consistent with the ATC requirements of the area to which deployed, the functions, training, qualification, and certification for Marine forces tactical ATC units shall be as prescribed in this manual.

HOW TO GET COPIES

Additional copies of this manual and changes thereto may be procured through the local supply system from NAVICP Philadelphia via DAAS in accordance with NAVSUP P-409 (MILSTRIP/MILSTRAP), or a requisition can be submitted to Naval Supply Systems Command via the Naval Logistics Library (NLL) website, www.nll.navsup.navy.mil.

This publication is also available to view or download from the NATEC website, www.natec.navy.mil.

Automatic Distribution (with Updates)

This publication and changes to it are automatically sent to activities that are established on the Automatic Distribution Requirements List (ADRL) maintained by Naval Air Technical Data and Engineering Service Command (NATEC), in San Diego, CA. If there is continuing need for this publication, each activity's Central Technical Publication Librarian must send a revised ADRL report on floppy disk to NATEC. If an activity does not have a library, send a letter to the Commanding Officer, Naval Air Technical Data and Engineering Service Command, NAS North Island, Bldg. 90, P.O. Box 357031, San Diego, CA 92135-7031, requesting assignments of a distribution account number (if necessary) and automatic mailing of future issues of the publications needed.

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UPDATING THE MANUAL

To ensure that the manual contains the latest procedures and information, NATOPS review conferences are held in accordance with OPNAVINST 3710.7 series.

CHANGE RECOMMENDATIONS

Recommended changes to this manual or other NATOPS publications may be submitted by anyone in accordance with OPNAVINST 3710.7 series.

Routine change recommendations are submitted directly to the Model Manager on OPNAV Form 3710/6 (4-90) shown herein. The address of the Model Manager of this publication is:

Chief of Naval Operations
N785F
2000 Navy Pentagon
Washington, D.C. 20350-2000

Change recommendations of an URGENT nature (safety of flight, etc.), should be submitted directly to the model manager, copy to the chain of command, by priority message.

YOUR RESPONSIBILITY

NATOPS manuals are kept current through an active manual change program. Any corrections, additions, or constructive suggestions for improvement of its content should be submitted by routine or urgent change recommendation, as appropriate at once.

NATOPS MANUAL INTERIM CHANGES

Interim changes are changes or corrections to the NATOPS manuals promulgated by CNO. Interim changes are issued either as printed pages, or as a naval message. The Interim Change Summary page is provided as a record of all interim changes. Upon receipt of a change or revision, the custodian of the manual should check the updated Interim Change Summary to ascertain that all outstanding interim changes have been either incorporated or canceled; those not incorporated shall be recorded as outstanding in the section provided.

CHANGE SYMBOLS

Revised text is indicated by a black vertical line in either margin of the page, like the one printed next to this paragraph. The change symbol shows where there has been a change. The change might be material added or information restated. A change symbol in the margin by the chapter number and title indicates a new or completely revised chapter.

WARNINGS, CAUTIONS, AND NOTES

The following definitions apply to “WARNINGS”, “CAUTIONS”, and “Notes” found throughout the manual.

WARNING

An operating procedure, practice, or condition, etc., that may result in injury or death, if not carefully observed or followed.

CAUTION

An operating procedure, practice, or condition, etc., that may result in damage to equipment, if not carefully observed or followed.

Note

An operating procedure, practice, or condition, etc., that is essential to emphasize.

WORDING

The concept of word usage and intended meaning adhered to in preparing this Manual is as follows:

1. “Shall” has been used only when application of a procedure is mandatory.
2. “Should” has been used only when application of a procedure is recommended.
3. “May” and “need not” have been used only when application of a procedure is optional.
4. “Will” has been used only to indicate futurity, never to indicate any degree of requirement for application of a procedure.

NATOPS/TACTICAL CHANGE RECOMMENDATION
OPNAV 3710/6 (4-90) S/N 0107-LF-009-7900

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Your change recommendation is reclassified URGENT and forwarded for approval to _____ by my DTG _____

/S/ _____ MODEL MANAGER	_____ AIRCRAFT
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CHAPTER 1

Introduction

1.1 MISSION

The mission of Navy and Marine Corps air traffic control facilities is to provide for the safe, orderly, and expeditious movement of air traffic. It includes aircraft movements on the airport surface and within airspace where control jurisdiction has been delegated. The complex functions, equipment, and personnel required to provide this service comprises an [ATCF](#).

1.2 OTHER SOURCES OF INFORMATION

1.2.1 Federal Aviation Administration (FAA) Directives

1. The following [FAA](#) directives are applicable to the Naval establishment:
 - a. FAA Order 7100.9, Standard Terminal Arrival Route (STAR). Provides guidance and standardization for developing and managing the [STAR](#) program.
 - b. FAA Order 7110.10, Flight Services. Contains procedures and phraseology for use by personnel providing flight assistance services and flight planning.
 - c. FAA Order 7110.65, Air Traffic Control. Contains procedures for providing [ATC](#) services.
 - d. FAA Order 7130.3, Holding Pattern Criteria. Serves as a planning document for airspace planners by setting forth criteria for determining holding pattern airspace area dimensions and instructions for their use.
 - e. FAA Order 7220.1, Certification and Rating Procedures. Specifies procedures for the certification and rating of all air traffic controllers.
 - f. FAA Order 7400.2, Procedures for Handling Airspace Matters. Prescribes procedures used

by FAA personnel engaged in handling of airspace matters.

- g. FAA Order 7610.4, Special Military Operations. Addresses special military operations and is promulgated by OPNAVINST 3722.33.
2. Advisory Circulars — Advisory Circulars do not set forth policy and the information contained therein is advisory in nature. However, the supply support agreement, Advisory Circular AC-229, is adhered to for the mutual benefit of both the Navy/Marine Corps and the FAA. Naval ATC facilities are not precluded from using this information.
3. General Notices (GENOTs) and Regional Notices (RENOTs) — [GENOTs](#) and RENOTs do not apply to the Naval establishment unless such procedures are promulgated by [CNO](#) (N785F).

1.2.2 Department of the Navy Directives.

ATC personnel shall be familiar with and operate in accordance with applicable naval directives. Some of the more pertinent directives are listed below. A more extensive list of directives can be found in [Appendix P](#).

1. NAVMETOCCOMINST 1500.3 — Provides basic guidelines and standardized procedures for those units of the Naval Meteorology and Oceanography Command charged with the responsibility to train and certify air traffic controllers in observing, recording, and disseminating tower visibility information.
2. OPNAVINST 3710.7 — NATOPS General Flight and Operating Instructions Manual. Provides guidance to aviation personnel regarding flight planning, flight plan approval, flight rules, emergencies, and ATC procedures.
3. OPNAVINST 3710.31 — Operational Procedures for Aircraft Carrying Hazardous Materials. Establishes policy and procedures for alerting

aircraft crash-fire protection and other base support activities to the arrival/departure of aircraft carrying hazardous materials and outlines procedures that apply when CB munitions/agents are being transported on military or military contract aircraft. It specifies what action must be taken by the technical escort, air crewmember, and the aircraft commander, should an in-flight emergency involving these materials occur.

4. OPNAVINST 3721.5 — **NAALS** Program. Promulgates policy and guidance for the planning, programming, and implementation of the NAALS program and associated equipment for use at naval aviation shore facilities.
5. OPNAVINST 3721.18 — U.S. Interagency Ground Inspection Manual for Air Traffic Control and Navigational Aid Facilities. Prescribes standards for equipment and navigational aids used in controlling air traffic.
6. OPNAVINST 3721.20 — The U.S. Military **NOTAM** System. Establishes policy, delineates responsibilities, and provides guidance for issuing NOTAMs.
7. OPNAVINST 3722.16 — U.S. Standard TERPs. Establishes design minimums and obstacle clearance criteria for instrument approaches.
8. OPNAVINST 3722.33 (FAA Order 7610.4) — Special Military Operations. Provides procedures for air traffic control planning, coordination, and services during defense activities and special military operations.
9. OPNAVINST 3722.35 — Baseline Planning Criteria for Naval Air Traffic Control Facility (ATCF) Resources Criteria. Provides a mechanism for defining ATCF resources locally and on an equitable basis.
10. OPNAVINST 3770.2 — Airspace Procedures Manual. Provides guidance for airspace utilization.
11. SECNAVINST 3770.1 — Use of Department of the Navy Aviation Facilities by Other Than U.S. **DOD** Aircraft. Sets policy and procedures for the issuance of aviation facility licenses.

12. NAVAIR 16-1-520 — U.S. Standard Flight Inspection Manual. Establishes procedures and criteria for flight check of navigational aids and instrument procedures.
13. NAVAIRINST 5400.137 — Air Traffic Control and Landing Systems Program. Contains the charter that provides the program's description, scope, operating relationships, organization, resources, and outlines the authority and responsibility of the ATCALs program manager (PMA 213).
14. NAVFAC P-80.3 — Airfield Safety Clearances. Provides guidance for identifying obstructions to air navigation and establishes airfield safety clearances for fixed-wing aircraft and helicopter installations.
15. NCWP 3-25.8 — Marine Air Traffic Control Detachment Handbook. Focuses on the details of the Marine Air Traffic Control Detachment (MATCD) operations and the role it plays in MAGTF, joint, and multinational operations.
16. SPAWAR EE 003-BA-GYD-010/**GEMO** — Ground Electronics Maintenance Officer Operations and Maintenance Management Guide (**GEMO** Manual). Provides information concerning **GEMD** organization and administration as well as training, safety, security, and supply support associated with the maintenance management of shore-based air traffic control systems.

1.2.3 ATC Schools at **NATTC** Pensacola.

These schools maintain a comprehensive technical library that may be accessed by field activities for research of technical questions.

1.2.4 Navy/Marine Corps ATC Web Site (<https://atc.navy.mil>).

This Web site is designed to provide historical and current reference data to assist in all facets of Navy/Marine Corps ATC and Ground Electronics. Many of the forms referenced in this manual are available for download at this Web site. CNO (N785F) has oversight for the contents of this Web site which is maintained by SPAWARSCEN, Charleston.

1.3 EXPLANATION OF TERMS

Explanation of terms and abbreviations commonly used in air traffic control are found in **FARs**, **DOD**

FLIPs, AIM, Naval Meteorological Instructions, FAA Orders, and military directives. No attempt to duplicate these terms has been made.

1. **NAS** — An independent activity that provides aircraft operations, maintenance, training, and personnel facilities in accordance with organizational requirements.
2. **NAWS** — An independent activity that provides aircraft operations, maintenance, training, and personnel facilities in support of weapons research, development, test and evaluation (RDT&E).
3. **MCAS** — An independent aviation activity developed to provide permanent facilities for a war-strength Marine aircraft wing and station forces less the units deployed at subordinate Marine Corps air facilities and any Marine Corps auxiliary landing field. A Marine Corps air station possesses facilities for maintenance work beyond the scope of the capabilities of the dependent fields. It acts as the supply stock point as designated for the subordinate airfields and air facilities to be supported and budgets and manages the funds for maintenance and operations for all assigned subordinate airfields and is under the command of the appropriate Commander, Marine Corps Air Bases.
4. **NAF** — An activity established to meet some special requirement of naval aviation. It may or may not be administratively dependent on a parent (air or nonair) activity in accordance with organizational requirements.
5. **ALF** — An airfield having limited facilities, additional to the landing area in operation. It is designated as such by the Chief of Naval Operations to provide an airfield that can serve as a staging base for gunnery, ordnance, or other training exercises; **FCLP** or other landing practice site; or emergency or “bingo” field in support of offshore carrier operations and/or a base with limited support for assigned aircraft or units. The facilities and/or services may include any or all of the following as appropriate to usage and/or user requirements: air traffic control communications; crash, fire, and rescue services; personnel berthing and messing; refueling and rearming equipment; ready issue stowage; line operations; line maintenance; high usage line maintenance spare parts; and limited support of assigned aircraft or units. An ALF is not a separately established activity, but is under the cognizance of a nearby parent (air or nonair) activity from which personnel, material, and funds for its support are allocated. The parent activity may maintain a caretaker detachment and/or service unit at the ALF for day-to-day operations.
6. **OLF** and Helicopter OLF — An airfield having no established facilities in operation except a landing area. It is designated as such by the Chief of Naval Operations to provide a landing area on which aircraft based elsewhere can conduct landing practice or other exercises. An OLF is not a separately established activity, but is under the cognizance of a nearby parent air station from which personnel, material, and funds for its support are allocated. However, required air traffic control and/or crash rescue personnel or others appropriate to support the operations to be conducted, along with mobile facilities as required to supplement existing facilities may be located at the OLF either on a “duration of the operation” or a “normal operating hours” basis.
7. **Jointly Staffed Facility** — A military air traffic control facility wherein operational responsibility is delineated between the military and another agency such as the FAA.
8. **Naval Air Traffic Control Facility** — The complex of functions, equipment, and personnel at a naval aviation shore facility that provides air traffic control service in a designated area of jurisdiction to aircraft, both airborne and on the airfield operating area.
9. **Naval Aviation Shore Facility** — Any station with an airfield that is operated by the naval establishment and is not designated as an **EAF**.
10. **NAVREP** — Department of the Navy Representative assigned to the FAA Regional Headquarters under the sponsorship of CNO (N785F). NAVREP functions are outlined in OPNAVINST 3770.2.

CHAPTER 2

General

2.1 INTERFACE WITH NATIONAL AIRSPACE SYSTEM

2.1.1 Background

2.1.1.1 The Federal Aviation Act of 1958. The Federal Aviation Act of 1958 authorizes and directs the Administrator of the FAA to assign by rule, regulation, or order, the use of the navigable airspace under such terms, conditions, and limitations as may be deemed necessary in order to ensure the safety of aircraft and the efficient utilization of airspace. The administrator is also authorized to provide necessary facilities and personnel for the regulation and protection of air traffic. Under the same act, the Administrator may delegate certain functions to any other Federal department, subject to the concurrence of that department. The Administrator exercises control through the National Airspace System which is the common network of U.S. airspace, navigational aids, communications, and air traffic control facilities and equipment. The National Airspace System also includes aeronautical information and charts, weather information, FAA manpower and material, and system components jointly shared with the military. It does not include the system operated by the military entirely for military purposes. Domestically, air traffic facilities operated by the military are, in effect, extensions of the National Airspace System. Delegation of responsibility for the operation of military air traffic control facilities is the subject of a [MOA](#) between the FAA and the Navy, Army, and Air Force (see [Appendix A](#)). In foreign countries, similar arrangements for authority to control air traffic within sovereign airspace is a matter of formal agreement with appropriate military or foreign host government officials of the country involved. The Federal Aviation Act of 1958 (Public Law 85-726) was amended by Executive Order 10854 and Public Law 103-272.

2.1.1.2 Military Responsibility. In general, the cognizant military service provides airport traffic control service (visual flight rules) at those military

airports where it maintains a control tower. Where it is mutually agreed to be advantageous and subject to a [LOA](#) between the local military authority and the appropriate FAA [ARTCC](#) or foreign host government, approach control functions for the military terminal area may also be performed by the military authority. In some cases, air traffic control service may also be provided for air operations in restricted, warning, or other designated special use airspace.

2.1.1.3 FAA Responsibility. Where a military facility is located near an FAA approach control facility, the FAA will normally provide approach control service for the military. If mutually agreed, the FAA may staff an approach control (surveillance radar) at facilities located on military installations. At military installations where FAA staffing is provided in whole or in part, a local memorandum of agreement shall be signed between appropriate FAA and local military authorities outlining the details of the staffing arrangement and shall include provisions for military personnel to cross-train on approach control positions. At naval aviation shore facilities, the function of [PAR](#) shall be provided by military personnel; however, FAA personnel may receive cross-training at PAR positions.

2.1.1.4 Open Skies Treaty. The Treaty on Open Skies (OS) was ratified by the United States on 2 November 1993 and entered into force on 1 January 2002. This Treaty is a security and confidence building measure that establishes a regime of unarmed aerial observation flights over the territory of signatory states. As of 1 January 2002, there is no right of refusal for Open Skies overflights except for Safety of Flight reasons and those listed in FAAO 7110.65. Naval activities will be overflown by foreign countries, and any imagery collected may be obtained by any party to the treaty. Naval Treaty Implementation Program (NTIP) executes the Department of the Navy (DON) OS Notification Program, coordinates high value event input, oversees the post-flight analysis, and provides assistance and training to Commands as requested. Additional information on Open Skies may be found at <http://www.nawcwpns.navy.mil/~treaty/>.

2.1.2 FAA Monitoring of ATC Procedures.

The FAA has been authorized to conduct in-flight monitoring of military facilities for the purpose of ensuring that uniform voice procedures are employed, to verify that procedures used to control air traffic are safe and practical, and to recommend corrective action to be taken should discrepancies be identified. These in-flight checks are separate and distinct from those specified in the U.S. Standard Flight Inspection Manual, which addresses inspection of navigational aids. After checking a naval aviation shore facility, FAA personnel will complete FAA Form 2711 and submit it to the station commanding officer or his authorized representative. In addition, if the flight terminates at the facility, the pilot will discuss the check informally with facility personnel. Discrepancies noted shall be reviewed and corrected as feasible.

2.1.3 FAA Air Traffic Representative (ATREP).

The FAA has been authorized to assign an [ATREP](#) at ATC facilities where approach control authority has been delegated to the Navy and Marine Corps. ATREP functions are outlined in FAA Order 7610.4 and [Article IV](#) of [Appendix A](#).

2.1.4 Suspension of Approach Control Authority

2.1.4.1 ATREP. Article I of [Appendix A](#) provides that the ATREP or a representative of the FAA area manager may temporarily suspend the delegation of approach control authority in the interest of flight safety.

2.1.4.2 Commanding Officer. If approach control authority is temporarily suspended, the commanding officer shall:

1. Attempt immediate resolution at the local level.
2. Notify by the fastest means available the cognizant NAVREP, [ISIC](#), and type commander.
3. Report details by message to the ISIC within 2 working days. CNO (N785F), [CMC](#) (aviation), cognizant NAVREP, and the appropriate chain of command shall be information addressees.

4. If unable to effect resolution within 10 days, the commanding officer shall request assistance from the ISIC.

2.1.4.3 Type Commander. The type commander shall:

1. When appropriate, request the FAA Regional Administrator to aid in reestablishment of approach control authority.
2. If unable to effect resolution, request CNO/CMC to act on the matter.

2.1.4.4 NAVREP. The cognizant NAVREP shall be an information addressee on all correspondence.

2.1.5 Air Traffic Control NATOPS Evaluation Program.

Type commanders shall establish a air traffic control NATOPS evaluation team to evaluate personnel manning, equipment, and performance of personnel and equipment involved in the provision of ATC-related services under type commander cognizance. Particular attention shall be placed on the organizational compliance of facility management to the governing sections of this NATOPS manual. Air Traffic Control NATOPS Evaluation teams shall be under the cognizance of the air traffic control specialist assigned to type commander staffs, and shall use [Appendix B](#) as a minimum.

Air traffic control NATOPS evaluation team visits will be performed biennially at all activities tasked to support ATC services. Evaluations shall measure facility ability to perform its mission in relation to operational tasking, special use airspace management, and flight activity. Evaluations in each of the functional areas including administration, training, control tower, flight planning, radar, and ground electronics maintenance shall be performed. Observations within each area will be in the form of subjective and objective remarks with an overview at the conclusion. Negative observations will require detailed explanation remarks.

[MACS](#) ATC Detachments should utilize [Appendix B](#) to evaluate air traffic control services and procedures. Additionally, the Marine Liaison Officer at SPAWARSYSCEN, San Diego maintains a [MACS](#) ATC Detachment equipment evaluation checklist and may, if requested by appropriate authority, assist in performing detachment equipment Air Traffic Control NATOPS Evaluations.

2.1.5.1 Reports. A formal report will be forwarded by the reporting type commander to the evaluated facility within 15 working days after the conclusion of the NATOPS evaluation. This report will delineate deficiencies and recommend corrective action for the commanding officer or higher authority as appropriate. Items of significant interest may require command situation reports. Normally, major deficiencies will require the establishment of a [POA&M](#) with monthly follow-up reports by the command until completion. Minor deficiencies will require a one-time correction report following the initial tasking of the type commander formal report. Local commands should provide ISIC with copies of the most recent type commander Air Traffic Control NATOPS Evaluation for credit associated with command inspections.

2.1.6 Control Authority. The qualified air traffic controller at the control position has final authority for applying separation criteria to control of air traffic. Advice or instructions by other than ATC personnel may be issued through the air traffic controller, but controller authority for approval or denial of procedures as they pertain to separation of air traffic shall not be interfered with or abridged except by qualified supervisory personnel.

2.2 AIR TRAFFIC PROCEDURES ADVISORY COMMITTEE (ATPAC)

[ATPAC](#) is a formal committee established by [DOT](#) charter to advise the FAA on present ATC procedures and practices and to analyze new or significantly revised procedural concepts. ATPAC members include representation from the [AOPA](#), [ALPA](#), [ATCA](#), [ATA](#), [APA](#), FAA, [HAI](#), [NAATS](#), [NBAA](#), [RAA](#), U.S. Air Force, U.S. Navy, and U.S. Army. N785F2 (primary member) and N785F1 (alternate member) provide USN representation.

2.2.1 Action. Any user or provider of ATC services may submit an area of concern. Correspondence should be submitted to N785F2 via the Type Commander or CMC (aviation), as appropriate.

2.3 ANNUAL AWARDS

2.3.1 Background

2.3.1.1 Air Traffic Controller of the Year. The Vice Admiral Robert B. Pirie Naval Air Traffic Controller of the Year Award is symbolic of the outstanding contributions to operational readiness and safety of flight made by individual Navy and Marine Corps air traffic controllers. This perpetual award is named in honor of Vice Admiral Robert B. Pirie who, while serving as Deputy Chief of Naval Operations for Air Warfare (OP-05) from 1958-1962, was credited with maintaining the Navy's Air Controlman rating following the enactment of the Federal Aviation Act of 1958 which created the present National Airspace System.

2.3.1.2 Air Traffic Control Technician of the Year. The Vice Admiral William P. Lawrence Naval Air Traffic Control Technician of the Year Award is symbolic of the outstanding maintenance contributions to operational readiness and safety of flight made by individual Navy and Marine Corps technicians. This perpetual award is named in honor of Vice Admiral William P. Lawrence who made significant contributions to the growth and stability of Naval Air Traffic Control while serving in OP-05 from 1975 to 1978.

2.3.1.3 Awards. Both awards are sponsored by Telephonics Corp., Command Systems Division. The primary trophies are maintained on display at NATTC Pensacola ATC schools. Replicas are presented to each recipient.

2.3.1.4 Nomination Criteria. Specific criteria for determining E-6 or below nominees for the Pirie and Lawrence awards are not delineated in order to permit the full range of professional judgment by reporting seniors. However, one or more of the following categories is considered appropriate:

1. An individual whose introduction or development of an air traffic control or maintenance concept has led to overall improvements in the efficiency and/or safety of naval aviation.

2. A controller or technician whose sustained outstanding performance has significantly contributed to the efficiency or flight safety of naval aviation.
3. A controller personally responsible for executing lifesaving action in response to an emergency situation.
4. A technician who has improved significantly the reliability or maintenance of Navy air traffic control systems or reduced the cost associated with maintaining or replacing these systems.
5. Outstanding leadership or other individual achievement in the field of air traffic control or systems maintenance.

2.3.2 Action

2.3.2.1 Originating Commands. Commands with air traffic controllers and air traffic control technicians assigned are strongly encouraged to select and recognize individuals whose performance embodies the spirit of these awards. Nominations, accompanied by substantiating rationale, shall be submitted to Type Commanders by 15 December. Commands with multiple UICs (e.g. NAS Oceana and Air Det Norfolk) should submit nominations from each ATC facility. Period of consideration is from 1 January of the year in which the nomination is submitted.

2.3.2.2 Format. A sample format for nominations is contained in [Appendix S](#). Substantiating justification shall be included in the cover letter of the nomination package and shall not exceed two pages. The following enclosures shall be submitted with the nomination letter:

1. Professional History — A complete chronological listing of all billets held by the nominee during the preceding two calendar years, prepared in five-column landscape format under the following headings: Date/Month/Year; Grades/Rates Held; Command; Professional Qualifications/Ratings/Designations; Awards Received.
2. Biography — Contains, at a minimum, date/place of birth; hometown; date of initial enlistment; and

family members. Shall not exceed one page in length.

3. Personal Award Recommendation — Completed, but unsigned OPNAV 1650/3 (with summary of action and proposed citation) recommending the nominee for the Navy and Marine Corps Commendation Medal. The following shall be used in completing the form:

- a. Originator: CNO (N785F)
- b. Awarding Authority: CNO (N78)
- c. Name, grade, title of originator: Blank
- d. Signature: Blank
- e. Forwarding Endorsements (block 23): Blank
- f. Summary of Action narrative: May be virtually the same as the nomination cover letter
- g. Award Citation: Must mention the Vice Admiral Robert B. Pirie Naval Air Traffic Controller of the Year/Vice Admiral William P. Lawrence Naval Air Traffic Control Technician of the Year Award.

2.3.2.3 Type Commanders. COMNAVAIRLANT, COMNAVAIRPAC, CNATRA, COMNAVAIRES, COMNAVAIRSYSCOM, COMNAVSURFLANT, COMNAVSURFPAC, and NATTC (ATC Schools, Code 30) shall submit nominations to reach CNO (N785F) by 30 January each year. COMCABWEST, COMCABEAST, CG MCB Japan, CG 1MAW, CG 2D MAW, CG 3D MAW, CG 4MAW shall submit nominations to CMC (Aviation) by 15 January. CMC (Aviation) shall forward no more than four nominations to reach CNO (N785F) by 30 January.

Although type commanders are limited to one nomination (for each award) for submission to CNO (N785F), nothing in this paragraph precludes the type commander from establishing intermediate recognition at its level (i.e., [TYCOM](#) sea duty controller/technician of the year, TYCOM shore duty controller/technician of the year, TYCOM OUTUS controller/ technician of the year, etc.).

2.3.2.4 Selection. The Chief of Naval Operations (Director Air Warfare) will select and announce the awardees. In recognition of the achievement as controller or technician of the year, each awardee will be presented the Navy and Marine Corps Commendation Medal.

2.3.2.5 Presentation. Presentation of the Award will be made at the annual Association of Naval Aviation (ANA) Convention in accordance with OPNAVINST 1650.24.

2.3.2.6 Funding. The selectees' Type Commander at the time of award presentation shall provide necessary funding and arrangements for the award presentation and other travel or activities, as appropriate.

2.4 REQUESTS FOR CHANGES IN OPERATIONAL CAPABILITY

For **VLA**, special project requests should be submitted to Commander Naval Air Systems Command (COMNAVAIRSYSCOM) (PMA 251) for inclusion in the **AMLIP**. Additionally, requests for addition, removal, or replacement (exclusive of maintenance replacements) of equipment or systems that would alter the operational capability of a facility shall be initiated by submitting a naval air traffic control NAALS **OCIR** in accordance with OPNAVINST 3721.5.

Commanding officers shall notify the cognizant NAVREP when any change in utilization of military airports and/or landing areas is intended and such change has the potential for affecting the use of airspace. DOD Directive 5030.17 of 6 November 1978, OPNAVINST 3770.2, and sections 307 and 308 of the FAA Act of 1958 (as amended), apply.

2.5 RUNWAY CLOSURE AND THRESHOLD DISPLACEMENT

2.5.1 Runway Closure. Requests for permanent runway closures shall be forwarded via the chain of command to COMNAVAIRSYSCOM to be approved by CNO (N785F). Section 308(b) of the FAA Act of 1958 (as amended) is applicable.

2.5.2 Threshold Displacement. Information regarding permanent and temporary threshold displacements may be found in the NAVAIR 51-50AAA2 (Shore-based Airfield Marking and Lighting), NAVFAC P80.3 (Facility Planning Factor Criteria for Navy and Marine Corps Installations), and NAVAIR 00-80T-114 (NATOPS Air Traffic Control Manual). Requests for permanent threshold displacement shall be forwarded via the chain of command to COMNAVAIRSYSCOM for approval. Copies of each approval shall be forwarded to CNO (N785F) or CMC (Aviation), as appropriate.

2.6 AIRPORT FACILITIES

2.6.1 Air Navigational Aids

2.6.1.1 Basis for Assignment

2.6.1.1.1 Background. **VORTAC**s comprise the primary U.S. en route navigational system. The FAA owns and operates most en route VORTAC facilities. In the terminal area, the primary electronic landing aids for naval aviation shore facilities are **TACAN** for non-precision approaches and **PAR** for precision approaches. Additionally, automatic landing systems are installed where required for use and training by aircrews flying compatibly equipped fleet aircraft. Other terminal area navigational aids (e.g., **UHF NDB** or **VOR**) may be authorized for installation when users are dependent on these systems either as the primary aid to navigation or for a backup system. Terminal navigational aids established solely to serve military terminals are generally operated and maintained by the cognizant military service.

2.6.1.1.2 Naval Policy. It is the policy of the Department of the Navy to:

1. Make maximum use of FAA VORTAC facilities.
2. Use FAA and other military service navigational aids to the maximum extent in establishing standard instrument approach procedures to naval aviation shore facilities when such use meets operational requirements.
3. Transfer operational responsibility to the FAA or decommission USN/USMC operated navigational aids when their usefulness has been served.

2.6.1.1.3 Requests for Installation of Navigational Aids. Requests for installation of navigational aids are initiated in accordance with OPNAVINST 3721.5 by submitting an OCIR.

2.6.1.1.4 Requests for Decommissioning of Navigational Aids. Requests shall be submitted to the Chief of Naval Operations (N785F). Prior to requesting decommissioning of navigational aids, the facility shall determine if:

1. The **NAVAID** forms part of the Federal airway system.
2. Airspace assignment is predicated upon the **NAVAID**.
3. **NAVAID** is used for military or civil instrument procedure.
4. The **NAVAID** is included in **ICAO** plans. The findings shall be addressed in the facility requests for authority to decommission.

Note

When a navigational aid is found to be a part of the National Airspace System or included in ICAO plans, coordination must be effected with the FAA via the appropriate NAVREP.

2.6.1.2 Interruptions to Service

2.6.1.2.1 Scheduled Outages. No NOTAM action is required when routine preventive maintenance is performed on radars and NAVAIDs provided the following conditions are satisfied:

1. Time periods do not exceed these specified limits:
 - a. For radar systems (PAR, **ASR**, etc.) that are a part of the National Airspace System — 30 minutes.
 - b. For NAVAIDs (TACAN, VOR, etc.) that are a part of the National Airspace System — 1 hour.
 - c. For all Navy radars and NAVAIDs that are not part of the National Airspace System — 2 hours.

2. Extension of the specified time period is not authorized and a NOTAM must be initiated at or before the end of that period.
3. One hour prior notice is given to FAA flight service facilities and each concerned ATC facility.
4. Weather conditions are at and are forecast to remain equal to or better than the following:
 - a. Airfields with two or more approach aids: ceiling 3,000 feet, visibility 5 **SM**.
 - b. Airfields with a single approach aid: sky condition scattered, visibility 5 **SM**.
5. Weather Deterioration or Maintenance Delay. If the weather deteriorates to below the minimums stated in **subparagraph 4** of **paragraph 2.6.1.2.1** or the facility is not returned to service during the applicable time period, a NOTAM will be immediately initiated.
6. To the maximum extent possible, scheduled maintenance should be accomplished during hours of least traffic activity.

Note

More restrictive weather minimums may be imposed at any aviation facility for unique climatology or for other safety considerations.

2.6.1.2.2 Unscheduled Outages. Transmission of NOTAMs concerning malfunctions of navigational aids may be delayed 1 hour to allow for rapid repair when weather conditions stated above are met. Extension of the 1 hour unscheduled maintenance period is not authorized.

2.6.1.2.3 Unreliable Operation. If maintenance is performed which could affect the reliability of the navigational aid or if the navigational aid is not operating according to flight operation standards (excluding published restrictions), the aid shall be put in a nonradiating status. Radiate without identification when required for corrective maintenance. A NOTAM shall be initiated in accordance with the conditions specified above.

2.6.1.3 Monitoring Navigational Aids

2.6.1.3.1 Responsibility. Commanding officers shall ensure that all navigational aid equipment for which they have cognizance is monitored in accordance with applicable technical orders, instruction books, and standards. Normally, authority for monitoring navigational aids is delegated to approach control or, at locations not possessing approach control authority, to the control tower.

2.6.1.3.2 Site Monitoring. When a navigational aid is to be used for ATC or navigation and cannot be monitored from the primary (remote) monitor facility, it shall be monitored at the navigational aid site. Monitoring at the site shall be conducted when the remote or automatic monitor is inoperative because of either equipment malfunction or line difficulties. Further, the following conditions must exist for site monitoring:

1. Monitor equipment at the navigational aid site is operating properly.
2. Reliable two-way communications are available between the site and the primary monitor facility.

2.6.1.3.3 Frequency of Inspections. Monitors not providing automatic visual and/or aural alarms shall be checked at least hourly and the results logged.

2.6.1.3.4 Periods When Airfield Is Closed. When the facility delegated monitoring responsibility is not manned continuously and it is desired or necessary to keep navigational aids on the air, naval aviation shore facility commanders may delegate monitoring responsibilities to any on-station agency provided:

1. Continuous manning is maintained.
2. Automatic visual and aural alarms are installed.
3. Maintenance personnel are readily available in the event of malfunction.
4. NOTAM responsibilities can be met.

5. When the above conditions cannot be complied with, the periods of operation shall be published in the appropriate **FLIP** products and the navigational aid shall be monitored during those periods. The aid shall be put in a nonradiating status or the identification feature removed when the aid cannot be monitored.

2.6.1.3.5 Performance Criteria. Technical performance standards and essential equipment parameters are set forth in the U.S. Interagency Ground Inspection Manual for Air Traffic Control and Navigational Aid Facilities (OPNAVINST 3721.18). Conditions requiring special flight inspections are set forth in the same manual.

2.6.1.4 Flight Inspection

2.6.1.4.1 General. By Executive Order 11047 of 28 August 1962, the FAA is designated as the authority for inspecting military navigational aids. Procedures for requesting and conducting flight inspections of navigational aids are contained in FAA Order 8240.32, Request for Flight Inspection Report. Consult NAVAIR AE-TACAN-GYD-000 for procedures relating to shipboard TACAN certification/flight inspection.

2.6.1.4.2 Responsibility. The FAA flight programs division **AMS** is the primary method for managing navigational aid status and inspection due dates for navigational aids. The FAA is responsible for flight inspecting (excluding classified sites and mobile deployments/exercises). Commanding officers having cognizance of a navigational aid that is either commissioned or decommissioned shall transmit a routine message to FAA/AVN-250 within 24 hours of commissioning/decommissioning.

2.6.1.4.3 Applicability. The commissioning notification message establishes the AMS database, keying the requirement for the follow-on navigational aid data, the commissioning flight inspection report, and incorporation of the navigational aid into the follow-on periodic flight inspection schedule/workload assigned to the Flight Inspection Field Office. The decommissioning notification message removes the navigational aid from active status, places the flight inspection reports into a 5-year retention file, and deletes future periodic flight inspection due dates.

NAVAIR 00-80T-114

2.6.1.4.4 Procedures. The commissioning/decommissioning notification message shall conform to the following format:

From: (Naval aviation shore facility)

To: FAA AERO CNTR OKLA CITY OK//AVN-250//

Info: CNO WASHINGTON DC //N785F//

Type Commander

Navy Representative to FAA region

Subj: (Commissioning/Decommissioning) NOTICE

1. (NAVAID identifier)
2. (NAVAID location)
3. (NAVAID type)
4. (Date commissioned/decommissioned)
5. (Pertinent remarks)

2.6.2 Wind Indicators (Wind Tees and Wind Cones). Wind indicators shall be installed per NAVAIR 51-50AAA-2.

2.6.3 Airport Lighting and Visual Aids

2.6.3.1 Requirements. Requirements for airport rotating beacon, obstruction lighting and marking, runway lighting, taxiway lighting, parking and service area lighting, approach lighting, and other airport lighting are set forth in NAVAIR 51-50AAA-2. Consult NAVFAC P-80, Facility Planning Criteria for Navy and Marine Corps Shore Installations.

2.6.3.2 Procedures. Procedures for operation of airport lighting are outlined in FAA Order 7110.65. Operation of airport lighting is the responsibility of the control tower. During periods when the airfield is closed, all associated lighting shall be shut down with the following exceptions:

1. Navigable airspace obstruction lights as outlined in FAR Part 77 which are not associated with the closed airport.
2. Rotating beacons if used as navigation reference points or visual land marks.

2.6.3.3 Closed Runway. Runway lights shall not be lighted for any runway for which a NOTAM is in effect which closes that runway.

2.6.3.4 Optical Landing System (OLS). OLS installations are normally authorized at designated fleet support stations where field carrier landing practice training is to be provided. The OLS normally shall be turned on at all times the associated runway is in use. Local operating procedures shall be prescribed for rheostat positioning to facilitate setting the optimum intensity during varying light conditions. The OLS intensity shall be operated as requested by individual pilots making approaches.

2.6.3.5 Danger Markings. In order to attain uniformity of marking for dangerous areas on all military flying fields, the following instructions, which are compatible with instructions issued by the U.S. Air Force, shall be complied with:

1. Small holes, soft spots, etc., on the usable portion of landing fields shall be marked by day with yellow flags or yellow pyramids and by night with red lights to warn incoming pilots that areas so marked are unsafe for use.
2. When relatively large areas are unsafe for landing, they shall be outlined by day with yellow flags and by night with red lights.
3. The fact that the entire area outlined is unusable shall be indicated by placing in its approximate center by day a relatively large X (10 × 60 feet), reference NAVAIR 51-50AAA-2, made up of yellow flags or strips of yellow fabric and at night by red lights.
4. Whenever a well-defined runway is closed, a large X made of yellow flags or yellow strips of fabric shall be placed at each end during daylight hours. The Xs prescribed shall be large enough to warn visiting pilots that the area or runway is unsafe for use. Closed runways shall not be lit.
5. A large number of individual markers shall not be used because they make it impossible for a pilot to determine which area is to be used and which is to be avoided.

2.6.3.6 Waveoff Lights. Several different visual waveoff methods may be in use at naval air facilities. The waveoff lights on the OLS and the wheels-up waveoff lights are the principal systems in use and, where installed, shall be interconnected and controllable from the control tower as well as runway location(s). Both systems shall be operable from a single control. Waveoff lights will be used by tower personnel and LSO, as appropriate, to augment radio transmissions when a waveoff is required. Waveoff lights are designed for intermittent use only and are not to be used to signal a closed runway. A wheels-up light bar consisting of a row of white lights situated off the approach end of the runway is a part of the wheels-up waveoff system and serves to illuminate an aircraft's undercarriage during night operations.

2.6.3.7 Out of Battery Lights. Arresting gear "Out of Battery Lights" shall be visible from the ATCT. For periods when ATCT visibility precludes monitoring of the "Out of Battery" lights, a local procedure shall be established to verify "In Battery" status.

2.6.4 Mobile Air Traffic Control Facility Services

2.6.4.1 Background. Mobile air traffic control facilities are available to provide all-weather ATC service support to naval air stations through approval of the appropriate chain of command.

MACS ATC detachments provide such support for Marine Force operations and exercises, as well as NAS/MCAS. MACS ATC detachments routinely provide station support during ATC facility relocation, equipment site relocation, and equipment SLEP.

2.6.4.2 Request Procedures

1. Requesting activity shall submit the initial request to the TYCOM, info/copy to ISIC, COMNAV-AIRSYSCOM PATUXENT RIVER MD//PMA213//, SPAWARSYSCEN SAN DIEGO CA//D33//, and COMNAVAIRWARCENACDIV PATUXENT RIVER MD//4.5.8//.
2. The request shall include the equipment/services required, date required, and request for direct liaison.
3. TYCOM shall forward the request to MARFORLANT/PAC for approval.

2.6.4.3 Funding. Costs for mobile air traffic control facility services will normally be borne by the requesting station. Costs include funding for a 2-day site survey and transportation/billeting/messing for the period of deployment.

2.6.4.4 Other Considerations. Other considerations to be evaluated early in the process of obtaining mobile air traffic control facility services include:

1. Site selection
2. Commercial/emergency power
3. Frequency request/authorization
4. Landlines
5. Flight check
6. ATC procedures
7. Clear delineation of operational control.

2.7 AIRPORT PROCEDURES

2.7.1 LSO/RDO Responsibilities

2.7.1.1 Landing Signal Officer (LSO). A qualified LSO is required for the conduct of FCLP. In addition, it is highly desirable to have a qualified LSO with two-way voice communications at the scene when an emergency arresting gear engagement is to be made. The LSO NATOPS Manual contains procedures for conducting FCLP and lists the necessary equipment which the air station is responsible for providing the LSO.

2.7.1.2 Runway Duty Officer (RDO). An RDO may be required by certain commands to perform the following functions and should be provided with appropriate equipment:

1. Visually monitor arrival and departure of aircraft assigned to the command.
2. Issue advisory information relating to unsafe practices during runup, takeoff, landing, or in the traffic pattern.
3. Provide advice or assistance to pilots experiencing difficulties.

2.7.1.3 Procedures and Responsibilities.

LSOs and RDOs are not classified as ATC personnel and shall not be used to provide ATC services. The responsibility for interval separation between FCLP aircraft and maintenance of pattern discipline is delegated to the LSO. However, the control tower retains final responsibility and authority for separation and control of all aircraft in the surface area. The following procedures apply regarding LSOs and RDOs:

1. LSOs shall be qualified in accordance with the LSO NATOPS Manual and RDOs qualified in accordance with local command directives.
2. A continuous monitor of the assigned frequency shall be maintained by the LSO and RDO. LSOs and RDOs shall use only assigned discrete frequencies unless otherwise authorized by the control tower.
3. Two-way direct communications must exist between the control tower and LSO/RDO during FCLP operations.
4. RDOs shall maintain radio silence at all times unless actual safety of flight is involved.
5. Mobile shelters or communication trailers which are used by the LSO and RDO are to be moved outside the 750-foot lateral clearance zone when operations have been completed or equipment is not in use.
6. Local directives will delineate coordination required to support FCLP operations.

2.7.2 Course Rules Briefings. Commanding Officers of naval aviation shore activities shall establish a program to provide course rules/ATC procedures briefings for all flying units that operate at the airfield.

2.7.3 Airfield Vehicular Traffic

2.7.3.1 Indoctrination Course for Operators.

Commanding Officers shall establish an airfield vehicle operator's indoctrination course. Organizations with airfield vehicle operators shall ensure operators attend and successfully complete the course initially upon assignment and annually thereafter. Attendance of the

course shall be documented and maintained by the course manager.

2.7.3.2 Local Airfield Rules. Local rules shall be established which minimize vehicle traffic on movement areas. Unnecessary vehicular traffic on the airfield is a safety hazard, which requires constant evaluation to develop alternative measures such as use of perimeter roads.

2.7.3.3 Movement Areas. All vehicles operating on movement areas, shall be radio equipped or be escorted by radio-equipped vehicles. Vehicle painting, markings, and lighting shall be in compliance with FAA Advisory Circular 150/5210-5 (series). Vehicles shall receive a specific clearance from the control tower prior to operating on runways and designated helicopter landing areas. Light signals shall not be used for controlling vehicles except when the control tower experiences an outage of radio equipment.

2.7.3.4 Other Than Airport Vehicles. All vehicles not regularly used on the airfield shall carry a flag 3 feet square attached to a staff and flying above the vehicle or be equipped with an amber rotating beacon whenever operations on aircraft operating areas are necessary. Flags shall consist of a checkered pattern of international orange and white squares not less than 1 foot on each side.

2.7.4 Service to Transient Aircraft

2.7.4.1 Transient Military Aircraft

2.7.4.1.1 Policy. It is the policy of the Department of the Navy that naval airfields shall be available for the use of transient military aircraft to the extent possible and that the aircraft and crew shall be supported within the capabilities of such activities.

2.7.4.1.2 Exceptions. Transient military aircraft shall not be prohibited from landing at any naval airfield except:

1. When an emergency situation exists at the field.
2. When repairs or other conditions render use of the field hazardous to all or certain types of aircraft.
3. In isolated instances where the situation justifies, and prior approval has been obtained via the chain of command from the Chief of Naval Operations (N785F).

4. When the field is in a caretaker status or inactivated.
5. When special operations or special mission activities are being conducted at the field.
6. When the field is closed.

2.7.4.1.3 General Criteria. No restrictions shall be placed on the use of naval airfields for the sole reason that they are adjacent to major aircraft manufacturing facilities. Only aircraft on official orders in connection with duties which cannot be performed elsewhere shall be permitted to utilize contractor-owned fields.

Any restriction to transient military aircraft imposed for safety reasons, such as inspections, public demonstrations, or events, should be limited to only that period of time during which a hazard actually exists.

Permanent official business only restrictions shall not be imposed without the approval of the Chief of Naval Operations (N785F).

In local areas containing several naval airfields, the duplication of facilities at each of the airfields to fully accommodate transient aircraft is not desired if one of the airfields can provide for the needs of the transients. However, any restrictions imposed must be submitted through the chain of command and approved by the Chief of Naval Operations (N785F).

Commanding Officers of stations located on airfields which are used jointly with civil or other military agencies may impose only those restrictions which are applicable to naval facilities under their control.

Commanding Officers of naval airfields shall ensure that aeronautical data affecting naval airfields is accurately published in DOD FLIP. Corrections, additions, or deletions to USN/USMC FLIP data should be processed according to FLIP General Planning.

Commanding Officers of naval aviation shore facilities shall not permanently restrict any transient military aircraft from landing at their facility unless such restriction has been approved by the Chief of Naval Operations (N785F). Emergency restrictions of a temporary (10 days or less) nature (e.g., "prior permission required") may be imposed by commanding

officers without higher command authorization when landing of aircraft at their facility is considered unsafe. Notification of such restrictions shall be accomplished as follows:

1. Advise Navy and Marine Corps aviation activities by message as far in advance of the restriction as practicable.
2. Issue a NOTAM within 24 hours prior to commencement of the restriction.

2.7.4.2 Transient Civil Aircraft

2.7.4.2.1 Policy. Use of USN/USMC airfields by civil aircraft shall be in accordance with SECNAVINST 3770.1. Practice approaches may be provided to civil aircraft for pilot familiarization or training provided:

1. A civil aircraft landing permit has been executed and
2. Local arrangements have been made in advance with the Commanding Officer of the air activity concerned.

2.7.4.2.2 Emergency Service. Emergency service shall be provided any aircraft upon request. When providing such emergency service to civil aircraft, no attempt should be made to execute a civil aircraft landing permit until after the aircraft has landed.

2.7.5 Flight Inspection Aircraft

2.7.5.1 In-Flight Priority. FAA aircraft engaged in flight inspection of navigation aids shall be provided maximum assistance by control facilities. Subject to other operational requirements, direct contact should be maintained between the flight inspection pilot and the control facility to provide for an exchange of information regarding the intention of the pilot and the known traffic in the area. Many flight inspections are accomplished using automatic recording equipment and an uninterrupted flight is necessary for successful completion of the flight mission. The work load for the limited number of aircraft engaged in flight inspection activities requires that these aircraft be given priority over all other normal air operations to the maximum extent possible.

2.7.5.2 Ground Servicing. Priority for servicing can be given to FAA flight inspection aircraft over normal or routine transient aircraft at all Navy and Marine Corps aviation facilities. Scheduled airlifts, MEDEVAC mission, VIP movements, and any operational flight will take precedence over FAA flight inspection aircraft.

2.8 PREPARATION OF AIR OPERATIONS MANUAL

2.8.1 General. The basic outline below should be adhered to in the preparation of air operation manuals. It is realized that local conditions will necessitate the addition of other material or the deletion of some headings. Attention shall be given to current OPNAV instructions and other applicable directives in preparing the manual.

2.8.2 Review. An annual review shall be conducted to ensure that the subject matter is pertinent and up to date.

2.8.3 Distribution. One copy of new or revised manuals shall be forwarded to NAVFIG, Washington Navy Yard, Bldg 176, 901 M Street SE, Washington, D.C. 20374-5088; the appropriate Type Commander; SPAWARSYSCEN, Charleston (Code 31M), P.O. Box 190022, North Charleston, SC 29419-9022; COMNAVAIRSYSCOM (AIR-4223); COMNAVAIRSYS-COM, Code 4.5.9.2, Bldg 8131, Villa Road, St Inigoes, MD 20680, ATTN: ATC Military Team Lead; and Commander, Naval Safety Center (Code 114). Distribution to other air activities utilizing local facilities is encouraged.

2.8.4 Airfield Name. If applicable, the name of the individual for whom the field is named shall appear on the cover of the manual along with the geographic name. A short biography of the honoree, including an account of any heroic deeds, may be included in the text of the manual.

2.8.5 Outline

2.8.5.1 General

1. General rules.
2. Hangar and service facilities (include wheel load capacity of runways, taxiways, and parking aprons).

3. Lighting facilities.
4. Hours of operation.
5. Compass rose.
6. Average annual weather data.
7. Arresting gear (include configuration based on the active runway).

2.8.5.2 Flight Planning

1. Instructions for filing and completing flight plans (VFR-IFR).
2. Weather minimums.

2.8.5.3 Course Rules

1. Course rules briefing requirements.
2. Taxi instructions.
3. Takeoff instructions.
4. Landing instructions.
5. Ordnance/weapons handling.
6. Noise abatement procedures.
7. Definition of local flying areas.
8. MOAs, restricted areas, etc.
9. Local obstructions.
10. Designated parking areas for aircraft loading and offloading hazardous materials in accordance with OPNAVINST 3710.31.
11. Airport vehicular traffic procedures.

Note

Where appropriate, local course rules shall specify airspeeds based on information contained in the flight manuals applicable to the aircraft operated by the prime user(s) of the airfield concerned.

2.8.5.4 Inspections. Include guidelines for periodic self-administered inspections of runways, taxiways, and parking ramps. Include procedures for identifying to airport users, by NOTAM, [ATIS](#), and other appropriate means, conditions that may affect the safe operation of aircraft. These conditions include, but are not limited to:

1. Construction or maintenance work on pavement or safety areas.
2. Rough or wavy portions of pavement or safety areas.
3. The presence and depth of snow, slush, ice, or water on runways or taxiways.
4. The presence of snow next to runways or taxiways in such height that it might come in contact with any part of the aircraft when on the runway or taxiway.
5. The presence of parked aircraft or other objects on or next to runways or taxiways.
6. The failure or irregular operation of all or part of the airport lighting system, including the approach, threshold, runway, taxiway, and obstruction lights operated by the operator of the airport.
7. The presence of a large number of birds.

Note

The centerline should be used as a reference when reporting runway/taxiway conditions.

2.8.5.5 Air Traffic Control

1. Description of ATC services provided.
2. Emergency procedures.
3. Procedures for civil operations which infringe upon the Class C/D/E airspace such as crop dusting, sign towing, forest fire fighting, etc.
4. Restrictions and pilot/controller advisories from [PALS](#) certification final report.

2.8.5.6 Transient Aircraft

1. Accommodations available.
2. Transportation available.
3. Instructions for clearance of passengers for flights.
4. Procedures for handling visiting VIPs.
5. Procedures for handling the orders of personnel authorized per diem.
6. Customs procedures, hours, and requirements (all stations on foreign soil and, when applicable, in [CONUS](#)).
7. Procedures for obtaining flight rations.
8. Procedures for obtaining required registered publications necessary for flight.
9. Procedures and facilities for temporary stowage of registered material and weapons.
10. FAA flight inspection aircraft shall be given priority for refueling and servicing over routine transient aircraft. Operational flights, MEDEVAC missions, scheduled airlifts, and VIP movements take precedence over FAA aircraft.

2.8.5.7 Aircraft Crash and Rescue

1. Crash and rescue bill.
2. Search and rescue bill.
3. Salvage bill.

2.8.5.8 Illustrations

1. Traffic pattern chart.
2. Taxi pattern charts.
3. Seaplane procedure chart, if applicable.
4. Prohibited, warning, or restricted area chart.

5. Target dropping and bombing area chart.
6. Scaled terrain/obstruction map.

2.9 AIR FACILITY REPORTING

The [NIMA](#) is responsible for acquiring all air facilities data, maintaining an evaluated data file, and providing analysis support services to all DOD

elements. The [AAFIF](#), an automated data base, is an integral part of this responsibility.

Per DOD Directive 5105.60, the National Imagery and Mapping Agency annually sends each USN/USMC air facility a printout of currently held AAFIF data. Commanding Officers of air facilities that are owned, operated, or tenanted by the USN/USMC will provide NIMA with a complete reconfirmation or correction of the data on the printout in accordance with the included instruction.

CHAPTER 3

Facility Management

3.1 GENERAL

The ATC facility includes personnel and equipment associated with the operation of the following: control tower, approach control, terminal radar, en route radar, special use airspace and scheduling, flight planning, and air navigational aids.

3.1.1 ATCF Classification Standard. This standard serves as the foundation for all other ATCF planning standards by establishing a common baseline for ATCF resource determinations. Addressed within the standard are the needs for ATCF classification, the concepts used for standard development, descriptions of the services provided by ATCFs, and definitions of the ATCF classes.

3.1.1.1 Need for Classification. Development of a classification scheme which succinctly describes the various types of existing Navy and Marine Corps ATCFs has long been a goal of Navy ATC system planners. Such a scheme provides a mechanism for defining ATCF resources logically and on an equitable basis systemwide. Baseline Planning Criteria for ATCF Resources Criteria (OPNAVINST 3722.35) provides guidance in minimum baseline planning of Navy and Marine Corps ATCFs.

3.1.1.2 Approach to Standard Development. By definition, classification is the process of arranging things into groups based upon systematic division of common traits. The underlying principle for establishing a classification scheme is that each resultant class must encompass common elements. Since Navy ATC is one of a large number of closely interrelated elements collectively supporting the naval aviation mission, the classification scheme must identify all elements that bear upon the performance of ATC and analyze each for commonality across the spectrum of ATCFs. The ATCF classification scheme, by

segregating ATC services into groups, establishes 10 major classes:

1. Class I Flight Planning Facility — Provides only flight planning service.
2. Class II Control Tower Facility — Provides airport traffic control service. Unless modified by letter of agreement, ATC clearance authority is limited to VFR although IFR and special VFR clearances originated by authorized facilities may be relayed. Flight planning service may also be provided.
3. Class IIIA/IIIB Combined Control Tower and **GCA** Facility — Provides both airport traffic control and low approach and landing services. Class IIIA low approach and landing service is limited to control on the final approach course; Class IIIB includes full pattern control in addition to control on the final approach course. Flight planning service may also be provided.
4. Class IVA/IVB Approach Control Facility — Provides airport traffic control and terminal area control services. Class IVA facilities are not ASR equipped (manual approach control); class IVB facilities are ASR equipped (radar approach control). These facilities may originate IFR and special VFR ATC clearances. Low approach and landing and flight planning services may be provided.
5. Class VA/Class VB Joint Control Facility — A combined ATCF and **ROC/FACSFAC** that may provide airport traffic control, low approach and landing, terminal area control, and special use airspace control services.
6. Class VI Fleet Area Control and Surveillance Facility — Radar air traffic control facility certified to provide full range of special use airspace control service. Real-time scheduling of military operating areas may also be provided. En route control service may be provided.

7. Class VII Combined Center — **TRACON (CERAP)** — An air traffic control facility and TRACON providing en route control and terminal area control services.
8. **CATCC** — The agency responsible for status keeping of all **CV** air operations and control of all airborne aircraft except those under the control of **CDC**, or **PriFly**. CATCCs provide low approach and landing, and terminal area control service. A CATCC is analogous to a Class IVB facility.
9. **AATCC** — An air traffic control agency responsible for the approach and departure control of amphibious task force aircraft and, when directed by **TACC**, assumes tactical control of specified aircraft.
10. **TACC** — The agency responsible for control of all airborne assets assigned or in support of the amphibious task force. The TACC is analogous to a Class VA/VB facility.

Note

N785F must approve any change in ATCF classification.

3.1.1.3 ATC Service Descriptions. Six distinct ATC services exist and are provided singularly or in combination at every ATCF:

1. Flight planning service.
2. Airport traffic control service.
3. Low approach and landing service.
4. Terminal area control service.
5. Special use airspace control service.
6. En route control service.

3.1.1.3.1 Flight Planning Service. The planning of a flight is the first element of an air operation. Safety of flight is dependent upon thorough flight planning covering itinerary, times, and weather. Flight planning service provides an interface between the flight crew and the ATC system and includes work

space, personnel, equipment, and information related to:

1. Planning the flight.
2. Processing flight plans for entry into the ATC system.
3. Processing flight plans for closeout from the ATC system.

3.1.1.3.2 Airport Traffic Control Service. Airport traffic control encompasses those services provided to aircraft operating within class C/D/E surface area or on the airport surface. These include:

1. Issuing control instructions for sequencing and orderly/expeditious movement of approaching, landing, or departing aircraft.
2. Furnishing information to pilots concerning clearances to operate aircraft, weather and field conditions, and pertinent operating and procedural instructions.
3. Relaying aircraft operation and control messages between pilots and other air traffic facilities.
4. Notifying crash and rescue agencies during actual or potential accidents on or in the vicinity of the airport.
5. Controlling ground vehicular traffic in or near aircraft operating area.

3.1.1.3.3 Low Approach and Landing Service. This service permits aircraft to be recovered when ceiling and/or visibility are less than the prescribed minimums for non-precision instrument approaches. This service encompasses:

1. Issuing control instruction to provide separation to aircraft approaching for landing under marginal weather conditions.
2. Providing information to guide the aircraft in azimuth and altitude to an optimum touchdown point on the landing surface.

3.1.1.3.4 Terminal Area Control Service.

Terminal area control service provides separation and control of aircraft operating in the relatively dense air traffic environment surrounding major airports. Service is exclusive of those performed as part of airport traffic control and low approach and landing services. This service encompasses:

1. Separation and control of departing and arriving aircraft operating under instrument flight rules.
2. Separation and control of transiting aircraft operating under instrument flight rules.
3. Separation and control of aircraft operating under visual flight rules, but desire the added margin of safety afforded by such control.

3.1.1.3.5 Special Use Airspace Control Service.

This service combines both air traffic control in the classic sense (i.e., separating aircraft from each other or obstructions) and the provision of combat direction and/or special use airspace surveillance and scheduling. Service is mission oriented and includes:

1. Providing direction and flight following of mission aircraft.
2. Providing advisory control to aircraft conducting VFR operations within radar surveillance areas, including navigational assistance to ensure integrity of adjacent controlled airspace.
3. Interfacing with the National Airspace System, including positive control of IFR aircraft arriving and departing **SUA**.

3.1.1.3.6 En Route Control Service. This service provides separation and control of aircraft operating between departure and destination terminal areas. Service is exclusive of terminal area control, airport traffic control, and low approach and landing services. This service encompasses:

1. Separation and control of transiting aircraft under instrument flight rules.
2. Separation and control of aircraft operating under visual flight rules, but desire the added margin of safety by such control when equipment, capabilities, and workload permit.

3.1.2 Billet Descriptions, USN. The following billet descriptions pertain to the management of Navy ATC facilities and shall be used in identifying assignments within a facility. Additional billet descriptions are found in chapters addressing specific branches. (Marine Corps billet descriptions are identified separately.)

3.1.2.1 ATC Facility Officer (ATCFO). The **ATCFO** shall be a graduate of an **ACAI** or equivalent DOD or DOT air traffic controller course, successfully complete the FAA Airman's Written Test (AWT) and possess an **ATCS** Certificate (FAA Form 7220-1). The function of the ATCFO is to perform the duties of division officer. Duties, responsibilities, and authority include the following:

1. Overall management of the ATCF.
2. Ensuring the proper coordination and control of the movement of air traffic within the ATCF area of jurisdiction.
3. Establishment of standard operating procedures for the activity in accordance with applicable military directives and FAA rules and regulations pertaining to air traffic control.
4. Initiating the collection and safeguarding of data relating to accidents and infractions of regulations with which the ATCF is concerned.
5. Determining operational capability of ATC equipment.
6. Ensuring training, supervision, and assignment of ATC personnel.
7. Liaison with NAVREPs, FAA representatives, local base officials, and representatives of other agencies.
8. Determining qualification of ATC personnel and approving ratings and certification as appropriate.
9. Ensure proper management of **SDAP** program.
10. Initiating, in conjunction with the GEMO, requests for equipment replacement or enhancement required to accomplish the ATC-related mission.
11. Serving as a member of the Command Master Planning Board and Station Planning Board.

ATCF officers shall not be normally assigned duties outside their billet description. When unavoidable, they shall be limited to essential duties as determined by the commanding officer.

3.1.2.2 Assistant ATC Facility Officer (AATCFO). The AATCFO shall be a graduate of an ACA1 or equivalent DOD or DOT air traffic controller course, successfully complete the FAA Airman's Written Test (AWT) and possess an ATCS Certificate (FAA Form 7220-1). The AATCFO functions encompass assisting the ATCFO in the management and administration of the ATCF. Duties, responsibilities, and authority include the following:

1. Providing interface with FAA and other military facilities.
2. Developing, reviewing, and standardizing ATC procedures.
3. Other duties as may be prescribed or assigned.

3.1.2.3 ATC Leading Chief Petty Officer (ATC LCPO). The ATC LCPO shall be a graduate of an ACA1 or equivalent DOD or DOT air traffic controller course, successfully complete the FAA Airmen's Written Test (AWT) and possess an ATCS certificate (FAA Form 7220-1). The ATC LCPO function is to assist the ATCFO in administration, supervision, and training of assigned personnel. Duties, responsibilities, and authority include the following:

1. Coordinating assignment and supervision of enlisted personnel within the ATCF.
2. Preparing and promulgating appropriate military and professional matters pertaining to the ATCF.
3. Providing assistance and making recommendations to the ATCFO concerning improvement of spaces, procedures, working conditions, and welfare and morale of enlisted personnel.
4. Providing input to the ATCFO with regard to changes to and interpretation of manpower documents.
5. Assigning operating initials to newly reported personnel.
6. Acts as the ATCFO in the absence of the ATCF officer.

3.1.2.4 Branch Chief. Standard branch organization of ATC facilities and individual billet descriptions pertaining to each operating position are delineated in separate chapters. Branch chief billets are established as a part of facility management and are not to be construed as a part of the facility standard watch organization.

3.1.2.5 Facility Watch Supervisor (FWS). Each facility shall have an FWS designated by the commanding officer on duty at the facility at all times during hours of operation. The FWS shall be qualified on all operating positions within the facility. The FWS shall be responsible to the commanding officer or his designated representative for operational performance of the watch crew on duty. At the discretion of the facility officer, the duties of the FWS may be combined with those of a branch supervisor, but should not normally be assigned to a control position. Duties, responsibilities, and authority include the following:

Note

When a facility has been officially authorized to operate periodically in reduced ATC service mode; i.e., a Class IV facility providing only airport traffic control services, the FWS position qualification requirements are correspondingly reduced to include only those positions of operation applicable to the facility in reduced mode. Commanding officer designation of the "Special Category FWS" is also required.

1. Assuring an equipment checkout is performed at the beginning of each shift, reporting any malfunction of equipment to electronics maintenance, and any derogation of essential services to appropriate agencies. Assures proper crew briefing and an orderly watch turnover.
2. Preparation of the operating position assignments for those personnel under his supervision.
3. Assuring position currency and accomplishment and documentation of training.
4. Assuring use of proper control procedures and techniques by assigned personnel; assuring effective coordination within the facility and between facilities; and assuring corrective action is taken whenever control deficiencies are found.

5. Receiving complaints from pilots, adjacent facilities, and the general public regarding services or procedures provided by the facility and accumulation of initial data for forwarding to the ATCF officer.
6. Accumulation and initial documentation of accident and incident records and forwarding such records to the ATCF officer promptly. In the absence of the ATCF officer, AATCF officer, or leading chief, the FWS shall make the necessary accident and incident notification as required by local directives.
7. Checking and signing daily facility logs and forwarding them to the appropriate branch chief.
8. Physical security.

3.1.2.6 Training Chief. The duties, responsibilities, and authority of the training chief are delineated in [Chapter 8](#) of this manual. At those facilities where this billet is staffed by civilian personnel, the billet title of [EPDS](#) may be utilized.

3.1.2.7 TERPS Specialist. Each ATC Facility/ Detachment should have an air traffic controller trained and designated to perform the duties of TERPS Specialist. The TERPS Specialist should complete training in a formal TERPS course.

3.1.3 Billet Descriptions, USMC

3.1.3.1 ATC Facility Officer (ATCFO). The ATCFO shall be a graduate of the air traffic controller (ACA1) or equivalent DOD or DOT air traffic controller course. The ATCFO shall have successfully completed the FAA Airman's Written Test (AWT) and possess an ATCS certificate (FAA Form 7220-1). The ATCFO shall have attained the position qualifications and ATCS rating required to be MOS qualified. Responsibilities include the following:

1. Overall management of the ATCF.
2. Ensuring the proper coordination and control of the movement of air traffic within the ATCF area of jurisdiction.
3. Establishment of standard operating procedures for the activity in accordance with applicable

military directives and FAA rules and regulations pertaining to air traffic control.

4. Initiating the collection and safeguarding of data relating to accidents and infractions of regulations with which the ATCF is concerned.
5. Determining operational capability of ATC equipment.
6. Ensuring training, supervision, and assignment of ATC personnel.
7. Liaison with NAVREPs, FAA representatives, local base officials, and representatives of other agencies.
8. Determining the qualification requirements of ATC personnel and approving ratings and certification as appropriate.
9. Initiating, in conjunction with the GEMO, requests for equipment replacement or enhancement required to accomplish the ATC-related mission.
10. Serving as required, as a member of the Command Master Planning Board and Station Planning Board.

ATCF officers shall not be normally assigned duties outside their billet description. When unavoidable, they shall be limited to essential duties as determined by the Commanding Officer.

3.1.3.2 Assistant Air Traffic Control Facility Officer (AATCFO). The AATCFO shall be a graduate of the air traffic controller (ACA1) or equivalent DOD or DOT air traffic controller course. The AATCFO shall have successfully completed the FAA Airman's Written Test (AWT) and possess an ATCS certificate (FAA Form 7220-1). The AATCFO shall have attained the position qualifications and ATCS ratings required to be MOS qualified. Responsibilities include the following:

1. Assist the ATCFO, as directed, in the management of the ATCF including matters relating to [AICUZ](#), noise abatement, and environmental procedures.
2. Supervision of administrative matters pertaining to the ATCF.

3. Formulation and recommendations for implementation of policy and procedures for the administration and operation of the ATCF.
4. Providing preliminary interface with the FAA and military facilities on airspace matters.
5. Providing for ATCF airspace utilization.
6. Acts as the ATCFO in the absence of the ATCF officer.

3.1.3.3 Air Traffic Control Facility Training and Standardization Officer (ATCFTSO). The ATCFTSO shall be a graduate of the air traffic controller (ACA1) or equivalent DOD or DOT air traffic controller course. The ATCFTSO shall have successfully completed the FAA Airman's Written Test (AWT) and possess an ATCS certificate (FAA Form 7220-1). The ATCFTSO shall have attained the position qualifications and ATCS ratings required to be MOS qualified. The responsibilities of the ATCFTSO are to assist the ATCFO, in training and standardization of the facility programs and procedures. The duties of the ATCFTSO may be performed by the AATCFO, as directed by the ATCFO.

3.1.3.4 Air Traffic Control Facility Watch Officer (ATCFWO). The ATCFWO shall be a graduate of the air traffic controller (ACA1) or equivalent DOD or DOT air traffic controller course. The ATCFWO shall have successfully completed the FAA Airman's Written Test (AWT) and possess an ATCS certificate (FAA Form 7220-1). The ATCFWO shall have attained the position qualifications and ATCS rating required to be MOS qualified. The ATCFWO shall be responsible to the ATCFO for the operational performance of the watch crew on duty. At the discretion of the ATCFO, those duties of the ATCFWO may be combined with those of a branch supervisor, but should not be assigned to a control position. Duties, responsibilities, and authority include the following:

1. Assuring an equipment checkout is performed at the beginning of each shift, reporting any malfunction of equipment to electronics maintenance, and any degradation of essential services

to appropriate agencies. Assures proper crew briefing and orderly watch turnover.

2. Preparation of the operating position assignments for those personnel under his supervision.
3. Assuring position currency and accomplishment and documentation of training.
4. Assuring use of proper control procedures and techniques by assigned personnel: assuring effective coordination within the facility and between facilities; and assuring corrective action is taken whenever control deficiencies are found.
5. Receiving complaints from pilots, adjacent facilities, and general public regarding services or procedures provided by the facility and accumulation of initial data for forwarding to the ATCFO.
6. Accumulation and initial documentation of accident and incident records and forwarding such records to the ATCFO promptly. In the absence of the ATCFO, AATCFO, or ATCNCOIC, the ATCFWO shall make the necessary accident and incident notification as required by local directive.
7. Checking and signing daily facility logs and forwarding them to the appropriate branch chief.
8. Physical security.

3.1.3.5 Air Traffic Control Facility Non-Commissioned Officer in Charge (ATCNCOIC). The ATCNCOIC shall be a graduate of the ATC facility management course. The ATCNCOIC chief function is to assist the facility officer in administration, supervision, and training of assigned personnel. Duties, responsibilities, and authority include the following:

1. Coordinating assignment and supervision of enlisted personnel within the ATCF.
2. Preparing and promulgating appropriate military and professional matters pertaining to the ATCF.
3. Providing assistance and making recommendations to the ATCF officer concerning improvement of spaces, procedures, working conditions, and welfare and morale of enlisted personnel.

4. Providing input to the ATCF officer with regard to changes to and interpretation of manpower documents.
5. Assigning operating initials to newly reported personnel.

3.1.3.6 Training and Standardization Supervisor. See [Chapter 8](#) of this manual for requirements and functions.

3.1.3.7 TERPS Specialist. Each ATC Facility/Detachment should have an air traffic controller trained and designated to perform the duties of TERPS Specialist. The TERPS Specialist should complete training in a formal TERPS course.

3.1.4 Training

3.1.4.1 Team Concept. The controllers at ATC facilities train and work as an integral team. Training as a watch team should not be used as a substitute for sound personnel management practices such as manning for demand.

3.1.4.2 Briefings. ATC personnel should have an understanding of problems encountered by flight crews. Accordingly, training lectures should be conducted periodically in the following areas:

1. Operational characteristics and limitations of aircraft normally served by the facility.
2. Physiological and psychological factors incident to flight.

3.1.4.3 Orientation and Indoctrination Flights. Provisions are made in OPNAVINST 3710.7 for air traffic controllers, military and FAA, to receive orientation and indoctrination flights for the purpose of better understanding operating problems and evaluating ATC procedures at the facility.

Note

DON air traffic controllers are not authorized to participate in the FAA SF-160 (jumpseat) program.

3.1.4.4 Crosstraining. ATC facilities shall conduct organized crosstraining on all positions and equipment to the maximum extent possible.

3.1.4.5 Mixing Live and Simulated Targets. Mixing live and simulated targets on the same indicator, except PAR, is permitted, provided the command has determined that there is no derogation to safe air operations. Commands which determine that certain periods of high density air traffic preclude mixing live and simulated targets are encouraged to schedule the simulator during periods of light air traffic activity or when the field is closed.

3.1.4.6 FAA Schools. The FAA Academy conducts many ATC, airspace, and equipment maintenance courses which may be beneficial to Navy/Marine Corps air traffic controllers and air traffic control maintenance technicians. A full list of available courses can be found on the FAA Academy's web page (www.academy.jccbi.gov/catalog/). NATTC Pensacola (Air Traffic Control School) is the coordinator for Navy/Marine Corps quotas. Requests for quotas must be submitted to the Training Officer, Operations Division, Air Traffic Control School, NATTC Pensacola no later than 1 April for requirements in the succeeding fiscal year. Short-fused requirements may be requested for the current fiscal year; however, quota availability is extremely limited. Individual commands are responsible for the cost of the course and all associated travel/per diem expenses.

3.1.5 Facility Directives. The ATC facility directive system consists of the local ATC facility manual and supplementary directives which will be promulgated to ensure timely dissemination of information necessary for effective implementation of ATC services.

3.1.6 Facility Manual

3.1.6.1 General. Each command shall promulgate an ATC facility manual. This manual should address facility administration, organization, qualification requirements, training, and air traffic control matters concerning local procedures. Facility manuals shall be reviewed and updated on a continuous basis and shall be forwarded to the appropriate Type Commander and COMNAVAIRSYSCOM, Code 4.5.9.2, Bldg. 8131, Villa Road, St. Inigoes, MD 20684, ATTN: ATC Military Team Lead, and SPAWARSCEN, Charleston (Code 31M), P.O. Box 190022, North Charleston, SC 29149-9022. The basic outline below should be adhered to in the preparation of manuals.

3.1.6.2 Outline

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

3.1.6.2.2 Administration. Contains facility organization, mission and tasks, and billet descriptions.

3.1.6.2.3 Safety. Details requirements to safeguard personnel and property.

3.1.6.2.4 Training Plan. Provides position/facility training and qualification requirements.

3.1.6.2.5 Flight Planning. Details policy and procedures available as functional guidelines for flight planning.

3.1.6.2.6 Control Tower. Details policy and procedures available as functional guidelines for control tower operations.

3.1.6.2.7 Radar. Details policy and procedures available as functional guidelines for radar operations.

3.1.6.2.8 Facility Watch Supervisor. Details policies and procedures available as functional guidelines for facility watch supervisors.

3.1.6.2.9 Equipment. Details equipment operational capability and utilization, including procedures for required alignment accuracy checks.

3.1.6.2.10 Appendices. Provides amplifying data/examples of information contained within the manual.

3.1.7 Procedural Agreements

3.1.7.1 Letters of Agreement (LOA). Commanding Officers shall negotiate an LOA when operational/procedural needs require the cooperation and concurrence of other agencies/organizations/ATC facilities/foreign host governments. LOAs are executed when it is necessary to:

1. Supplement established operational/procedural instructions.
2. Establish or standardize operating methods.

3. Delegate responsibility for ATC service; e.g., control boundary jurisdiction, and procedures for coordinating and controlling aircraft where two or more airports have conflicting traffic patterns.

Note

Modification (expansion or reduction) of ATC airspace responsibility shall not be executed without prior approval of CNO (N785F) via appropriate chain of command.

4. Define interfacility or interagency responsibilities and coordination requirements.
5. Specify special operating conditions or specific air traffic control procedures.
6. Describe procedures or minimums deviating from those contained in FAA Order 7110.65 and other pertinent directives.
7. Define stereotyped flight plans used for special operations, such as training flights or flight test activities.
8. Describe airspace areas required to segregate special operations.

Specific subjects for LOAs are detailed in FAA Order 7210.3.

3.1.7.1.1 Development and Content. A sample LOA template is contained in [Appendix C](#). In developing an LOA, the following guidelines apply:

1. Determine, through coordination, which facility is principally responsible for processing the LOA.
2. Confine the material in each agreement to a single subject or purpose.
3. Describe the responsibilities and procedures applicable to each facility and organization involved.
4. Delegate responsibility for control of IFR aircraft, where necessary, by taking the following action:
 - a. Describe the area within which responsibility is delegated. This area may be depicted in chart form.
 - b. Define the conditions governing use of the area. These include altitudes, routing

configuration, and limitations or exceptions to the use of the applicable airspace.

- c. Specify the details of control procedures to be used. These include clearance limits, reporting points, handoff points, and release points.
 - d. Identify clearance limits designated as Instrument Approach Fixes when they are to be used for holding aircraft.
 - e. Specify communications and coordination procedures.
5. Attach charts or other visual presentations, when appropriate, to depict the conditions of the LOA.
 6. Coordinate with affected flying units if aircraft operations or pilot procedures will be affected.
 7. Establish an effective date, acceptable to all parties involved, that permits sufficient time for distribution and for participating facilities and flying units to familiarize personnel, revise directives, flight charts, etc., and complete other actions.
 8. Forward a copy of the approved/signed LOA to the appropriate NAVREP.

3.1.7.1.2 Review. Commanding Officers shall ensure LOAs are reviewed annually to ensure accuracy and conformance with current policy. Coordinate with signatories to revise contents or cancel the LOA, as necessary.

3.1.7.2 Memorandums of Agreement.

Memorandums of agreement are prepared with FAA at jointly staffed ATC facilities when it is necessary to regulate and standardize the internal operation of a facility. They contain instructions pertaining to administrative or operational practices and procedures, either temporary or permanent. A sample memorandum of agreement is shown in [Appendix D](#). A memorandum of agreement may also be used when necessary to prescribe procedures with other departments or commands and agencies aboard the same base.

3.1.8 Air Traffic Control Contingency Plan. A contingency plan has been developed in coordination with FAA to provide continuity of naval flight operations within the National Airspace System in the event

of a significant disruption of ATC services. This plan is included in [Appendix E](#). Commanding officers having ATC facilities under their cognizance shall execute the coordinating action delineated in [paragraph E.4 of Appendix E](#), as appropriate.

3.2 FACILITY LOGS

3.2.1 Daily Operations Log. Each branch of an ATC facility shall maintain a daily operations log (FAA Form 7230-4). An automated FAA Form 7230-4 or the Visual Information Display System (VIDS) may be used. This log should be maintained by the supervisor on duty and shall contain the following:

1. Date.
2. Time of all entries.
3. Signature of supervisor on duty.
4. Description of operational status of all primary ATC equipment (i.e., radar, NAVAIDs, communications, and emergency backup equipment).
5. Changes to primary ATC equipment operational status throughout the day.
6. Emergencies.
7. A record of emergency generator operational checks.
8. A record of PAR (and other) bailout alarm checks.
9. Other items deemed appropriate by ATC facility officer.

Note

- ATCFO may assign ATC equipment to specific branches for log entry purposes to eliminate duplication.
- When an automated FAA Form 7230-4 is used, the controller assuming responsibility for the watch shall sign on with the time and his/her name, e.g., "1430 J. Smith on." Entering his/her name serves the same purpose as signing the certification statement at the bottom of the form. If printed, the controller responsible for the watch at the time of printing, shall sign and date the certification statement at the bottom of the form.

3.2.2 Position Logs. A position log (FAA Form 7230-10) shall be maintained for each operating position in the facility. An automated FAA Form 7230-10 or the Visual Information Display System (VIDS) may be used. The purpose is to ensure a formal turnover as relief occurs and establish a reliable record of position manning. These logs shall contain the following:

1. Date.
2. Time.
3. Position.
4. Controller operating initials. (If the position is operated by a trainee, his/her initials shall be entered after those of the controller responsible for the position. Position logs for final controllers are not required where a radar approach record is maintained by position).

3.3 PERSONNEL MANAGEMENT

3.3.1 Qualification and Certification

3.3.1.1 General. Military and civilian personnel performing duties of an ATCS shall be certified in accordance with provisions of [Chapter 4](#) of this manual.

Records of qualification at the various operating positions and the attainment of ratings to basic certificates shall be maintained in accordance with [Chapter 8](#) of this manual. The extent of each controller qualification level shall be readily available to supervisory personnel.

3.3.1.2 Service Record Entry. A permanent record of the air traffic controller ratings shall be entered on page 4 of the individual service record for USN personnel and page 11 for USMC personnel. Entries shall be made in the training and qualification records (NAVMC form 11004) for USMC personnel.

3.3.1.3 Medical Certification. All air traffic control personnel (Navy, Marine, and civilian (DON)) must maintain current annual physical in accordance with physical standards established in Manual of Medical Department, Chapter 15.7, and must have current NAVMED 6400/2 Clearance Notice

(Aeromedical) on file when providing or supervising ATC services.

Section I of the ATC Certification/Qualification Record shall contain the signed original of the current BUMED 6410/1 or 6410/2 (Aeromedical Grounding or Clearance Notice). Notices to be maintained include those covering annual flight physicals and most current “up chit” from any grounded period (the exception being the Grounding Notice that “expires automatically,” in which case a Clearance Notice is not required). These notices shall be retained until the succeeding year’s annual flight physical Clearance Notice is received. Medical waivers shall be retained in the record as long as they are in effect. If there are special conditions for the waiver, the enclosure(s) that list these conditions shall be attached to the waiver approval letter.

Note

A temporary waiver from a local military flight surgeon board recommendation, or a letter from Naval Aerospace and Operational Medical Institute stating a waiver is recommended do not constitute permanent waiver approval letters.

3.3.2 Boards

3.3.2.1 Procedures Evaluation Board (PEB).

Facilities shall establish a [PEB](#) for the purpose of recommending to the ATCFO action to be taken regarding ATC procedures. ATCFO will decide composition of board. In certain circumstances, as defined by the ATCFO, the ATCFO may establish or change ATC procedures without convening the PEB.

3.3.2.2 Controller Evaluation Board (CEB).

Facilities shall establish a [CEB](#) for the purpose of evaluating and recommending to the ATCFO action concerning the following:

1. Training status and progress of controllers who are not progressing satisfactorily or who have not been able to meet training schedules.
2. Controllers whose performance or training record indicates unsatisfactory performance or inability to master the complexities of the air traffic control rating.
3. Other matters deemed appropriate by either the ATCFO or leading chief/ATCNCOIC (USMC).

CEB composition will be at the discretion of the ATCFO. The controller concerned shall be given the opportunity to provide oral/written comments to the CEB. Deliberations shall be documented to include ranks/names/positions of members and witnesses. CEB minutes, recommendations, and endorsements shall be included as an enclosure to ATCS revocation recommendations resulting from failure to qualify.

3.3.3 Operating Positions

3.3.3.1 General. The number and types of operating positions at a facility are directly related to the ATC functions performed by the facility. While the volume of air traffic requiring facility services will influence the overall number of operating positions, certain positions may be combined without affecting the efficient provision of ATC services. Accordingly, during periods of light traffic activity, operating positions may be combined, provided the controller is facility rated or qualified in the combined positions. ATCFOs shall ensure that operating positions that may be combined are clearly specified in local ATC facility directives. Additionally, the specific circumstances under which operating positions may be combined shall be stipulated.

3.3.3.2 Trainees. When assigned to operating positions, trainees shall be under the direct and constant supervision of a controller qualified on the position concerned. The qualified controller retains ultimate responsibility for the position and shall utilize the same radio console as the trainee unless override capability exists from an adjacent console to ensure instantaneous radio communications with the aircraft by the qualified controller. Except as noted below, trainees shall not be assigned to final controller positions (precision, surveillance, or PALS) under prevailing weather conditions below 1,000 feet or 3 miles.

3.3.3.2.1 RFC Trainees. With written approval of radar chief, trainees nearing qualification or who have achieved a prior RFC rating may be authorized to control aircraft conducting radar approaches under weather conditions as determined by the ATCFO.

3.3.3.3 Controller Qualifications. During practical controller certification examinations, a qualified controller assigned to the position of operation is responsible for the control of air traffic.

3.3.4 Human Performance and Medical Qualifications

3.3.4.1 General. Operational readiness and aviation safety are enhanced by ensuring that air traffic controllers achieve and maintain an optimal state of physical and emotional health. Conditions that reduce this state can decrease performance and increase mishap potential. This section outlines basic guidelines that individuals and all levels of supervision can use to attain and monitor personnel performance.

3.3.4.2 Factors Affecting Personnel Readiness. Numerous complex factors affect the readiness of air traffic controllers. These factors must be understood by all concerned and appropriate countermeasures must be established to ensure they do not reduce personnel readiness. Air traffic controllers shall report any physical indisposition to superiors and assume operational duties only when fit to do so. The air traffic control facility officer shall ensure that air traffic control personnel are adequately observed and appropriate grounding action is taken when necessary. When, in the judgment of supervisory personnel, a controller's physical or mental health appears questionable, the controller shall be relieved of ATC duties and referred to a military flight surgeon for evaluation and ruling. Personnel temporarily suspended or relieved from performing ATC duties shall not control or supervise the control of aircraft from any position in the facility. They may, at the discretion of the ATCFO, be assigned to duties in the flight planning branch. (The following paragraphs apply: [3.3.4.3](#), [3.3.4.4](#), [3.3.5.2](#), [3.3.5.3](#), [3.3.6](#), [3.7.7](#).)

3.3.4.3 Physical Qualification and Examination. Physical qualification as certified by an appropriate physical examination is a prerequisite for all air traffic controllers. Air traffic control facility officers shall suspend from ATC duties all air traffic controllers who have not met physical examination requirements. Physical standards as established by COMNAVMEDCOM are to be met as a continuing requirement, not solely at the time of the required physical examination. Military flight surgeons shall conduct interviews and/or physical examinations for air traffic personnel as follows:

1. Physical examination annually.
2. Check-in — Upon reporting (including TAD) to a new command.

3. Postgrounding — Following grounding for medical reasons.
4. Posthospitalization — Following return to duty after any admission to the sick list/hospital (including medical boards). A clearance notice (NAVMED 6410/2) is required when ATC personnel return to duty.
5. Postaircraft mishap — As necessary to meet the requirements of [paragraph 3.7.7](#) and OPNAVINST 3750.6.
6. As directed by higher authority; competence for duty, etc.

The extent of the examinations shall be determined by the military flight surgeon or as directed by the Manual of the Medical Department. Notation of such examination shall be entered in the individual health record and reported as required to the commanding officer and COMNAVMEDCOM.

Note

Aviation eyeglass frames are authorized for personnel required to wear glasses and/or choosing to wear sunglasses on duty for air traffic control purposes. Non-aviation frames restrict field of view and negatively impact flight safety.

3.3.4.4 Waiver of Physical Standards. Air traffic controllers who are classified [NPQ](#); (i.e., long-term grounding) may be considered for a waiver of standards. The following procedures shall be followed:

1. Air traffic controllers shall submit the request for waiver of physical standards via the chain-of-command and Naval Aerospace and Operational Medical Institute (Code 42) to COMNAVPERS-COM (PERS-404DF) or CMC/ASM-34, as appropriate. Waiver authority for DON civilian controllers is CNO (N785), or CMC/ASM-34, as appropriate.
2. The waiver request must be endorsed by the military flight surgeon and the air traffic controller's commanding officer. The military flight surgeon's endorsement to the waiver request shall include an aeromedical evaluation on a typed Form SF-88 with appropriate

consultations by the supporting medical treatment facility.

3.3.4.4.1 Disposition

1. In cases where a waiver of standards has not been granted, revocation of ATCS certificate should be considered per [paragraph 4.6.4.2](#).
2. Military air traffic controllers are not eligible to be transferred to perform ATC duties until a waiver of standards is approved by COMNAVPERS-COM or CMC, as appropriate.
3. Advancement in the AC rating shall not be permitted if a waiver of standards is not granted (refer to the Advancement Manual and the Manual of Navy Enlisted Manpower and Personnel Classifications and Occupational Standards).

3.3.5 Use of Intoxicating Drugs and Beverages

3.3.5.1 Use of Drugs and Sedatives. The following policy shall apply in regard to the use of drugs and sedatives by air traffic control personnel:

1. Personnel may be assigned to their regular positions of operations within facilities even though they are taking innocuous medication such as aspirin derivatives, vitamin preparations, nose drops, skin ointments, etc.
2. Unless individual waivers are obtained, personnel taking either regular or prolonged-action antihistamines for the treatment of an ailment such as an allergy condition shall not be assigned to an operating position.
3. Obtaining waivers — Personnel taking either regular or prolonged-action antihistamines may be assigned to positions of operation provided individual waivers are obtained from a military flight surgeon which indicate that there are no deleterious effects caused by the antihistamine.
4. Restricted use of drugs — Personnel assigned to an operating position in a facility, including those personnel who have direct supervision of controllers within a facility, shall not use the types of drugs listed below within a 24-hour period before assumption of duty.
 - a. Sedative-type drugs.
 - b. Tranquilizers.

- c. Any drugs such as but not limited to anti-hypertensive agents or duodenal ulcer medications which have an effect on the central or autonomous nervous system.
 - d. Any other drug and/or medication likely to affect the alertness, judgment, vision, equilibrium, or state of consciousness.
5. ATC personnel shall not consume intoxicating beverages within 12 hours of scheduled ATC duties. Air traffic controllers shall not perform ATC functions or directly supervise personnel performing these functions within 12 hours after consuming intoxicating beverages.

3.3.5.2 Drug Abuse. Any Navy or DOD employed air traffic controller charged with violating Federal, state, or local statutes, Navy or Marine Corps regulations relating to the growing, processing, manufacture, sale, disposition, possession, use, transportation, or importation of narcotic drugs, marijuana, and depressant or stimulant drugs or substances shall be immediately suspended from all controller duties identified as control positions and reassigned to noncontroller duties. This suspension shall remain in effect pending disposition of the charges.

Any military air traffic controller identified as a drug abuser, as defined in OPNAVINST 5350.4, shall have their ATCS certification and ratings permanently revoked in accordance with [Chapter 4](#) of this manual. All military air traffic controllers guilty of drug abuse shall be processed for separation in accordance with OPNAVINST 5350.4. Civilian controllers not terminated from government service will be handled in accordance with civil service guidelines.

3.3.5.3 Alcohol Abuse. Any air traffic controller suspected of using alcohol while in a duty status or reporting for duty under the influence of alcohol shall be suspended from all ATC duties and referred to a military flight surgeon or military physician for evaluation and determination in accordance with current instructions. Alcohol abuse by air traffic controllers shall be handled per OPNAVINST 5350.4. Information relating to disposition of rehabilitated alcohol-dependent/abuser air traffic controllers is contained in BUMEDINST 5300.8.

3.3.6 Blood Donors. ATC personnel who have donated blood shall not perform ATC functions or directly supervise personnel performing these functions unless at least 24 hours have elapsed since the blood was donated.

3.3.7 Work Load Planning

3.3.7.1 Hours of Duty. ATC facility operational requirements will establish normal working periods and work schedules. A normal scheduled ATC watch should be 8 hours and not exceed 10 hours. A scheduled crew rest period of at least 8-12 hours should occur between ATC watches. In an emergency or contingency situation, normal working periods may necessarily be extended. Federal Air Regulation Part 65.47 is quoted for guidance to ATCFs that interface with the National Airspace System:

“Except in an emergency, a certificated air traffic control tower operator must be relieved of all duties for at least 24 consecutive hours at least once during each seven consecutive days. Such an operator may not serve or be required to serve:

- a. For more than 10 consecutive hours, or
- b. For more than 10 hours during a period of 24 consecutive hours, unless he has had a rest period of at least 8 hours at or before the end of the 10 hours of duty.”

3.3.7.2 Collateral Assignments. Air traffic control is a demanding occupational field that requires continuous involvement to maintain proficiency. This dictates the assignment of all air traffic controllers to ATC billets whenever possible. Accordingly, air traffic controllers shall not normally be assigned duties outside their professional specialty. When such outside assignments are unavoidable, they shall be limited to essential military duties.

3.4 FACILITY OPERATION

3.4.1 Hours of Operation

3.4.1.1 Normal Operation. Except where reduced hours of operation have been approved, naval ATC facilities ashore shall be manned on a 24-hour daily basis and shall be capable of controlling arriving and departing aircraft without delay. However, at

nonremoted radar facilities/radar operational facilities (ROFs), radar shall be manned for effective control of aircraft on 15-minute notice after the facility has been alerted of impending instrument operations. Additionally, these positions should be manned 30 minutes prior to the arrival of all known inbound traffic when weather is below locally established VFR minimums or when requested by pilots on the flight plan. Department of the Navy airports are considered closed during nonoperating hours.

3.4.1.2 Reduced Hours of Operation. Light air traffic density, low facility personnel manning, and limited operating funds may make it inadvisable to operate airfield and ATC facility portions of certain naval aviation shore activities on a continuous basis. Accordingly, commanding officers are encouraged to request permission to close airfields and ATC facilities (to include FACSFAC) during specific hours provided the following conditions, as applicable prevail:

1. A paucity of traffic exists for recurrent time periods.
2. A suitable military aviation facility located in close proximity can handle transient traffic arriving in the area during these specific hours of closing without degradation to mission or task.
3. Such action is considered appropriate in relation to mission and tasks.
4. These requests shall be forwarded to the appropriate type commander via the chain of command with copies to CNO (N785F), CMC (Aviation), and the cognizant major claimant and NAVREP setting forth all pertinent facts and a statement as to whether the request is for an indefinite (protracted) or a specific period of time.
5. Changes in hours of operation bearing on any standing letters of agreement between Navy or Marine facilities and FAA or host governments shall be brought to the attention of local FAA or host government authorities.
6. Any change to airfield operating hours may have an impact on the corresponding Class B/C/D/E airspace. ATCFOs must be sensitive to FAA 7400.2 requirements (i.e., communications,

weather observation and reporting, and weather transmission). In addition, any operations conducted beyond published airfield operating hours may similarly impact Class B/C/D/E airspace. Consult with the NAVREP when necessary.

3.4.1.3 Holiday Operation. Commanding officers may request to close their airfields/FACSFAC in conjunction with federally observed holidays provided the following conditions prevail:

1. A paucity of traffic exists for the closure period.
2. Such action is considered appropriate in relation to mission and tasks.
3. Coordination is effected with locally-based aviation units.

These requests shall be forwarded to the appropriate type commander. After approval, commanding officers shall, via Naval message, advise cognizant major claimant, type commander, NAVREP, NAVAIRLOG-OFF, and other appropriate commands/agencies of the extent of the holiday closure at least seven days in advance of the closure. Notification shall also be made using the NOTAM system.

3.4.1.4 Closed-Field Operations

1. It is recognized that operational requirements dictate certain operations outside the normal published airfield hours (i.e., SAR/MEDEVAC, law enforcement support, special operations, etc.). These operations shall be conducted in accordance with guidance contained in OPNAVINST 3710.7. Support plans for closed-field operations should include, but not be limited to, consideration of the following items:
 - a. LOA or MOA.
 - b. Crash/fire rescue support.
 - c. Field lighting/NAVAIDs.
2. Airfields operating outside of published hours could have a legal impact on the associated airspace. Coordination with the appropriate NAVREP is required.

3.4.2 Watch Team Briefing. A briefing, attended by the entire watch team, shall be conducted prior to assumption of the watch. Briefings should include but are not limited to:

1. Current/forecast weather.
2. Current/projected airport conditions.
3. Equipment status.
4. New facility directives.
5. Special operations.
6. Operating position/training assignments.

3.4.3 Time Standards

3.4.3.1 Time Source. All ATCFs shall use UTC for entries on all forms, logs and written records, and radio and landline communications. Local time shall be used for facility work schedules, daily traffic counts, and administrative forms and correspondence.

3.4.3.2 Time Checks. A reliable accurate clock shall be visible from each position of operation in all ATCFs. It shall be set periodically as follows:

1. In approach control facilities, clocks are set to agree with those of the en route facility responsible for the terminal facility.
2. In FACSFACs clocks are set to agree with those of the host en route facility.
3. In all other facilities, clocks are set to agree with those of the approach control facility serving the airport.
4. Time checks shall be obtained at the start of each watch.

3.4.4 Emergency Plan

3.4.4.1 Local Directives. Operational instructions for providing emergency service at naval aviation shore facilities shall be promulgated by commanding officers. If applicable, procedures should include provisions for alerting personnel operating emergency equipment located at outlying fields served by the facility as well as the station where the facility is located.

3.4.4.2 Alerting Procedures. Procedures for alerting personnel operating emergency equipment (including equipment which may be located off the airfield) shall consist of:

1. Initiating the alert by any of the following when the opinion is that a potential or actual emergency exists:
 - a. The air traffic controller.
 - b. The pilot of the aircraft concerned.
 - c. The reporting custodian or representative of the aircraft.
 - d. The station commanding officer or representative.
2. Stating the nature and location of the emergency by means of a signaling system (such as a siren or telephone).
3. Specifying, when required, the category of alert applicable to the emergency.

3.4.4.3 Responsibility for Handling an Emergency. Prompt dispatch of emergency equipment is the joint responsibility of air traffic control personnel and the crash crew. After receiving the alert, and appropriate tower clearances, personnel operating the emergency equipment shall be responsible for handling the emergency.

3.4.5 Emergency Power

3.4.5.1 Responsibility. Commanding officers are responsible for developing and maintaining plans and procedures for ensuring continuity of ATC services and navigational aids during emergency conditions such as power failure, fire, flood, storm damage, etc. In this regard, auxiliary power sources must be maintained in optimum operational condition. Accordingly, each facility shall establish a program of preventive maintenance and periodic load and no-load operation to ensure maximum continuity of ATC service.

3.4.5.2 Severe Weather Activity. Weather reports, advisories, and radar shall be monitored to determine when severe weather activity is approaching the facility. At least 30 minutes before severe weather is anticipated, facilities shall shift to auxiliary power

unless reliable automatic transfer equipment is installed. Auxiliary power generators for related facilities including navigational aids shall be operated as directed by the ATCF officer.

3.4.6 Communications

3.4.6.1 Emergency and Distress Frequencies

3.4.6.1.1 Limitations on Usage. Emergency and distress frequencies 243.0 and 121.5 MHz will be used only to provide a communications channel to and from airborne and ground stations or surface craft involved in an actual emergency or distress. This includes immediate assistance by other aircraft or surface units in the vicinity acting to alleviate or avert the distress or emergency condition. It does not include communications incident to a coordinated SAR operation. SAR communications are to be conducted on the frequency 282.8 MHz or other appropriate frequency as directed. The usage limitations do not preclude brief operational equipment checks.

3.4.6.1.2 Responsibility. Judgment as to what constitutes an emergency requiring the use of these frequencies remains a responsibility of the individual operator. Time permitting, facilities shall identify that they are on guard frequencies (e.g., “Navy 43271, this is (facility name) on guard (message).”).

3.4.6.2 Unauthorized Transmissions. ATC personnel shall not knowingly transmit or permit to be transmitted over voice or data communications circuits:

1. Obscene, indecent, or profane language.
2. False or deceptive communications.
3. Identification not authorized or assigned.
4. Willful or malicious interference with other communications.
5. Superfluous or unauthorized transmissions of a personal nature.

3.4.6.3 Authorized Transmissions Not Associated With Air Traffic Control. In addition to normal ATC transmissions, occasions may arise

when messages by a third party, pertaining to safety of aircraft operation or preservation of life or property, are necessary. Such messages are authorized for transmission on ATC communications channels. They may be transmitted by controller personnel or by certain individuals concerned with the emergency. These individuals shall be given access to facilities to personally issue such messages for their respective interests provided that control instructions shall not be issued and such transmissions can be interrupted when required to continue ATC services.

ATCFs may relay tactical instructions when no other source of communications is available.

3.4.6.4 Safety of Flight Considerations. The final approach, touchdown, landing roll, takeoff, and initial climb to the first turn away from the airfield are considered to be the most critical phases of flight — phases requiring the full attention of the pilot. Except during radar approaches or departures, controllers shall refrain from transmitting to the aircraft during these phases of the operation unless conditions affecting safety of flight are observed or are known to exist. Safety of flight considerations, including airfield conditions, shall be transmitted at any time observed by or made known to the controller.

3.4.6.5 Phraseology. ATC procedures and phraseology are prescribed in FAA Order 7110.65. Emphasis is on standardization, brevity, and reduction of frequency congestion. In no case should the flightpath of an aircraft be extended merely to permit completion of required voice transmissions. Broadcasting of information which is available to the pilot in flight information publications should be held to a minimum. At jointly staffed facilities and at facilities where an aircraft will be controlled by both FAA and naval ATCFs, information to be transmitted by each facility shall be the subject of written agreement and clearly understood by all concerned with a view toward eliminating redundancy.

3.4.6.6 Precision Approach Landing System (PALS) Phraseology. At PALS equipped airfields, standard CCA phraseology may be used when a pilot specifically requests a PALS approach vice an ASR or PAR approach (see CATC Handbook, NAVAIR-AE-CVATC-OPM-000).

3.4.7 Recorders

3.4.7.1 Use. Voice recording and digital video recording (where installed) shall be required to provide information for the following:

1. Determining adequacy and accuracy of ATC instructions, especially during emergencies or heavy traffic.
2. Conducting aircraft incident or accident analysis.
3. Immediately playing back incidents to aid search and rescue efforts.
4. Periodically evaluating circuit loads to determine the need for corrective measures.
5. Conducting training of air traffic controllers.

3.4.7.2 Recording Operating Procedures.

All radio circuits, interphones, and telephones used for the control of air or vehicular traffic, including crash phone circuits, shall be recorded continuously during the hours of operation. Position recording shall be used for all operating positions; however, the following frequencies shall be recorded independently:

1. UHF emergency.
2. VHF emergency.
3. Primary local control frequency.
4. Primary approach control frequency.

3.4.7.3 Retention and Release of Original Voice and Video Recordings.

Original recordings shall be retained for at least 15 days except for mishaps involving Navy ATCFs or DON aircraft. Additionally, a copy of the ATC voice recording shall be forwarded to CNO N785F for review with a copy of a formal written recommendation regarding release. These mishap recordings shall be retained until:

1. Claim/complaint has been adjudicated.
2. Two-year statute of limitations has expired.
3. Released or directed by higher authority.

Requests for reviewing or duplicating original recordings that may be evidence in a non-U.S. Government investigation shall be referred to N785F. In all

cases, tapes or information thereon shall not be released to any party without consent of the appropriate commanding officer. A chain of custody with appropriate signatures obtained, indicating release and assumption of responsibility, shall be established for all original voice or video recordings prior to release to appropriately authorized agencies or officials. The Freedom of Information Act as delineated in SECNAV-INST 5720.42 series shall be referred to in all cases.

3.4.7.4 Joint Facilities. Policies concerning recording for FAA control functions within jointly operated facilities will be established by the FAA. At facilities where the FAA assumes recording responsibilities, specific procedures shall be established.

3.4.7.5 Recorder Failure. If recording equipment fails, all flight clearance and control data shall be entered on the appropriate flight progress strips. This information shall include:

1. Time control is assumed or aircraft handed off.
2. Position and time radar contact established or lost or radar service terminated.
3. Missed approach.
4. Altitude changes.
5. Other information pertinent to the traffic situation.

3.4.7.6 Maintenance and Custody of Recorder Tapes.

Recorder tapes shall be changed by electronics maintenance personnel. Each recorder channel shall be checked at time of change. During the period of required retention, recording tapes shall be stored in locked cabinets under the custody of the electronics maintenance officer or equivalent. Label each reel before storage with recorder identification and date of recording. Recorder tapes shall be available to ATCF supervisory personnel.

3.4.7.7 Making Copies of Voice Recordings.

In order to protect original voice recordings from wear and possible damage, arrangements shall be made to rerecord all pertinent recordings as soon as possible after an accident occurs. This rerecording should include all communications data pertinent to the accident and the time track, when available, from a

period of 5 minutes before the initial contact to 5 minutes after the last contact.

A voice announcement containing all information normally furnished at the beginning of a transcription (except abbreviations) shall preface the copy or separate portions of the copy if several channels are recorded. In the case of an accident resulting in serious injuries or fatalities or a midair collision involving any type of civil aircraft, two copies shall be made. The first copy will be impounded with the original; the second or working copy will be used in making transcriptions or an analysis of the accident.

To make copies of voice recordings:

1. Make an initial rerecording for facility use in preparing transcriptions or analysis of an incident. Additional copies of voice recordings should be made from the facility rerecordings, if equipment permits, to minimize replays of the original tape.
2. A voice announcement preceding a rerecording of an original tape shall be made using the following format as necessary.

This rerecording is being prepared by _____.
(facility)

The subject concerns an aircraft mishap involving _____ on _____
(aircraft identification) (date)

at approximately _____.
(UTC)

The agencies involved in this mishap are _____.
(do not use abbreviations)

Positions of operation are recorded in the following sequence _____.
(local control, departure radar, etc.)

I hereby certify that the following is a true rerecording of the original transmission pertaining to the subject mishap. My name is _____ and I am at _____
(name) (position title)
at _____.
(facility)

3. The rerecording of each position of operation will be preceded by a statement identifying the specific position and the start/stop times of the rerecording in UTC.

This portion of the rerecording concerns communications at the _____
(position)
during the period _____ to _____.
(UTC)

4. All tape cassettes or reels on which rerecordings are prepared shall be clearly identified (i.e., facility aircraft identification, mishap date and time, and mishap number if appropriate). Cassette tapes shall have the recorder tabs removed.
5. Conclude the rerecording with the following statement: "This is the end of the rerecording concerning the mishap involving (aircraft identification)."

The individual supervising this operation should include a brief written statement; the original and first copy should identify the contents, specifying the date and time removed from the recorder and recorded.

Use a direct electronic connection between playback and rerecording equipment to accomplish this rerecording. Do not use the speaker-to-microphone method in the rerecording process, except at locations where there may be some tape units and belt recorders that have not been adapted for electronic takeoff of sound.

Stereo equipment shall be used to produce rerecordings when the capability exists. Time shall be recorded on the right track and pertinent data recorded on the left track. Digital time shall be used when available and shall always be rerecorded on stereo equipment. When stereo capability does not exist, voice time may be recorded simultaneously with other pertinent data on monaural tape. Volume of the voice time shall be adjusted so that pertinent voice transmissions are not blocked out.

Two certified rerecordings only of the original recording shall be made. Any additional rerecordings shall be made from a certified copy of the original and shall have a voice announcement preceding the certification indicating the date the rerecording was made and identifying for whom it was made.

3.4.7.8 Transcriptions of Voice Recordings.

Typewritten transcriptions shall be prepared for all formal accident packages and shall contain all recorded communications concerning the subject aircraft for a period of 5 minutes before initial contact until 5 minutes after the accident. Those positions that provided normal services to the subject aircraft and did not either (1) work the aircraft just prior to or at the time of the accident and/or (2) have no pertinent transmissions can submit a statement certified by facility chief stating that "...all services provided (by that position) were normal and there were no pertinent transmissions." A chronological summary of flight will accompany the certified statement and will include those services provided by that position.

Transcriptions shall be made from the copy of the voice recording rather than from the original, in order to protect the original recordings from wear or damage. The original recording may be used to check the transcription after this recording has been reviewed by the investigators or otherwise released by them.

The first page of each transcription shall be on letterhead paper and shall give the following information:

1. Name of facility preparing the transcription
2. Date transcription was certified
3. Subject of the transcription
4. Date and period of time covered by the transcription
5. List of agencies making transmissions together with the standard abbreviation for each
6. Certification in the following form by the person making the transcription (not the facility chief unless he/she prepared the transcription).

I HEREBY CERTIFY that the following is a true transcription of the recorded conversations pertaining to the subject aircraft accident:

NAME

TITLE

The body of the transcription shall be single-spaced. Each separate contact shall be separate from the next contact by triple spacing. Where transmissions of more than one agency (tower, station, aircraft, operations office, etc.) are recorded, each transmission should be prefaced by the abbreviation for the agency for identification purposes. Where breaks occur in the continuity of any particular contact, such breaks will be shown by a series of dashes. When time-announce systems are installed, time entries shall be entered at the beginning of each transmission. When time-announce systems are not available, a remark will be entered in the certification regarding the method of timing used.

The transcription shall be verbatim and abbreviations shall not be used. Where numbers are spoken, the number shall be spelled out to indicate the exact manner in which it was spoken. Where the recording is unintelligible, the word "unintelligible" shall be inserted in parentheses in the proper location. Where an interpretation of a garbled word or portion is made, the word or portion interpreted shall be surrounded by parentheses and asterisked. A footnote at the end of the transcription shall be provided as follows: "This portion of the recording is not entirely clear, but this represents the best interpretation possible under the circumstances." Extensive punctuation should not be used. At the end of the transcript enter "End of Transcript."

3.4.8 Automatic Terminal Information Service (ATIS). Responsibility for updating and monitoring broadcasts and disseminating current messages shall be assigned to a specific pertinent position of operation. ATIS messages shall be made a matter of record on facility recorders. If not possible, a written record of each message shall be established and retained for a period of 15 days.

3.5 ELECTRONICS MAINTENANCE

3.5.1 Air Traffic Control Facility Technicians

3.5.1.1 Responsibility. Maintenance responsibility for equipment used to accomplish the air traffic control mission of a command is vested in the ground electronics maintenance division. Maintenance personnel, in addition to corrective maintenance, shall perform preventive maintenance and daily checks in compliance with existing policies in addition to requirements established by local directives.

3.5.1.2 Responsibilities. Technician(s) assigned air traffic control maintenance responsibilities shall be present within the ATCF anytime the facility is open and available to provide ATC services. Responsibilities include:

1. Keeping ATCF supervisory personnel apprised of equipment status.
2. Confirming controller judgment regarding equipment malfunctions.
3. Authority to recall electronic maintenance personnel qualified to perform corrective maintenance should an after-hour outage adversely impact the fleet support provision capability of the ATCF and the specific technical specialty required to perform corrective maintenance if not a member of the duty section.
4. Performing other duties as assigned.

3.5.1.3 Formal Training. Electronic technicians actively involved in performing maintenance actions in support of ATC systems shall possess the applicable NEC/MOS/Civilian equivalent certification for that equipment.

3.5.1.4 Certification. Local certification of electronics technicians shall be in compliance with PQS augmented as required by local directives.

3.5.1.5 Working Hour Limitations. Working hour limitations in effect for air traffic controllers (paragraph 3.3.7) should be imposed on electronic technicians maintaining ATC-related equipment unless operational requirements dictate otherwise.

3.5.1.6 Alcohol Abuse (USN). Electronic technicians or engineers assigned ATC maintenance responsibilities shall be subject to alcohol abuse regulations as described in paragraph 3.3.5.3 of this instruction.

3.5.1.7 Alcohol Abuse (USMC). Maintenance technicians/engineers assigned ATC responsibilities shall be subject to the alcohol and drug abuse policies stated in paragraphs 3.3.5.2 and 3.3.5.3. Additionally, drug abusers will not be able to maintain a security clearance in accordance with OPNAVINST 5510.1. Security clearances lost for drug abuse will require

personnel processing for a lateral move. PRIM and IRAM apply. Application for reentry into the field will be entertained only after reinstatement of security clearance.

3.5.2 Equipment Maintenance Criteria. Performance standards and tolerances and certification/recertification requirements for navigational aids, radars, and communications equipment are contained in OPNAVINST 3721.18.

3.6 SECURITY OF FACILITIES

3.6.1 Controlled Access. To guard against the unnecessary distraction by unescorted visitors and observers in ATCFs, commanding officers shall ensure that the security of such areas is maintained.

3.6.2 Official Business Access to Other Than ATC Personnel. It may become necessary for personnel with aircraft technical expertise to be present in the ATCF during aircraft emergencies or when aircraft are otherwise experiencing operating difficulties or malfunctions. In such instances, only those personnel absolutely necessary and required to provide technical advice shall be allowed within the facility. In no instance shall controller authority be abridged by personnel who are present for this purpose. Official business visits by other than the aforementioned personnel shall be approved by the ATCFO and such persons shall be escorted while in the facility.

3.6.3 Unofficial Visits and Tours. Visits by pilots and other interested personnel and tours for civilian groups or individuals are encouraged. However, visitors shall be escorted at all times.

3.6.4 Commercial Telephones. Telephones in the control tower shall be assigned unpublished numbers or modified so as not to ring in the control tower. The telephone number should be changed when deemed necessary by the ATCFO.

3.7 AIRCRAFT ACCIDENTS AND INCIDENTS

3.7.1 Importance of Collecting Data. The importance of collecting accurate data concerning aircraft accidents and incidents in a timely manner cannot be overemphasized. Detection of faulty equipment and/or procedures must be accomplished as

quickly as possible to reduce hazards to aviation. Additionally, timely collection of accurate information will in the long run serve to best protect the rights of pilots and controllers involved.

3.7.2 Guidance Concerning Investigation and Reporting. Guidance concerning investigation and reporting aircraft accidents and incidents, including NMAC incidents, is contained in OPNAVINST 3750.6. Policy regarding the release of information and records pertaining to such mishaps is addressed in the same directive. Involvement of civilian aircraft or other major civilian property should be reported via OPREP 3 in accordance with OPNAVINST 3100.6.

3.7.3 ATC Involvement. Involvement of components of the ATC system in an aircraft accident or incident may include:

3.7.3.1 Priority. Pilot irregularities or deviations from established procedures which require special handling by controllers (i.e., giving priority that results in delay or sequence adjustment to other aircraft).

3.7.3.2 Deviation. Operational errors involving failure of equipment, personnel, procedures, or other system components, individually or in combination, which result in a deviation from established ATC standards.

3.7.4 Involvement of a Facility or Navigation Aid. Whenever a facility, service, or navigational aid is or is suspected to have been involved in an aircraft accident or incident, action shall be taken to provide for the continuing safe, orderly, and expeditious movement of air traffic operating under the jurisdiction of the facility. Accurate and complete information shall be obtained for use in investigations by the facility, other agencies, or higher authority.

3.7.5 ATC Procedures Following an Accident/Incident. Following an aircraft accident or incident, ATCF supervisory personnel shall notify appropriate personnel designated in local directives; request and obtain weather observation; and cause the removal and safeguarding of any tapes that are, or may be, pertinent to the accident or incident unless relieved of this responsibility by proper authority. Statements shall be obtained from controller and supervisory personnel involved. These statements are in support of

administrative action and may not be made the basis of subsequent legal or disciplinary proceedings unless provisions of Article 31 of the UCMJ have been observed (see Appendices F and G). The operating characteristics and equipment condition shall be examined by technically qualified personnel who were not on duty at the time of the accident/incident to determine whether equipment could have been a contributing factor. Prior to this examination, no equipment alterations or adjustments shall be made on equipment which might have contributed to the incident without consent of the ATCFO.

3.7.6 Radar Facility Involvement in an Accident/Incident. When a radar facility is or is suspected to have been involved in an accident or incident, the following action shall be taken: during VFR conditions, a check of scope, video map, and cursor alignment shall be made. If the equipment is considered by ATC supervisory personnel on watch to be satisfactory, radar operations may be resumed. During IFR conditions when arriving aircraft cannot land by use of other facilities or proceed to an alternate ATCF, supervisory personnel on watch may resume radar operations after conducting a check of scope, video map, and cursor alignment. However, safety of flight considerations are paramount and pilots must concur prior to use of equipment under these circumstances. If doubt exists that equipment performance is not satisfactory, such equipment shall be placed out of service until complete technical evaluation and appropriate flight checks can be accomplished.

3.7.7 ATC Personnel Involved in an Accident/Incident. ATCF personnel who appear to have contributed to an accident or an incident which jeopardizes safety of aircraft shall be temporarily relieved of operational duty and referred to a military flight surgeon for physical/psychological evaluation. This action is not to be considered as disciplinary or punitive action or in any way indicative that the controller was responsible for the accident/incident. This removal is to permit preparation of facts and supporting data for an immediate facility investigation of the accident/incident. Further, removal at this time is for protection of the naval service and the controller in the event human error existed or was caused by the controller's incapacity such as illness or extreme pressure. The relief from operational duty shall remain in effect until the ATCFO has determined the probability of controller involvement. If after a preliminary

investigation the controller is found not responsible for or contributory to the accident/incident, the controller will be returned to operational duty. If subsequent in-depth investigation reveals that the controller was responsible for or contributory to the error, the following actions shall be taken as a minimum prerequisite to reassignment to operational duty:

1. Detailed and complete review of the accident/incident with the controller including a discussion of circumstances related to the accident/ incident.
2. Reevaluation of the controller on the position(s) to determine necessity for additional training.
3. If retraining is required, it should be conducted with particular emphasis on weaknesses revealed during investigation of the accident/incident.
4. Satisfactory completion and documentation of the action outlined in 2 and 3 above, including demonstration of skill level at least equal to that required for the appropriate portion of sector/ position “checkout,” is to be considered a recertification of control ability.

3.7.8 Disciplinary Action. Disciplinary action is a possibility in some cases of carelessness or negligence. Therefore, because of the seriousness of such action to the controller, use of the terms “carelessness” or “negligence” must be carefully considered. Use these terms only in cases where the controller is careless or negligent beyond reasonable doubt. Instances involving an accident or incident resulting in personal injury or property damage may result in lawsuits being filed. In such event, files and records relating to the investigation of the instance and any disciplinary or other actions taken may be subject to disclosure to the attorneys for the litigants and produced in court. The purpose of this action is not to minimize or restrict actions because of possible liability, but is to provide additional assurance that the findings upon which disciplinary or administrative action is taken will not contain any unwarranted language which might be misleading to persons outside the naval service and result in a possible unjustified liability to the service or the individual. If disciplinary action appears warranted, action must be initiated in accordance with appropriate military and/or Office of Personnel Management directives.

3.8 AIR TRAFFIC CONTROL HAZARDS (OPERATIONAL ERRORS/DEVIATIONS)

3.8.1 General. The ATCFO, in order to maintain an effective ATC facility organization, must identify any and all deficiencies and take appropriate corrective action.

3.8.2 Severe Air Traffic Control Hazard (Operational Error). A severe air traffic control hazard is an occurrence attributable to an element of the air traffic system that:

1. Results in less than the applicable separation minimal between two or more aircraft, or between an aircraft and terrain or obstacles, as required by FAA 7110.65 and supplemental instructions. Obstacles include vehicles/ equipment/personnel on runways; or
2. Aircraft lands or departs on a runway closed to aircraft operations after receiving air traffic authorization.

3.8.3 Routine Air Traffic Control Hazard (Operational Deviation). A routine air traffic control hazard is a controlled occurrence where applicable minimal separation, as referenced in [paragraph 3.8.2](#), was maintained, but:

1. Less than the applicable separation minima existed between an aircraft and protected airspace without prior approval.
2. An aircraft penetrated airspace that was delegated to another position of operation or another facility without prior coordination and approval.
3. An aircraft penetrated airspace that was delegated to another position of operation or another facility at an altitude or route contrary to the altitude or route requested and approved in direct coordination or as specified in a letter of agreement, precoordination, or internal procedure.
4. An aircraft, vehicle, equipment, or personnel encroached upon a landing area that was delegated to another position of operation without prior coordination and approval.

3.8.4 Reporting Air Traffic Control Hazards. The reporting of air traffic control hazards is an element of the Naval Aviation Safety Program. Reporting requirements and format are contained in OPNAVINST 3750.6.

3.9 HANDLING OF ALLEGED FLIGHT VIOLATIONS

3.9.1 Procedures. Commanding officers shall establish local procedures to be followed by ATC personnel observing violations of flying regulations. Alleged flight violations shall be handled in accordance with the applicable provisions of OPNAVINST 3710.7.

3.10 REPORTS

3.10.1 Activity Report (See Appendix H, Forms To Be Locally Reproduced). Items apply to Navy/Marine Corps ATCFs except an activity report/traffic count is not required from forces afloat. The activity report consists of three parts: the control tower operations count, the approach control operations count, and the special use airspace operations count. One, two, or all three portions of the activity report may apply dependent upon class of ATC facility. Traffic count at satellite fields (OLF, ALF) shall be reported on a separate control tower operations sheet by the parent activity.

3.10.1.1 Purpose and Applicability. Reports of air activity are required by CNO to assist in administration and manning and to support the operational costs of the ATC program ashore.

3.10.1.2 Report Distribution and Time of Submission. Subject report shall be submitted annually (1 January) to reach CNO (N785F) within 30 days of due date; copies to appropriate type commander ATC representative and NAVREP; USMC send additional copy to CMC (Aviation).

3.10.1.3 Instructions for Preparation of the Report

1. Categorize air taxi operations as air carrier.
2. Categorize U.S. Coast Guard operations as other military.
3. An IFR operation is recorded for aircraft operating in accordance with IFR, or provided IFR separation from other aircraft. Instrument operations shall be counted whenever aircraft are provided IFR separation regardless of existing weather conditions or the type of flight plan.

Aircraft operating on a **SVFR** clearance are considered as instrument operations.

4. A VFR operation is recorded for aircraft operations flown in accordance with visual rules, except when the aircraft is being provided IFR separation from other aircraft. This rule precludes simultaneous count of the same operation as both an IFR and a VFR operation.
5. Radar approaches are considered as any surveillance, or precision radar approach to a landing, missed approach, or waveoff. Each approach executed shall be counted regardless of the flight rules under which the aircraft is operating or the existing weather conditions.
6. PALS approaches (if applicable) shall be reported by modes.
7. Remarks shall include any air activity items that, in the judgement of the originator, would be of interest to the report recipients. Report airport use by runway, NAVAID approaches by runway, and radar/PALS approaches by runway. Also, report air traffic control training device usage in the following format:

(Type device) Usage:

- a. Number of hours used.
- b. Number of radar approaches accomplished.
- c. Number of hours arrival control, vector to outlying fields, etc.
- d. Number of hours not available because of maintenance outage.

3.10.1.3.1 Air Activity. Air traffic control-related activity supported by the facility during the preceding year shall be included in this report.

a. Control Tower Operations. The control tower operations count is maintained by the control tower. At Navy/Marine Corps approach control facilities, these statistics are recorded separately from the approach control operations count. For the purpose of the control tower operations count:

1. Count an arrival as one operation. Individual aircraft of a formation shall be counted separately.

2. Count a departure as one operation. Individual aircraft of a formation shall be counted separately.
 3. Count touch and go, low approach, or stop and go as two airport operations. Individual aircraft of a formation flight shall be counted separately.
 4. Count an approach followed by a waveoff as two operations (e.g., VFR tower traffic pattern, FCLP, or an instrument approach to minimum descent altitude or decision height). An individual aircraft formation flight shall be counted separately, except when a formation instrument approach terminates in a planned low approach/waveoff and formation integrity is maintained.
 5. Count aircraft that transit Class D airspace and are provided ATC service as one operation. Formation flights shall be considered as a single operation.
 6. There is no need to differentiate between IFR and VFR operations.
 7. At nonapproach control facilities, radar approaches and PALS approaches (if applicable), as well as ATC training device usage shall be included in the appropriate sections of the control tower operations report.
4. Count an approach followed by an unplanned missed approach as two operations if approach control provides ATC services following the missed approach (e.g., an instrument approach unplanned missed approach to control tower jurisdiction is only one approach control operation.)
 5. Count aircraft that transit or operate within the control area of jurisdiction and are provided ATC service as one operation. An aircraft departing a satellite airport, transiting the area, and arriving at a second satellite airport is considered one approach control operation.
 6. Formation flights shall be considered a single aircraft.
 7. Differentiate between IFR and VFR operations.
 8. For approach control facilities, radar approaches and PALS approaches (if applicable) as well as ATC training device usage shall be included in the appropriate sections of the approach control operations report.
 9. For approach control facilities that provide ATC service for satellite civil airports with instrument and approach procedures, two figures shall be recorded in the Remarks block:
 - a. The total number of instrument approaches by satellite airport and;
 - b. The total number of instrument approaches conducted when the visibility is less than 3 miles or the ceiling is at or below the minimum initial approaches altitude, by satellite airport.

b. Approach Control Operations. The approach control operations count is maintained by Navy/Marine Corps approach control facilities only. These statistics are recorded separately from the control tower operations count. For the purpose of the approach control operations count:

1. Count an arrival as one operation.
2. Count a departure as one operation.
3. Count a practice instrument approach as one operation. Do not take a second for the departure phase of the flight when the aircraft executes a planned missed approach, low approach, touch and go, or stop and go (e.g., an aircraft takes off to fly five practice instrument approaches, landing on the last one. Total instrument count would be six: one for the initial departure, plus one for each of the approaches).

This second figure is normally reported monthly to the parent ARTCC per FAAH 7210.3, Chapter 14.

c. Special Use Airspace Operations. The SUA operations count is maintained only by FACSFAC or FACSFAC like functions of Navy/Marine Corps ATC facilities. These statistics are recorded separately from the control tower operations and approach control operations counts. For the purpose of the SUA operations count:

1. Count aircraft that operate in the control area of jurisdiction and are provided special use airspace control services as one operation.

2. Individual aircraft of a formation shall be counted separately while operating within SUA. This corresponds with criteria for the annual restricted area/military operations area utilization report required by FAA Order 7400.2.
3. Operations shall be reported for individual regulatory and non-regulatory special use airspace designations as defined by FAA 7400.8. In addition, report operations in stand alone [ATCAAs](#) not used in conjunction with other special use airspace.
4. There is no need to differentiate between IFR and VFR.
5. For new or revised approach or departure procedures, submit a completed OPNAV Form 3722/1 or OPNAV Form 3722/5, as appropriate.
6. TERPS data base/obstacle data summaries (OPNAV Forms 3722/10 and 3722/11) shall be examined for changes as part of the triennial review process.
7. When interim TERPS data base/obstacle data changes occur, NAVFIG shall be notified as soon as possible using OPNAV Form 3722/10 or 3722/11. Changes must be identified on a cover letter or may be highlighted on the revised form. Minor changes may be made by telephone, but must be followed by letter or revised form.
8. Aeronautical information concerning subject procedures published in DOD FLIP (En Route and Terminal) shall be examined for accuracy as an integral part of the review process. Corrections to such information or a certification as to the accuracy thereof shall be included in the report.
9. Schedule for submission of triennial terminal instrument procedures report shall be established by NAVFIG. At least 90 days prior to the report date, NAVFIG will notify the station, via official correspondence, of report requirements. Additionally, NAVFIG will post a triennial schedule on the ATC Web site.

3.10.2 Triennial Terminal Instrument Procedures Report

3.10.2.1 Purpose and Applicability. Commanding Officers of Navy/Marine Corps aviation shore activities shall triennially review terminal instrument approach and departure procedures. This review shall include procedures published for local use or military use only, PALS, ICLS, and CCA. It shall ensure conformance with TERPS and [Chapter 9](#) of this manual. Reports of these reviews shall be submitted to Head, Naval Flight Information Group, 1339 Patterson Ave, S.E., Room 301, Washington Navy Yard, DC 20374-5088. Naval Flight Information Group (NAVFIG) shall review and approve all instrument procedures for Naval activities at least triennially. If the review/approval is completed within one month prior or one month after the required review date, the triennial date remains unchanged. If the review/approval cannot be completed within this window, the date of approval becomes the new triennial review date. NAVFIG shall notify the command at least 30 days prior any procedure becoming out of date. If the procedure becomes out of date or is no longer required, the aviation shore activity shall send a NOTAM to place the procedure out of service.

3.10.2.2 Station Reports. Station reports shall be submitted using the following instructions:

1. If no changes have occurred, submit a statement that the currently approved procedures are necessary, operationally suitable, and conform with the provisions of TERPs.
2. Modernization/rehabilitation plans including modifications.
3. Correspondence pertaining to acceptance/nonacceptance of equipment installations.

3. Correspondence pertaining to agreements with other agencies/facilities within the preceding 6 years.
4. Correspondence pertaining to airspace rulemaking proceedings within the preceding 6 years.
5. Manning level changes with justifications during the preceding 6 years.
6. Controller of the year nominations during the preceding 6 years.
7. Data on any assigned research and development or test and evaluation from initiation to completion.
8. Operational impact statements prepared during the preceding 6 years.
9. Airport usage by runway during the preceding 6 years.
10. NAVAID approaches by runway during the preceding 6 years.
11. Radar/PALS approaches by runway during the preceding 6 years.

Note

For those facilities equipped with an air traffic activity analyzer, maintenance of paper files to fulfill items 9 through 11 is not required.

3.10.4 Retention/Disposal Standards. Retention standards for records/data relating to daily management of air traffic are established as follows:

1. Daily record of facility operation and position logs — 6 months.
2. Flight plans — 6 months.
3. Flight progress strips — 3 months.

Records/data relating to mishaps involving Navy ATCFs or DON aircraft until:

1. Claim/complaint has been adjudicated.
2. Two-year statute of limitations has expired.
3. Released or directed by higher authority.

CHAPTER 4

Naval Certification Procedures

4.1 GENERAL

4.1.1 Purpose. This chapter provides policy guidance and general procedures for the naval air traffic control certification program. Procedures set forth in this chapter augment and amplify the certification procedures prescribed in FAA Order 7220.1.

4.1.2 Requirements for Control Tower Operator/Air Traffic Control Specialist Certification

4.1.3 CTO Examiner. The CTO Examiner shall be designated by the FAA Regional Examiner per FAA Order 7220.1. If a member of the ATC Facility is the designated CTO Examiner, they shall possess a CTO rating for the tower assigned.

4.1.4 ATCS Examiner. The ATCS Examiner shall be designated in writing by the Commanding Officer. The ATCS Examiner shall possess all ATCS ratings for the facility assigned.

4.1.4.1 Medical. Meet the physical requirements of FAR Part 67 and applicable naval directives.

4.1.4.2 Training and/or Experience

1. Satisfactorily complete the FAA airman written test for CTOs (AC Form 8060-37/8080-2).
2. Be a graduate of a U.S. military air traffic controller formal basic course of instruction that included PAR practical application.

4.2 CTO CERTIFICATES

4.2.1 Authority. The CTO Certificate (AC Form 8060-1) is issued by the FAA and authorizes the holder to act as an "airman" upon completion of the requirements specified in FAR Part 65 and FAA Order 7220.1.

4.2.2 Issuance of Ratings. The holder of an AC Form 8060-37/8080-2 may not exchange this form for a CTO Certificate without rating. These forms are nonexpiring and an applicant must qualify for a rating prior to issuance of a CTO certificate.

4.2.3 Position Qualifications. During the period prior to completion of CTO rating requirements, individual position qualifications shall be entered in the controller's ATC Certification/Qualification Record. The individual may perform duties as a controller under general supervision only at those positions at which qualified; otherwise, training shall be under the direct supervision of a controller qualified at the position being worked.

4.3 ATCS CERTIFICATES

4.3.1 Authority. The ATCS certificate (FAA Form 7220-1) is issued by authority of CNO/CMC and authorizes the holder to act as a naval air traffic controller. Each air traffic controller of the naval service shall be required to possess the ATCS certificate regardless of the capacity in which employed.

4.3.2 Naval Air Technical Training Center. NATTC Pensacola shall document and issue the ATCS certificate (without ratings) upon satisfactory completion of the naval basic ATC controller course.

4.3.3 Commanding Officer. The commanding officer or designated representative may issue ATCS certificates to individuals who meet the qualifications contained in [paragraph 4.1.2](#) and FAA Order 7220.1.

4.4 ATCS RATINGS

4.4.1 Position Qualifications. During the period prior to completion of facility rating requirements, individual position qualifications shall be entered in the controller's ATC Certification/Qualification Record. The individual may perform duties as a controller under general supervision only at those sectors or positions at

which qualified; otherwise, training shall be under the direct supervision of a controller qualified at the position being worked.

4.4.2 Issuance of Ratings. When it is determined that a controller is eligible for an ATCS rating, the ATCS examiner will administer appropriate examinations in accordance with the provisions of FAA Order 7220.1 and this chapter. Upon successful completion of these examinations, the ATCS examiner shall recommend the issuance of an applicable rating for the facility concerned. When approved by the ATCFO, the rating shall be recorded on the ATCS certificate, the certification/qualification record, and the individual service record.

4.4.3 Applicable ATCS Ratings. The types of ratings applicable for USN/USMC ATCS certification are listed in FAA Order 7220.1 and amplified as follows as a rating to the ATCS certificate:

1. APC — Holder is qualified as an approach controller at a nonradar (manual) approach control facility.
2. CATCC — Holder is qualified at all positions of CCA.
3. FACSFAC — Holder is qualified at all ATC operating positions of the FACSFAC.
4. AATCC — Holder is qualified at all positions of AATCC.
5. TACC — Holder is qualified at all positions of TACC.
6. BASEOPS — Holder is qualified at all positions in base operations. This rating can only be issued at Class I ATC facilities.
7. GCA — Holder is qualified at all positions of the GCA unit.
8. **RATCF** — Holder is qualified at all positions within the radar branch excluding approach control. This rating is applicable to those facilities providing terminal radar ATC services from a radar room-type environment.

9. RFC — Holder is qualified as a PAR, ASR, and, where applicable, precision approach landing system (PALS) final controller. At facilities where the TRACON, RATCF, CATCC, or AATCC rating is applicable, the radar final controller will normally be a position qualification and not an ATCS rating. Such facilities may, however, utilize the RFC rating when manning or experience levels prohibit continued training toward TRACON, RATCF, CATCC, or AATCC.
10. TRACON — Holder is qualified at all positions within the radar branch of an approach control facility.
11. ARTCC — Holder is qualified at all positions in the radar branch of the CERAP, including the en route portion. This rating is applicable only at facilities designated a CERAP as authorized by CNO (N785F).

Note

Supervisory designations are not required for issuance of ratings.

4.5 AIR TRAFFIC CONTROL WATCH SUPERVISOR (ACWS) DESIGNATION

The following designations are applicable to air traffic control supervisory positions ashore and afloat. Due to the greater authority and responsibility of these arduous positions, designation shall be in writing by the commanding officer.

4.5.1 Facility Watch Supervisor (FWS). Designation indicating the controller is responsible for the operational performance of the watch team at an air traffic control facility ashore.

4.5.2 Carrier Air Traffic Control Center (CATCC) Supervisor. Designation indicating the controller is responsible for the operational performance of the air operations and carrier controlled approach watch team during case III operations.

4.5.3 Amphibious Air Traffic Control Center (AATCC) Supervisor. Designation indicating the controller is responsible for the operational performance of the amphibious air traffic control center watch team.

4.5.4 Tactical Air Control Center (TACC) Supervisor. A designation indicating the controller is responsible for the operational performance of the tactical air control center watch team.

4.5.5 Air Traffic Control Training Supervisor (ATS). A designation indicating the controller (assigned to NATTC) is responsible for the initial FAA certification of air traffic controllers (under instruction) and meets all of the following requirements:

1. Assigned NEC-9502
2. Qualified as an air traffic control basic course phase one instructor
3. Qualified to instruct in any other phase of the air traffic control basic course, or an advanced course of ATC instruction
4. Designated as a Master Training Specialist.

4.6 SUSPENSION AND REVOCATION

4.6.1 Introduction. Supervisors at all levels in ATC facilities have the responsibility to continuously observe and evaluate controllers. Infrequently, it may be necessary to recommend suspension of a rating or revocation of an individual's certification. Procedures are hereby established for standardized, definitive action in such instances. Cases that require disciplinary or other administrative action may be taken concurrently. Each case must be individually evaluated.

4.6.2 Authority for Suspension of CTO Ratings and Revocation of CTO Certificates

4.6.2.1 CTO Examiner. The CTO Examiner may suspend a CTO facility rating after concurrence of the ATCFO.

4.6.2.2 Federal Aviation Administration. The FAA has final authority for the revocation of a CTO Certificate. After ATCS Certificate revocation and when appropriate, only CNO (N785F) for USN and CMC (Aviation) for USMC shall forward recommendations for CTO Certificate revocation to the FAA.

4.6.3 Authority for Suspension of ATCS Ratings and Revocation of ATCS Certificates

4.6.3.1 Commanding Officer. The commanding officer or designated representative may suspend an ATCS rating.

4.6.3.2 CNO/CMC. CNO (N785F) and CMC (Aviation) are the final revocation authorities for ATCS certificates issued under authority of this manual. NATTC is authorized to revoke initial entry level controllers who have not detached from NATTC. A copy of the revocation package shall be forwarded to CNO (N785F).

4.6.4 Procedures for Suspension or Revocation. Procedures contained here-in for suspension or revocation are administrative in nature and are not to be construed as disciplinary action. In every case of certificate revocation, the individual concerned shall be afforded an opportunity to submit a statement to accompany the recommendation for revocation.

4.6.4.1 Suspension of ATCS Rating(s). A rating shall be suspended when controller performance of duties adversely affects the facility efficiency or safety of flight. If the decision is made to suspend the ATCS Rating, the individual shall be promptly notified in writing. The suspension of rating shall be reflected in the certification/qualification record. Facility management shall suspend controllers from participating in ATC duties when notified by competent authority (e.g., ATF, CAAC, military flight surgeon, clinical psychologist) of alcohol dependency. In cases where an individual ATCS rating has been suspended and ATCS certificate revocation is not contemplated, the ATCS rating may be reissued provided the individual requalified on all applicable positions specified in the ATC Facility Manual.

USN. The ATCFO shall cause an entry to be made in the certification/qualification record as follows:

“(type) rating suspended.”

USMC. The ATCFO shall cause an entry to be made in the Certification/Qualification Record Book and in the controllers Service Record Book as per MCO P1070.12 (IRAM) Para 4006I.

(Date). ATC Rating(s) (type(s) is/are (suspended or revoked) this date. I acknowledge this (suspension or

revocation) as an administrative action authorized by the ATC officer and this action is not of a disciplinary nature.

4.6.4.2 Revocation of ATCS Certificate. Cases where certificate revocation should be considered include:

1. Negligence that has caused an accident.
2. Medically diagnosed physical, character, or behavioral disorder or condition which renders an air traffic controller NPQ or not aeronautically adaptable for ATC duties and for which a waiver of standards has not been granted by COMNAVPERSCOM (PERS-404DF).
3. Questionable moral character evidenced by documented recurrent antisocial behavior.
4. Professed or diagnosed anxiety (fear of controlling).
5. Unable to qualify within the time limitations specified in the ATC Facility Manual or unable to meet training schedules.
6. Alcohol or drug abuse in accordance with OPNAVINST 5350.4.
7. Loss of Commanding Officer's trust and confidence in controller's ability to safely perform air traffic control duties.

When the ATCFO determines that a recommendation for revocation of ATCS certificate is appropriate, the individual shall be promptly notified in writing using the format contained in [Appendix T](#). Associated ATCS ratings shall be immediately suspended.

The air traffic controller concerned shall be afforded 3 working days in which to submit a written statement concerning the recommendation or to decline the opportunity in writing.

Recommendations for revocation shall be submitted from the commanding officer via type commander to CNO (N785F) or CMC (APC-5), as appropriate, with a copy to the ISIC.

Complete concise documentation is essential. Consideration should be given to possible future actions by the controller. The following items should be included as appropriate; asterisked items are mandatory in all cases:

- *1. Controller name, rate/rank, SSN, date ATCS was issued.
2. A listing of all previously held ATC ratings/qualifications (including dates and locations) is also mandatory if failure to make satisfactory progress or failure to obtain the rating is the reason.
3. A summary of training pertinent to the case is also mandatory if failure to make satisfactory progress or failure to obtain the rating is the reason. CEB results shall be included.
- *4. Statement of ATCFO, Branch Chief, supervisors, witnesses, etc.
5. Statements of medical officers, NCIS investigations, or other authorities outside of the ATC facility. A permanent grounding notice and a statement from a military flight surgeon is mandatory if professed or diagnosed anxiety (fear of controlling) is the basis for recommendation for revocation.
- *6. Notification of recommendation to revoke ATCS Certificate.
- *7. Controller statement or written indication that no statement was offered.

Upon receipt of CNO decision, Navy individuals are not eligible for advancement in AC rating. If the individual is a "selectee," exam invalidation is directed. Inquiries pertaining to advancement eligibility should be directed to PERS-811 (Active Enlisted Advancements/Conversions/Incentives/Recall Branch).

Upon receipt of CNO/CMC decision, the commanding officer shall notify the individual and make the appropriate entry on page four of the service record. Revocations for E4 and above personnel will require timely initiation of action for forced conversion to another Navy occupation rating. Revocations for non-rated personnel will require removal of the striker designation. Provisions of the Bureau of Personnel Manual, paragraph 2230180 and 2230220 apply.

4.6.5 Reinstatement of ATCS/Reentry into AC Rating (USN). Reinstatement of the ATCS and reentry into the AC rating are two separate actions. N785F has prerogative for reinstatement. PERS-811 (Active Enlisted Advancements/Conversions/Incentives/Recall Branch), has the authority for reentry.

4.6.5.1 ATCS Reinstatement. Personnel who meet the following requirements for reinstatement may apply to N785F or CMC (Aviation), as appropriate, via the chain of command through an aviation type commander. Cases in which reinstatement shall not be considered include negligence that has caused an accident, professed or diagnosed anxiety (fear of controlling), failure to make satisfactory progress to obtain rating, and drug abuse. Correspondence should include at a minimum:

1. Statement(s) from available air traffic control officer(s) or leading chief(s) resulting from recent personal interview. Statement(s) should address apparent motivation and suitability for reinstatement as an air traffic controller.
2. Statement(s) from present division addressing performance, attitude, apparent suitability for the air traffic control vocation, etc.

3. Results of recent aviation medical exam by a military flight surgeon.

4. If revocation was alcohol related:

- a. A minimum of 12 months must elapse from the effective date of lateral conversion until date of request for reinstatement.
- b. Reevaluation from an Addiction Treatment Facility (ATF).
- c. An approved waiver of medical standards granted by COMNAVPERSCOM must be included as an enclosure to the reinstatement package.

4.6.5.2 Reentry into the AC Rating (USN). Personnel who gain reinstatement of the ATCS may apply for reentry into the AC rating. MILPERSMAN provisions for rating conversions apply.

4.6.5.3 Reentry into MOS 72XX (USMC). Personnel who gain reinstatement of ATCS may apply for reentry into MOS 72XX. Appropriate portions of the IRAM and PRIM apply.

CHAPTER 5

Flight Planning

5.1 GENERAL

5.1.1 Function. The Flight Planning Branch provides for flight guard, receiving and processing inbound and outbound flight information, and providing for planning, receiving, and processing flight plans.

5.1.2 Application. Functions and responsibilities set forth in this chapter are applicable to ATCFs that provide flight planning assistance to aircrews.

5.1.3 Billet Description, USN

5.1.3.1 Flight Planning Chief. The flight planning chief shall be fully qualified in the flight planning branch and be designated in writing by the ATCFO. Duties, responsibilities, and authority include the following:

1. Procuring and maintaining required publications, directives, charts, and supplies for pilot and branch personnel reference and use.
2. Managing flight planning facilities and equipment including ensuring completion of watch equipment checklist and recording of outages/returns to service with action taken to correct discrepancies.
3. Reviewing the branch log daily and maintaining operational continuity between various watch teams. Ensuring completion of position relief checklists by branch personnel.
4. Qualifying personnel for appropriate branch positions.
5. Evaluating and recommending to the ATCFO operational readiness of branch equipment.
6. Providing technical assistance to the ATCFO on matters pertaining to flight planning activities.

5.1.3.2 Flight Planning Supervisor (FS). The flight planning supervisor is responsible to the FWS for operational efficiency of the watch team. The flight planning supervisor shall be fully qualified in the branch.

1. Dissemination of NOTAMs.
2. Ensuring that adequate aeronautical charts, publications, and flight planning materials are available to aircrews.
3. Assisting aircrews in planning and proper filing of flight plans.
4. Supervising the processing and transmitting of flight plans and movement messages.
5. Ensuring the FP equipment checklist is completed at the beginning of each shift.

5.1.3.3 Flight Planning Dispatcher (FP).

Duties of the flight planning dispatcher include:

1. Receiving, processing, posting, and transmitting flight plans and movement messages
2. Coordinating with other air traffic control agencies and flight service stations regarding flight plans and movement messages
3. Handling incoming and outgoing communications, aircraft flight guard, and initiating overdue actions.

5.1.4 Billet Description, USMC

5.1.4.1 Flight Planning NCOIC. The flight planning NCOIC should be fully qualified in the flight planning branch and be designated in writing by the Airfield Operations Officer. Duties, responsibilities,

and authority include but are not limited to the following:

1. Procuring and maintaining required publications, directives, charts, and supplies for pilot and branch personnel reference and use.
2. Maintain flight planning facilities and equipment.
3. Review Operations log daily and ensure that watch relief checklists are completed by branch personnel.
4. Supervise the training and qualification of all personnel for appropriate branch positions.
5. Ensuring that qualification and certification records are maintained for assigned personnel.
6. Providing technical assistance to the Airfield Operations Officer on matters pertaining to flight planning activities.
7. Ensure aircraft flight guarding procedures are being adhered to.
8. Supervise the dissemination of NOTAMS.

5.1.4.2 Flight Planning Watch Supervisor.

The flight planning watch supervisor is responsible to the flight planning NCOIC. Duties, responsibilities, and authority include but are not limited to the following:

1. Advise the Flight Planning NCOIC on matters pertaining to publications, directives, charts and supplies for aircrew and branch personnel reference and use.
2. Advise the Flight Planning NCOIC of outages and actions taken to correct discrepancies of airfield equipment.
3. Provide assistance to the Flight Planning NCOIC in qualifying personnel on appropriate branch positions.
4. Evaluate the operational readiness of branch equipment.
5. Dissemination of NOTAMS.
6. Ensuring that watch integrity is maintained.

5.1.4.3 Flight Planning Dispatcher. The flight planning dispatcher is responsible to the flight planning watch supervisor. Duties of the flight planning dispatcher include but are not limited to the following:

1. Ensure that adequate aeronautical charts, publications, and flight planning materials are available to aircrews.
2. Assisting aircrews in planning and proper filing of flight plans.
3. Receive, process, and transmit flight plans and aircraft movement messages.

5.1.4.4 Flight Planning Clerk. The flight planning clerk is responsible to the flight planning watch supervisor. Duties of the flight planning clerk include but are not limited to the following:

1. Coordinating with other air traffic control agencies and flight service stations regarding flight plans and aircraft movement messages.
2. Handling of incoming and outgoing communications, aircraft flight guard, and initiating overdue aircraft actions.

5.2 FLIGHT PLAN HANDLING

5.2.1 Information Forwarded to FSS and ARTCC

5.2.1.1 Filing of a Flight Plan. Flight plan information and flight movement messages shall be in accordance with the procedures outlined in FAA Order 7110.10.

5.2.1.2 Closing of Flight Plan. When the pilot either verbally confirms closing the flight plan with the tower or flight planning personnel or delivers a copy of the flight plan to the base operations flight planning office, flight planning duty personnel shall ensure that the flight plan is closed out.

5.2.2 Modification of Flight Plan Form. Modification of information on a written flight plan form shall be accomplished only with concurrence of the pilot in command.

5.2.3 Retention of Flight Plan Forms by Naval Activities. Filed copies of all flight plan forms, flight schedules, OPS logs, aircraft clearance/arrival reports, and other associated forms filed with flight plans shall be retained on file in the operations department of the departure station for a period of 3 months. The U.S. Navy Flight Forecast Folder (NMOC 3140/25), if received, shall be turned over to the local Navy Meteorology and Oceanography Command activity for review. Flight plans forwarded to naval aviation shore activities by FAA flight service stations shall be retained in the operations department files for a period of 3 months from the date of flight.

5.3 TELECOMMUNICATIONS

5.3.1 Equipment/Circuit Problems. When an equipment outage occurs or is anticipated, ATC shall notify ARTCC, FSS, and the repair facility. Outages in excess of 24 hours shall be reported to the Program Manager, HQ AFFSA/XAOP, 1535 Command Drive, Suite D304, Andrews AFB, MD 20762-7002, DSN 858-4779.

5.4 FLIGHT PLANNING FACILITIES

5.4.1 Current Information

5.4.1.1 Responsibility. It is the responsibility of commanding officers to ensure that their facility information in military flight information publications is current. They shall establish procedures that will ensure submission of appropriate information for accuracy and completeness. Changes affecting a naval air activity instrument approach procedure shall be processed in accordance with this manual. Information for inclusion in flight information publications as well as notification of errors, omissions, or recommended changes shall be submitted to NAVFIG. Such information may be submitted on FLIP correction forms. A FLIP correction form is contained in [Appendix Q](#) and should be locally reproduced for submission to NAVFIG.

5.4.1.2 NOTAMs. NOTAMs shall be issued as required in accordance with provisions of OPNAVINST 3721.20.

5.4.1.3 Change Notices. Military flight information publications are corrected by [PCN](#), [ECN](#), [TCN](#), or

[UCN](#), which are distributed automatically to all addressees receiving the publications concerned. All publications on hand shall be corrected promptly and obsolete information shall be destroyed.

5.4.2 Flight Planning Areas. Flight planning areas shall be located, organized, and equipped in conformance with [subparagraphs 5.4.2.1](#) and [5.4.2.4](#) below. Standardized baseline position equipment configuration and quantity is detailed in OPNAVINST 3722.25. In providing flight planning areas, operations officers shall be governed by the mission of the activity and the scope of air operations.

5.4.2.1 Location. The location should be convenient to the flight planning dispatcher desk and the weather office and should be clearly marked to guide transient aircrews.

5.4.2.2 Monitoring of Spaces. Spaces should be monitored throughout working hours by qualified personnel.

5.4.2.3 Size. Accommodations shall include wall space for the display of required aeronautical information, plotting tables, and storage for charts, publications, and forms required by aircrews.

5.4.2.4 Availability of Information. Sufficient FLIPs, navigation equipment, and related information applicable to the mission of the activity shall be available.

1. FLIPs.
 - a. Planning.
 - b. Area charts.
 - c. En route low altitude.
 - d. En route high altitude.
 - e. En route supplements.
 - f. Terminal low altitude.
 - g. Terminal high altitude.
 - h. [DPs](#) and [STARs](#) (East and West).
2. NOTAMs shall be maintained up-to-date for ready reference and displayed in accordance with OPNAVINST 3721.20.

Note

Flight Planning Branches may use a computer to display NOTAM information in lieu of NOTAM display boards.

3. The following publications are utilized occasionally for reference purposes and shall be available in limited quantities where required:
 - a. Federal Aviation Regulations, Part 91, General Operating and Flight Rules.
 - b. Aeronautical Information Manual (AIM).
 - c. Contractions Manual (FAAO 7340.1).
 - d. Location Identifiers (FAAO 7350.6).
 - e. Notice to Airmen (NOTAM) Publication.
 - f. Foreign Clearance Guide.
 - g. International Flight Information Manual.
 - h. International NOTAMs.
 - i. Air Almanac.
 - j. NIMA Catalog of Maps, Charts and Related Products (Part 1 — Aerospace Products).
 - k. NIMA Bulletin Digest/Bulletin.
 - l. NIMA Chart Updating Manual (CHUM)/CHUM Supplement.
 - m. Aeronautical Information Publication (AIP).

4. The following information shall be prominently displayed as appropriate to the mission of the air activity to assist transient aircrews:

- a. A general flight planning chart.
- b. Local area flight planning charts of suitable scale showing VFR arrival and departure corridors.
- c. A scaled terrain/obstruction map to include overlays depicting current SID courses and their proximity to known hazards.

5.5 PUBLICATION PROCUREMENT PROCEDURES

5.5.1 National Imagery and Mapping Agency Products. The National Imagery and Mapping Agency Catalog of Maps, Charts and Related Products (Part 1 — Aerospace Products; Part 2 — Hydrographic Products; Part 3 — Topographic Products) contains information necessary to obtain required publications. NIMA Branch Offices are located in Norfolk, VA; San Diego, CA; and, Honolulu, HI Tampa, FL; Panama City, FL; Atsugi, Japan; Naples, Italy; and Germer-sheim, Germany, which provide customer assistance.

5.5.2 METOC Products. Requests for meteorological publications, charts, and/or forms should be made to Commander, Naval Meteorology and Oceanography Command, 1002 Balch Blvd., Stennis Space Center, MS 39522-5001.

CHAPTER 6

Control Tower

6.1 GENERAL

6.1.1 Function. The function of the control tower is to issue clearances and information to aircraft and vehicular traffic operating on runways, taxiways, and other designated areas of the airfield and to aircraft operating in assigned airspace areas. Airborne traffic controlled by the tower includes both VFR and IFR traffic released to local control jurisdiction. Manual (nonradar) approach control services may also be provided from the control tower. Functions and responsibilities set forth in this chapter are applicable to air traffic control facilities which provide control tower services. Operating positions in accordance with FAAO 7110.65 may be added, deleted, combined, or integrated as necessary to meet local requirements.

6.1.2 Billet Descriptions

6.1.2.1 Control Tower Chief. The tower chief shall possess a CTO rating for the control tower assigned and be designated in writing by the ATCFO. The function of the tower chief is to assist the ATCFO in managing matters pertaining to control tower functions. Duties, responsibilities, and authority include the following:

1. Maintaining a current library of facility directives and other pertinent regulations pertaining to control tower operations.
2. Managing tower equipment, ensuring completion of watch equipment checklist, and recording of outages/returns to service with action taken to correct discrepancies.
3. Reviewing the branch log daily and maintaining operational continuity between various watch teams. Ensuring completion of position relief checklists by tower controllers.
4. Qualifying personnel on individual operating positions and recommending personnel for

supervisory positions in conformance with this manual and local requirements.

5. Ensuring the currency of controllers.
6. Providing technical assistance to the ATCFO in development of procedures.

6.1.2.2 Tower Supervisor (USN)/Tower Watch Supervisor (USMC). The tower supervisor/tower watch supervisor is responsible to the FWS/FWO for operational efficiency of the watch team. The supervisor position should not normally be combined with control positions. The tower supervisor/tower watch supervisor shall possess a CTO rating for the tower assigned. Duties, responsibilities, and authority include the following:

1. Coordinating and directing control of aircraft operating in assigned airspace areas and vehicular traffic operating on runways, taxiways, and other designated areas of the airfield.
2. Briefing the control tower watch team on weather conditions, traffic, equipment status, field conditions, and special evolutions.
3. Assigning personnel to operating positions according to individual qualifications and training requirements as directed.
4. Assigning trainees to qualified controllers for supervision.
5. Notifying cognizant SAR agencies of aircraft in distress and providing assistance and advice during emergencies.
6. At times when the airfield is technically VFR, but visual separation cannot be maintained, take immediate action to suspend VFR operations and inform appropriate authorities.
7. Ensuring the ATCT equipment checklist is completed at the beginning of each shift.

6.1.3 Operating Positions

6.1.3.1 Local Controller (LC). The LC is responsible for maintaining a continuous visual surveillance of the Class B/C/D/E surface area and other movement areas. Primary duties of the LC include the following:

1. Formulating and issuing clearances and control instructions to accomplish separation between aircraft and between aircraft and vehicles operating under the jurisdiction of the tower.
2. Effecting coordination with appropriate operator positions and other facilities.
3. Providing flight assistance service to aircraft.
4. Operating airport lighting, lighting systems, and visual landing aids.
5. Providing initial notification and dispatch of emergency personnel and equipment for aircraft emergencies and mishaps.

6.1.3.2 Ground Controller (GC). The GC is responsible for exercising surveillance of the airport movement area. Primary duties of the GC include the following:

1. Formulating and issuing ground movement clearances to aircraft and vehicles operating on the airport.
2. Transmitting current weather and field conditions, as required.

6.1.3.3 Flight Data (FD). The duties of the FD position are:

1. Operating communications equipment associated with the FD position.
2. Receiving and relaying aircraft movement data.
3. Preparing and posting flight progress strips.
4. Operating FDIO equipment.
5. Operating ATIS equipment.
6. Monitoring NAVAID alarm systems.

6.1.3.4 Clearance Delivery (CD). The duties of the CD position are:

1. Obtaining, posting, and relaying ATC clearances and advisories.
2. Other duties as assigned by supervisor.

Note

This position may be located in the flight planning or radar branch when local circumstances warrant, as determined by the ATCFO.

6.2 EQUIPMENT

6.2.1 Requirements. Control towers should be provided the following equipment, as needed, to meet operational requirements. Standardized baseline control tower operator position equipment configuration and quantity is detailed in OPNAVINST 3722.35.

1. Control console.
2. Aircraft control communications equipment.
3. Interfacility communications equipment.
4. Intrafacility communications equipment.
5. Emergency communications system.
6. Radio receiver and transmitter controls.

Note

When the command workload and the airfield support assets justify, both a crash/fire net and an industrial net that separate the functions of crash/fire and industrial activities are appropriate. At locations without mission complexities and/or sufficient assets to perform both functions separately, consolidation of these functions is appropriate.

7. Flight progress strip holders.
8. Digital Altimeter Setting Indicator (DASI).
9. Weather dissemination or display device.
10. Wind direction and speed indicator.

11. Automatic Terminal Information Service (ATIS).
12. Digital reading clock.
13. Flight Data Input/Output (FDIO).
14. Remote video camera display.
15. Navigational aide monitor(s) (unless located in the radar room).
16. Airfield lighting and visual landing aids control.
17. Counters for recording aircraft operations.

Note

Items 8 through 17 may be part of the Visual Information Display System (VIDS).

18. Waveoff light controls (**FLOLS** and wheels-up/waveoff lights).
19. **VISCOM**.
20. Air traffic control signal lamp.
21. Binoculars (at least two pair of 7×50 power or stronger shall be available to control tower personnel).
22. Crash phone, crash alarm, and evacuation alarm controls.
23. Crash grid per NAVAIR 00-80R-14.
24. Tower radar display.

6.2.2 Mobile/Portable Control Tower. Mobile/portable control towers are transportable shelters equipped with the personnel and equipment to provide temporary or limited control tower services. Mobile/portable control towers shall be under the operational custody of the ATCFO.

6.2.3 Airfield Diagrams. An airfield diagram shall be displayed in the tower. The diagram should include:

1. Runways with length and width.
2. Taxiways with direction indicated if not bidirectional.

3. Intersection takeoff information.
4. Arresting gear location and type.
5. Location of navigational aids.
6. Visual landing aids.

6.2.4 Status Board. An airport status board shall be displayed in the control tower. The status board should include the following information:

1. Radar equipment status.
2. NAVAID status (unless NAVAID monitors are located in the control tower).
3. Arresting gear status.
4. NOTAMs and non-NOTAM field conditions.
5. Status of communications equipment.
6. Outages.
7. Weather warnings.
8. Other pertinent information.

6.2.5 Air Traffic Activity Analyzer. The air traffic activity analyzer records and maintains data to facilitate preparation of the annual air activity report as well as development of air station noise contours during AICUZ study updates. Operational data needed for noise contour development (NOISEMAP computer program) includes aircraft type, runway use/direction of operations, flightpath identification, and time of day.

6.2.6 Tower Radar Display. The primary purpose of the tower radar display is to increase efficiency and safety of flight within the surface area for which the tower has responsibility. The tower radar display is not intended to be used for approach control functions. Site specific condition and/or limitations of operations shall be specified by facility directive or letter of agreement, as appropriate. Tower radar displays may be used for the following:

1. To determine an aircraft's identification, exact location, or spacial relationship to other aircraft.

Note

This authorization does not alter visual separation procedures. When employing visual separation, the provisions of FAAO 7110.65, paragraph 7-2-1, Visual Separation, apply.

2. To provide aircraft with radar traffic advisories.
3. To provide a direction or suggested heading to VFR aircraft as a method for radar identification or as an advisory aid to navigation.
4. To provide information and instructions to aircraft operating within the surface area for which the tower has responsibility.
5. To ensure separation between successive departures, between arrivals and departures, and between overflights and departures within the surface area for which the tower has responsibility provided:
 - a. There is no airspace delegated to the tower.
 - b. The local controllers have radar training commensurate with their duties.
 - c. A LOA exists with the IFR facility having control jurisdiction which authorizes and prescribes the procedures to be used.
 - d. The LOA prescribes the process for a transition to nonradar procedures or the suspension of separation authority in the event of a radar outage.
 - e. The procedures for giving and receiving radar handoffs or pointouts do not impair the local controller's ability to satisfy responsibilities regarding the aircraft operating on the runways or within the surface area for which the tower has responsibility.
 - f. The procedures for ensuring radar separation do not require the tower to provide radar vectors.

6.2.7 BRANDS Site Unique Data

6.2.7.1 Requirements. Each air traffic control tower is unique in that runway configuration, traffic patterns, aircraft reporting points, terrain characteristics and coordination procedures differ. BRANDS system capabilities require that this site unique data be incorporated into each facility's operational software program.

6.2.7.2 Applicability. This data consists of three types: digital maps, low altitude alert, and identity code lockout.

6.2.7.3 Procedures. Changes shall be submitted to COMNAVAIRSYSCOM, Code 4.5.9.2, Bldg. 8131, Villa Road, St. Inigoes, MD 20684 ATTN: ATC Military Team Lead as outlined in the DAIR/RATCF DAIR/BRANDS Configuration Control Sub-board Policy and Procedures Manual.

6.3 WEATHER OBSERVATIONS BY CONTROL TOWER PERSONNEL

6.3.1 General. Air traffic controller weather observation and reporting procedures contained in Federal Meteorological Handbook Number 1 (NAVAIR 50-1D-1) and FAA Order 7110.65 apply to DON air traffic controllers.

6.3.1.1 Weather Observers. DON air traffic controllers shall not be certified as weather observers except as noted in [paragraph 6.3.2](#).

6.3.2 Certification of Tower Visibility Observers. Qualification and certification of DON air traffic controllers as tower visibility observers will be in accordance with NAVMETOCCOMINST 1500.3.

6.3.3 Tower Visibility Charts. Where air traffic controllers take tower visibility observations, tower visibility charts shall be maintained in the control tower. These charts shall be prepared in conjunction with the NAVMETOC Detachment/Marine Corps Weather Service as follows:

1. Prepare chart(s)/list(s) for daytime and nighttime visibility markers. Visibility markers may be depicted on separate daytime and nighttime charts or combination chart. Panoramic photos with distances/cardinal compass points may also be used.

2. Daytime/nighttime combination charts shall use the following legend:
 - a. Daytime visibility marker.
 - b. Nighttime visibility marker.
 - c. Daytime/nighttime visibility marker.
3. Each marker used shall be identified and its distance from the observation point noted.

6.4 PREVENTION OF WHEELS-UP LANDINGS

Tower controllers shall remind the pilot to check wheels down at an appropriate position in the pattern unless the pilot has previously reported wheels down.

The intent is solely to remind the pilot to lower the wheels, not to place responsibility on the controller. Controllers should be thoroughly indoctrinated in gear down indications of aircraft that normally operate at their airfield and should closely observe aircraft in the final stages of approach and landing.

6.5 UNIDIRECTIONAL ARRESTING GEAR

As a prerequisite to activation of a duty runway, unidirectional arresting gear shall be derigged and cables removed prior to runway use when engagement direction is opposite the runway of intended use. Also applies to overrun gear.

Emergencies requiring immediate landing are an exception; therefore, controllers shall inform the pilot of the emergency aircraft of the arresting gear hazard.

CHAPTER 7

Radar Operations

7.1 GENERAL

7.1.1 Functions. The function of the radar branch is to provide radar ATC services to IFR and VFR air traffic within assigned airspace. The scope of radar services provided will vary according to equipment installed and the delegated airspace. The functions and responsibilities set forth in this chapter are applicable to ATCFs that provide radar ATC services, regardless of equipment installation or configuration. However, operating positions in accordance with FAAO 7110.65 may be added, deleted, combined or integrated as necessary to meet local requirements.

7.1.2 Radar Chief. The radar chief shall possess the appropriate ATCS certification for the facility assigned and be designated in writing by the ATCFO. The function of the radar chief is to assist the ATCFO in managing matters pertaining to radar operations. Duties, responsibilities, and authority include the following:

1. Maintaining a current library of facility directives and other pertinent regulations pertaining to radar operations.
2. Managing radar branch equipment, ensuring completion of watch equipment checklist, and recording of outages/returns to service with action taken to correct discrepancies.
3. Reviewing the branch log daily and maintaining operational continuity between various watch teams. Ensuring completion of position relief checklists by radar controllers.
4. Qualifying personnel on individual operating positions and recommending personnel for supervisory positions in conformance with this manual and local directives.
5. Ensuring the currency of controllers.

6. Evaluating and recommending to the facility officer operational readiness of branch equipment.
7. Supervising FAA/military flight checks.
8. Providing technical assistance to the ATCFO in development of procedures.

7.1.3 Radar Supervisor. The radar supervisor is responsible to the FWS for operational efficiency of the watch team. The radar supervisor position should not normally be combined with a control position. The radar supervisor shall be qualified on all radar operating positions and possess the appropriate ATCS rating(s) for the facility assigned. Duties of the radar supervisor include the following:

1. Coordinating and directing control of air traffic within assigned airspace.
2. Briefing the radar watch team on weather conditions, traffic, equipment status, field conditions, and special evolutions.
3. Assigning personnel to operating positions according to individual qualifications and training requirements as directed.
4. Assigning trainees to qualified controllers for supervision.
5. Notifying cognizant SAR agencies of aircraft in distress and providing assistance and advice during emergencies.
6. Ensuring a radar equipment checklist is completed at the beginning of each shift.

7.1.4 Radar Watch Supervisor, USMC. The incumbent shall be qualified on all radar branch operating positions, possess the appropriate ATCS certification for the type facility assigned, and be designated by the ATCFO. Duties, responsibilities, and authority in coordination with the ATCFO include the following:

1. Coordinating and directing the control of air traffic within assigned airspace.

2. Briefing the radar watch on weather conditions, traffic, equipment status, and field conditions prior to assuming the watch.
3. Assigning personnel to operating positions according to individual qualifications and training requirements as directed.
4. Assigning trainees to qualified controllers for supervision.
5. Ensuring the currency of controllers.
6. Evaluating the operational readiness of branch equipment.
7. Supervising FAA/military flight checks.
8. Providing technical assistance to the ATCFO in the development of procedures.
9. Advising the ATCFO relating to the maintenance of a current library of facility directives and other regulations pertaining to the RATCF.
10. Maintaining radar equipment including the recording of outages and action taken to correct discrepancies.
11. Qualifying personnel on individual operating positions and recommending certification in conformance with this manual and local requirements.
12. Maintaining operational continuity of the watch.

7.1.5 Operating Positions

7.1.5.1 Approach Control (AP). AP is responsible for coordination and control of all instrument traffic within the ATCF area of jurisdiction. Primary duties of the AP position include the following:

1. Issuing ATC clearances and advisory information to aircraft under approach control jurisdiction.
2. Maintaining radar surveillance of assigned areas and providing radar service to aircraft as required.

3. Determining the separation and sequence to be used between aircraft.
4. Initiating/accepting radar handoffs to/from adjacent sectors/facilities.
5. Providing assistance and priority of services to aircraft in emergency situations.

7.1.5.2 Departure Control (DC). DC is responsible for maintaining radar surveillance of the assigned area of jurisdiction and providing radar ATC services as required. Duties of the DC position include the following:

1. Issuing clearances and advisory information to aircraft under departure control jurisdiction.
2. Initiating/accepting radar handoffs to/from adjacent sectors/facilities.

7.1.5.3 Arrival Control (AR). Duties of the AR position include the following:

1. Maintaining radar surveillance of the assigned area of jurisdiction and providing radar ATC services as required.
2. Issuing clearances and control instructions to aircraft operating under arrival control jurisdiction.
3. Accepting radar handoffs from approach control and providing radar ATC services to aircraft as required until the aircraft reaches approach minimums or is handed off to a final controller or adjacent facility.

7.1.5.4 Flight Data (FD). Duties of the FD position include the following:

1. Operating communications equipment associated with the FD position.
2. Receiving and relaying aircraft movement data.
3. Preparing and posting flight progress strips.
4. Operating FDIO equipment.
5. Monitoring NAVAID alarm systems.

7.1.5.5 Final Control (FC). Duties of the FC position include the following:

1. Providing instructions necessary for an aircraft to conduct an ASR/PAR/PALS approach.
2. When required, monitoring approaches as specified in FAA Order 7110.65.

7.2 EQUIPMENT

7.2.1 Requirements. Each radar facility should be provided the following minimum equipment, as needed, to meet operational requirements. Standardized baseline radar operator position equipment configuration and quantity is detailed in OPNAVINST 3722.35.

1. Surveillance and precision radar display.
2. ATC radar beacon interrogator equipment and display.
3. Video mapper.
4. Air Traffic Control communications equipment.
5. Interfacility communications equipment.
6. Intrafacility communications equipment.
7. Emergency communications system.
8. Radio receiver and transmitter controls.
9. Flight progress strip holders.
10. Digital Altimeter Setting Indicator (DASI).
11. Weather dissemination or display device.
12. Wind direction and speed indicator.
13. Automatic Terminal Information Service (ATIS).
14. Digital reading clock.
15. Flight Data Input/Output (FDIO).
16. Navigational aid monitor(s).

Note

Items 10 through 16 may be part of the Visual Information Display System (VIDS).

17. VISCOM.

7.2.2 Video Mapping

7.2.2.1 Requirements. The minimum radar mapping capability required for providing approach control services is one of the following:

1. Computer-generated map lines.
2. Digitally-generated map lines.

Where the radar system does not conform to the minimum radar mapping requirements, radar service shall be limited to:

1. Separating properly identified aircraft targets.
2. Vectoring aircraft to intercept a PAR final course.
3. Providing radar service in areas to ensure that no conflict with traffic on airways, other ATC areas of jurisdiction, restricted or prohibited areas, terrain, airport control zones, etc., exists.

7.2.2.2 Unauthorized Scope Markings. Grease pencil markings, plastic tape, compass rose grid lines, or other innovations shall not be used in lieu of an adequate video mapper or electronic cursor.

7.2.2.3 Video Map Data. To reduce scope clutter and increase operational efficiency, data on video maps shall be limited to, but not necessarily include, all of the following:

1. Airports.
2. Runway centerline extension.
3. Radio navigational and approach aids.
4. Reporting points.
5. Airway/route centerlines.
6. Boundaries (control, special use areas, terminal buffer areas, holding pattern airspace areas, etc.).

7. Handoff points.
8. Special use tracks (scramble, recovery, SIDs, etc.).
9. Obstructions.
10. Permanent echoes.
11. Prominent geographical features (islands, mountains, etc.).
12. Range accuracy marks.
13. Minimum vectoring altitudes in hundreds of feet (e.g., 23 = 2,300 feet; 100 = 10,000 feet).

7.2.2.4 Video Map Requests. Requests for new or revised radar video map plates are submitted to NAVFIG on NAVFIG Form 13910/7. Initial supplies of NAVFIG Form 13910/7 are available upon request from NAVFIG. One form is required for each video map needed.

Completed requests will be reviewed by NAVFIG and forwarded to COMNAVAIRSYSCOM, Code 4.5.9.2, Bldg. 8131, Villa Road, St. Inigoes, MD 20684 ATTN: ATC Military Team Lead, for production and distribution.

Each block of NAVFIG Form 13910/7 must have an entry. If the item does not apply enter N/A. In the point of contact block, indicate the person who is familiar with map requester requirements and can solve any misunderstandings concerning the requirements.

All maps are oriented to True North.

Maps may be made for radius scales of 5, 10, 20, 40, 60, 80, 100, 120, 150, and 200 nm. When a map is needed for a range that falls between two scales, request the larger scale.

A minimum of two permanent echoes must be displayed on each map requested.

A sketch shall accompany each video map request. Subsequent to the initial request, revisions can be indicated on the graphic received with each map plate.

Airfields can be shown two ways depending on the map scale to be used. All runways for each location can be shown on maps up to 40 nm. Maps with scales

beyond 40 nm will be shown as a circle with the bearing of the longest runway displayed by a line extending out both sides of the circle. Extended runway centerlines for secondary airfields may be requested.

7.2.3 Minimum Vectoring Altitude (MVA) Charts

7.2.3.1 Requirement. Radar minimum vectoring charts are developed to assist controllers in adhering to minimum safe IFR altitudes and obstruction clearance criteria set forth in OPNAVINST 3722.16 (TERPS) and FAA Order 7110.65. An MVA chart shall be developed for all radar facilities having a requirement to vector aircraft. Facilities using radar slaved from a host DOD/FAA radar system may use that facility's approved MVA chart.

7.2.3.2 Preparation. Instructions for preparing an MVA chart can be found in [Appendix I](#).

7.2.3.3 Chart Review and Approval. MVA charts for Navy/Marine Corps radar facilities are prepared by the ATC facility and submitted to Naval Flight Information Group, Washington Navy Yard Bldg 176, 901 M Street SE, Washington, DC 20374-5088 for review and final approval. The review will ensure that the design and obstacle clearance requirements are met. Any necessary adjustments in chart design or changes in vectoring altitudes shall be coordinated with the preparing ATC facility. Upon completion of a satisfactory review, the chart will be approved by NAVFIG and returned to the ATC facility. NAVFIG will initiate action for replacement video map(s) with COMNAVAIRSYSCOM, Code 4.5.9.2, Bldg. 8131, Villa Road, St. Inigoes, MD 20684 ATTN: ATC Military Team Lead. Charts shall be updated as required and reviewed biennially by the ATC facility to ensure accuracy.

7.2.3.4 Submission of Minimum Vectoring Altitude Chart Triennial Review Report. MVA charts shall be reviewed as part of the triennial terminal instrument procedures report.

7.2.4 RATCF DAIR/STARS Site Unique Data

7.2.4.1 Requirements. Each air traffic control facility is unique in that approach control and special use airspace, airports served, instrument approach procedures, terrain characteristics, and interfacility coordination procedures differ. RATCF DAIR/STARS

system capabilities require that these site unique data be incorporated into each facility's operational software program.

7.2.4.2 Applicability. The data collected/incorporated determine **MSAW** parameters, auto-exclusion areas, reflection filtering data, initialization values, automatic acquisition limits, radar PRF, and NAS reference codes (i.e., station, ARTCC, and other interfacing facilities).

7.2.4.3 Procedures. Changes shall be submitted in writing to: COMNAVAIRSYSCOM, Code 4.5.9.2, Bldg. 8131, Villa Road, St. Ingoes, MD 20684 ATTN: ATC Military Team Lead; as they occur.

7.2.5 Radar Systems Performance Checks/Tolerances

7.2.5.1 FAA Flight Inspection. Radar performance shall be verified on a periodic basis by an FAA flight inspection crew operating an aircraft equipped for that purpose. Requirements and procedures are set forth in the United States Standard Flight Inspection Manual.

7.2.5.2 Periodicity. In addition to FAA flight inspections, radar systems' performance checks shall be made daily by a qualified controller through observation and use of the systems. These checks should be made on a continuous basis, but shall be accomplished at least once each watch, available traffic permitting. Both primary and secondary radar systems shall be checked. Acceptability of the radar is a controller/ATC supervisor determination that cannot be usurped by non-controller personnel.

7.2.5.3 Video Maps. In addition to using the system test map(s), verification of the accuracy of maps shall be accomplished in the following manner:

1. Digitally-generated maps. Through the use of "targets of opportunity" flying over displayed fixes, navigation aids, etc., verify runway centerline(s) by observing landing and/or departing aircraft.
2. Computer-generated maps. Use the moving target indicator (MTI) reflectors, fixed location beacon transponders (Parrots), beacon real-time quality control (RTQC) symbols or calibration performance monitor equipment (CPME) beacon targets.

Cross-reference may also be made with adjacent radar facilities where mutually observed targets and fixes exist. The accuracy of the radar will be such that an aircraft reported as being over a fix will be within a circular area about the fix, the radius of which is 3 percent of the fix-to-radar antenna distance or 500 feet, or 1,000 feet for ATCRBS, whichever is greater.

7.2.5.4 Coverage. A useable target return (i.e., a strength 3 or 2 target) will be maintained along the entire airway/route or arrival/departure control routes for which radar service is provided. Tracking accuracy along these routes will be within the parameters stated in [paragraph 7.2.5.3](#). Radar service for arrival or departure routes is considered to exist between the normal handoff point and a point one-half mile from the end of a runway (or for secondary airports, the point where an aircraft leaves or enters the bottom ring of the radar coverage pattern).

7.2.5.5 Surveillance Approaches

7.2.5.5.1 Approach to Runway (Straight-In). The surveillance approach course line will coincide as nearly as practicable with the runway centerline extended. Maximum error left or right of runway edges will not exceed 500 feet at the [MAP](#).

7.2.5.5.2 Approach to an Airport (Circling). Where surveillance approach guidance is provided to an airport for a circling approach, surveillance approach guidance shall be discontinued at a point 1 mile from the airport, the missed approach point, or at a preestablished point beyond which radar or communications coverage ceases to exist. The aircraft will be within a circular area around the point where the approach is discontinued, the radius of which is 3 percent of the point to radar antenna distance or 500 feet, whichever is greater. Guidance accuracy at the point the approach is discontinued must be within 3 percent of the distance between the radar antenna and the discontinuation point or 500 feet, whichever is greater.

7.2.5.6 PAR Alignment Photographs. Each facility equipped with PAR shall have radar alignment photographs readily available to the radar final controller to facilitate radar performance checks. Radar alignment photographs shall be provided for each runway to which PAR approaches are established, and shall clearly display centerline and touchdown reflectors or bracket reflectors where applicable.

7.2.5.7 PAR Approach Tolerances. Course deviation will not exceed 30 feet or 0.2°, whichever is greater, at the runway threshold.

The glidepath angle shall be within 0.2° of the published angle.

The range information obtained will be accurate within ±2 percent.

The azimuth and elevation radar will be capable of detecting an aircraft on the runway centerline extended at an altitude of 2,000 feet and distance equal to the maximum scope range.

7.2.6 PAR/ASR Equipment Degrade/Failure

7.2.6.1 PAR. If the elevation portion of PAR equipment fails during a precision approach, discontinue PAR instructions and tell the aircraft to take

over visually or, if unable, to execute a missed approach.

If a surveillance approach, either ASR or PAR without glideslope, is established for the same runway, inform the aircraft that a surveillance can be given. When PAR azimuth is used, inform the pilot that mileage information will be from touchdown.

7.2.6.2 ASR. PAR approaches may be conducted when the ASR is unusable provided a nonradar instrument approach will position the aircraft over a navigation aid or DME fix within the PAR coverage or an adjacent radar facility can provide a direct radar handoff to the PAR controller.

Note

Specific application, phraseology, and procedures are covered in FAAO 7110.65. ■

CHAPTER 8

Training, Standardization, and Air Traffic Controller Performance Evaluations

8.1 GENERAL

8.1.1 Purpose. Each ATCF shall establish a training and standardization program to ensure that individual and watch team training is accomplished. The program shall be based on facility requirements and reviewed annually. [Appendix U](#) provides guidance in meeting minimum training requirements. This chapter provides basic guidelines for the establishment of such programs, and supports the requirements outlined in [Appendix U](#).

8.1.2 Training Chief

8.1.2.1 Qualifications. The training chief (USN)/training and standardization supervisor (USMC) shall possess a CTO rating and All ATCS ratings at the facility assigned. The training chief (USN) shall be a designated FWS. In addition, the individual filling this position should have a minimum of 5 years experience in ATC. The individual filling this position shall be designated in writing by the ATCFO.

8.1.2.2 Responsibilities. The training chief's function is to plan, execute, and supervise the ATC facility training, certification, and standardization programs. Duties, responsibilities, and authority include the following:

1. Establish and maintain an on-the-job training program for air traffic controllers.
2. Conduct classroom training on local area ATC equipment and procedures as required.
3. Develop local course material, visual aids, and training scenarios to supplement other published material such as the FAA refresher series.

4. Coordinate with the ATC LCPO (USN)/ATCNCOIC (USMC) and branch chiefs in the preparation of a monthly training schedule. This schedule will be supplemented with ATC information of an immediate nature such as ATC publication changes, OPNAV instructions, etc. The schedule will indicate which subjects must be recorded and on which form for inclusion in individual training records. The training schedule shall be retained for 1 year.
5. Prepare tests to evaluate the results of scheduled training.
6. Prepare an indoctrination program for newly assigned air traffic controllers. The purpose of this requirement is to acquaint the new arrival with other agencies with which the incumbent will be working. This can be in the form of a checklist and should include a visit to and brief on all other ATC facilities, base operations, and weather stations.
7. Maintain air traffic control certification/qualification records.
8. Ensure the effectiveness and currency of ATCF directives and technical libraries.

8.1.3 On-The-Job-Training Instructor (OJTI)

8.1.3.1 Qualifications. To be designated as an [OJTI](#), a controller shall meet the following minimum criteria:

1. Complete a facility OJTI Course.
2. Operationally current on positions involved.
3. Recommended by FWS (USN)/FWO (USMC).

OJTI designation shall be recorded in the certification/qualification record.

8.1.3.2 Responsibilities. The OJTI shall assist the controller under instruction (trainee) in acquiring the knowledge and skills necessary to qualify. Duties, responsibilities, and authority include the following:

1. Ensure the OJT process includes preferred methods of teaching through a combination of direction, demonstration, and practical application.
2. Be familiar with the trainee's previous training performance.
3. Document OJT results on the Air Traffic Controller Position Evaluation (refer to [Appendix J](#)).
4. Discuss performance as soon as possible after each session, an identification of strengths and weaknesses, and specific recommendations to improve performance.
5. Satisfy training objectives as specified in the facility/watch team training plan.
6. Keep the ATC FWS (USN)/FWO (USMC) informed of the trainee's progress.

8.2 Facility Training Program

8.2.1 Program Elements. The program shall consist of:

1. An ATC facility manual that includes information required for position or facility qualification/designation.
2. LQS for each operating and supervisory position that includes detailed information on equipment and procedures to standardize knowledge and performance factors required for qualification/designation.

The facility training program shall encompass each operating/supervisory position within the facility.

8.2.2 Long-Range Training Plan. The Training Chief/TSS, in conjunction with the LCPO/NCOIC and watch team leaders, will develop a long-range training plan to be used by each watch team leader in creating individual watch team training plans. This plan should

consider: controller experience levels, observed controller performance, facility TTH averages, and anticipated airfield OPTEMPO.

8.2.3 Crosstraining. Controller training in all functions of the ATCF is required to enhance flexibility.

8.2.4 On-the-Job Training. OJT is performance-oriented skill training wherein the trainee applies knowledge previously acquired.

Controllers instructing OJT shall be qualified and experienced at the position in which the training is conducted. They shall be designated an OJT Instructor.

8.2.5 Simulator Training. Those facilities with simulation training capability shall include training device usage in the facility training program. In addition to maintaining currency and proficiency during insufficient traffic situations, simulator training should be used for:

1. Unusual situations, such as weather affecting flight and other types of emergencies.
2. Seldom used procedures, such as transitioning to and applying non-radar separation.
3. Traffic and safety advisories.
4. Areas identified as needing reinforcement.

8.2.6 Position Qualified. Written authentication indicating an individual has successfully qualified for the performance of specific position functions within an ATCF. An air traffic controller is not required to possess a rating to be qualified to operate one or more position(s) in the facility (see [paragraphs 4.2.3 and 4.4.1](#)).

8.2.7 Time Limitations for Position Qualifications. Time limitations for position qualification shall be based on the maximum Total Training Hours (TTH) allotted for that position. TTH are those hours accumulated on position during OJT. Radar Final Controller qualification shall be based on a maximum number of approaches. Maximum hours and approaches are listed in [Figure 8-1](#) and may be reduced by the ATCF considering number and complexity of aircraft operations at a facility.

8.2.7.1 Training Time. Training time for Marine air traffic controllers is governed by MCO P 3500.19.

	MAXIMUM TRAINING TIME	
	INITIAL (Note 1)	SUBSEQUENT (Note 2)
CONTROL TOWER		
Flight Data	240 hours	120 hours
Ground Control	240 hours	120 hours
Clearance Delivery	240 hours	90 hours
Local Control	480 hours	270 hours
Approach Control	480 hours	210 hours
RADAR		
Approach Control (Note 3)	360 hours	270 hours
Departure Control	360 hours	270 hours
Arrival Control	360 hours	270 hours
Final Control (Note 5)	250 approaches	100 approaches
Coordinator	240 hours	120 hours
Flight Data	240 hours	120 hours
FACSFAC		
Flight Data	120 hours	90 hours
Sector Controller	360 hours	180 hours
Assistant Sector Controller	360 hours	180 hours
FLIGHT PLANNING		
Flight Planning Dispatcher	180 hours	90 hours
Notes		
<ol style="list-style-type: none"> 1. Applicable to controllers without previous position qualification (any facility) at the position under consideration. 2. Applicable to controllers with previous position qualification (any facility) at the position under consideration. 3. When more than one approach control position exists within a facility, the initial position qualification is allocated 360 hours. Subsequent allocation is decreased to 270 hours for each additional approach control position. 4. In cases where two positions, such as departure and arrival control are included in a single position, the maximum number of hours allowed is the combined total of the hours specified for each. 5. Radar Final Controller will reflect approaches vice TTH, 50 percent of which may be simulated. 		

Figure 8-1. Maximum Total Training Hours

8.2.7.2 Maximum Hours. The decision to terminate training can be made by the ATC officer during any stage if demonstrated performance documented by OJT evaluations indicates an inability to master the complexities of air traffic control, the trainee is not progressing satisfactorily, or is unable to meet training schedules. When the trainee reaches 70 percent of the maximum allotted position OJT time, the following determinations must be made:

1. If performance is satisfactory, training will be continued.
2. If performance is less than satisfactory and unusual or extenuating circumstances have occurred, the ATCFO may grant continuance of training.
3. If performance is less than satisfactory and 2. above does not apply, the ATCFO shall not grant continuance. Consideration may be given to revocation of the controllers ATCS certificate and subsequent change of rate/MOS. If revocation is initiated, the trainee shall be removed from training status and control duties.

8.3 CONTROLLER CURRENCY AND PROFICIENCY

8.3.1 Programs. The ATCFO shall institute a currency program for the purpose of maintaining controller proficiency. The program should consist of at least the following items:

1. Prescribed monthly time-on-position/simulator requirements
2. Over-the-Shoulder evaluations
3. Written testing.

8.3.1.1 Currency. Minimum prescribed time-on-position requirements that keep controllers at an acceptable level of performance.

8.3.1.2 Proficiency. The sustained level of time-on-position and complexity of operation necessary to make and keep a controller skilled and competent to perform duties effectively and safely.

8.3.2 Final Control Requirements

8.3.2.1 Radar Final Controllers. Final controllers should not conduct final approaches during IFR conditions unless they have controlled at least 10 approaches in the preceding calendar month. When the amount of air traffic limits proficiency, controllers qualified to control IFR traffic may concurrently count trainee approaches they actively monitor.

Additionally, during insufficient traffic situations and where target simulators are installed, controller proficiency can be maintained by use of a target simulator under proper supervision. Maintenance of controller proficiency by simulation shall not replace the equitable distribution of actual currency requirements. The use of simulator approaches shall be counted only by the controller making the approach. Monitored simulated approaches are not considered adequate to maintain currency and proficiency.

8.3.2.2 PALS Final Controllers. PALS final controllers (ashore) shall maintain currency requirements as described in [paragraph 8.3.2.1](#). When controllers ashore are qualified at both the PAR/ASR and PALS operating positions, ATCFOs may allow for the application of approaches at either position to meet the minimum currency requirement. Procedures at air stations equipped with AN/SPN-42T shall conform as closely as possible with PALS recovery procedures in NAVAIR 00-80T-105 CV NATOPS.

PALS final controllers (afloat) shall maintain currency requirements, that account for ship schedule/optempo, as prescribed by the CCA officer. Proficiency training is available at air stations equipped with AN/SPN-42T. CV/CVN Commanding Officers are encouraged to assign PALS final controllers TAD to these sites as necessary to maintain proficiency.

8.3.3 Monitoring Currency. The ATCFO shall institute procedures for monitoring air traffic controller currency.

8.4 CONTROLLER PERFORMANCE EVALUATIONS

8.4.1 Controllers Under Instruction. Adequate documentation of training is necessary to measure controller progress and evaluate training program effectiveness. An Air Traffic Controller Position

Evaluation ([Appendix J](#)) shall be used to document OJT on all operating positions. Controllers under instruction (trainees) will be evaluated on each observed factor/element as follows:

1. Satisfactory — observed performance meets expected performance requirements and indicates that the trainee demonstrates the ability to work independently for this factor/element.
2. Needs improvement — observed performance is acceptable at this stage of training; but must improve in order to meet expected performance.
3. Unsatisfactory — observed performance is unsatisfactory at this stage of training. Suggestions and recommendations for correcting each unsatisfactory factor/element must be stated in the comment portion. OJT Instructors shall include constructive comments to enhance feedback and summarize key points. OJTIs shall sign the evaluation. Trainees shall be given an opportunity to make written comments and shall also sign the evaluation.

8.4.2 Qualified Controllers. Each individual who is position qualified, facility rated or designated as a supervisor shall be evaluated at each position qualified at least annually (use [Appendix J](#)). Supervisors shall be administered written proficiency examinations. In case of unsatisfactory performance, the person being evaluated will be made aware of any deficiencies and will be reevaluated within 30 days. If major safety errors are apparent, the examiner may recommend temporary suspension of individual rating pending further action.

8.4.2.1 Tape Talk Program. ATCFO's shall establish a tape talk program for the purpose of periodically reviewing controller's phraseology, voice quality and inter/intraphone procedures and to assist in training, qualification, and proficiency process. At a minimum, a tape talk should be conducted for a trainee at the 10-percent level of PTH and as needed thereafter. A cassette recorder should be used to avoid excessive

wear on 12/24 hour tapes. All tape talks shall be documented in the certification/qualification record.

8.5 AIR TRAFFIC CONTROL CERTIFICATION/QUALIFICATION RECORDS

8.5.1 Development. ATC schools will provide the basic cover and startup pages of the air traffic control certification/qualification record for use by naval air traffic controllers. Certification/qualification entries will be locally prepared.

The forms in [Appendix L](#) are to be used as transmittals to PSD to ensure standardized entry of qualifications on page 4 of service records. Air traffic control specialist facility ratings applicable to USN/USMC are listed in [Chapter 4](#) of this manual. A copy of the appropriate qualification form shall be made a permanent part of the individual's ATC certification/qualification record.

8.5.2 Issuance. The ATC schools issue the record to each graduate of the air traffic control basic (AC A1) course. Marine students will receive the MACCS Performance Record (NAVMC 2898) with inserts (NAVMC 2899). This training record will contain the student's graduation certificate and school training record. The MPR will be maintained in the ATC facility (for station and FAPPED Marines) and in the squadron S-3 for MACS assigned Marines.

8.5.3 Transfer/Retention of Records. The ATC certification/qualification record shall be forwarded by the commanding officer or the designated representative to the individual's next command. These records shall be retained at the facility level for a period of six months after a controller transfers subsequent to ATCS revocation, separates, transfers to Fleet Reserve, or retires. Copies may be provided to the individual upon request.

8.5.4 USMC. All qualifications achieved on expeditionary ATC equipment shall be entered in the individual's MACCS Performance Record (NAVMC 2898).

CHAPTER 9

Terminal Instrument Procedures

9.1 GENERAL

9.1.1 Purpose. This chapter provides policy and guidance for establishment, approval, publication, review, revision or cancellation, and utilization of terminal instrument approach, departure, and arrival procedures at naval aviation shore facilities.

9.1.2 Criteria. Criteria governing terminal instrument procedures are published in OPNAVINST 3722.16 (TERPS).

9.1.2.1 Reservation and Confirmation of Location Identifiers. Obtaining five-letter location identifiers for local instrument procedures is the responsibility of each ATC Facility. Identifier selection involves coordination with the National Flight Data Center (NFDC) in order to preview their menu of available identifiers and make a preliminary reservation. Instruction and forms necessary to submit/confirm five-letter identifiers are contained in FAA Order 8260.19.

9.1.3 Required Source Material. Commanding officers of naval aviation shore facilities who are contemplating establishment of terminal instrument procedures shall submit to NAVFIG the following source materials prior to or coincident with the submission of the procedure approval request. Thereafter, a complete review for currency and accuracy of the material will be conducted annually as part of NAVAIR 3722-1. Following initial submission of the source material and when new or revised instrument procedures are submitted, a review of the source material will be conducted. Corrections to such information or a statement of accuracy shall be included with the annual report or procedure approval request.

9.1.3.1 Airport Layout. The airport layout is a detailed drawing that includes the ARP, all runways, taxiways, and NAVAID and airport obstacles. The

geodetic position of the runway thresholds and the ARP shall be shown to the nearest one-hundredth of an arc-second. The reference geodetic datum used will be indicated on the diagram. The runway true azimuth will be shown to the nearest one-tenth of a degree. A profile view of all runways to which instrument approaches are conducted will be included to show the MSL heights of the runway centerline at each 100-foot increment from the runway threshold to 3,000 feet down the runway. Such drawings shall be of sufficient coverage to allow precise plotting of the intersection of extended runway centerlines and final approach courses.

9.1.3.2 TERPs Airfield Information Summary (OPNAV 3722/10). Instructions for completing this form are contained in [Appendix M](#).

9.1.3.3 TERPs Obstacle Summary (OPNAV 3722/11). Instructions for completing this form are contained in [Appendix M](#).

9.1.3.4 Plan and Profile Drawings

1. Non-precision and ILS instrument procedures — A plan and profile view shall be submitted with the instrument procedure approval request.
2. The plan view shall depict the holding, initial, intermediate, final, and missed approach segments. The controlling obstacle for each segment should be depicted if known.
3. (USMC only) A plan view of all instrument procedures shall be maintained by the facility. A MVAC, with controlling obstacles, shall be maintained by the facility and updated monthly using the Chart Update Manual (CHUM).
4. The profile view shall depict the final approach descent including the final approach fix with minimum altitude and step down fixes (if required) with minimum altitude(s) and the missed approach point.

9.1.3.5 Facility Data (FAA AC Form 8200-14). This contains a detailed report of each NAVAID (i.e., TACAN, PAR, ASR, NDB) owned by the Navy and used for terminal instrument procedures. Information required on this form is used to prepare computer programs for FAA flight inspection aircraft. Instructions for completing the form are found in FAA Order 8240.36. Forward new and revised facility data form to: Data Evaluation Section, AVN-233, P.O. Box 25082, Oklahoma City, OK 73125.

9.1.3.6 Flight Inspection Report (FAA Form 8240). This report reflects the operating parameters of the air navigation facility. It is the means to certify the operational status of the facility, the quality of signal-in-space, and the instrument flight procedures it supports.

Each ATC Facility shall maintain a copy of the commissioning/recommissioning and most recent periodic flight inspection reports for all radars/navigation aids for which the facility is responsible.

9.1.4 Utilization. Operational use of approach, departure, and alternate airport procedures by naval aviators is governed by OPNAVINST 3710.7, NATOPS General Flight and Operating Instructions.

9.1.5 Coordination. During the formulation of terminal instrument procedures, coordination will be effected with the ATC activities that provide the associated en route and approach control service. Coordinating military and civil authorities shall sign the appropriate NAVAIR/OPNAV forms. In the event that the existing airspace structures in and around the terminal areas are not suitable for optimum procedures, the appropriate NAVREP should be consulted for assistance. Procedure cancellations will be coordinated with ATC activities concerned. When practical, this coordination will be effected well in advance of the planned date of cancellation. If advance coordination is impractical, cancellation shall be effected by NOTAM.

9.1.6 Waivers. When operational requirements dictate a departure from standards established by TERPs or this manual, a request for authority to deviate from such standards shall be submitted to NAVFIG with a complete explanation of alternatives considered and justification for the deviation to be approved by CNO (N785F). Such requests will include any information concerning planned use of procedure by civil aircraft. In

the cover letter, explain what alternatives were considered to preclude the waiver and why they won't work. OPNAV Form 3722/16, Terminal Instrument Procedures Standards Waiver ([Appendix N](#)), shall be used to submit waiver requirements.

9.1.7 Facility Flight Check. Requests for approval of terminal instrument procedures utilizing new, relocated, or modified navigational aids or radar facilities shall indicate that a facility flight check (normally conducted by FAA flight check aircraft) has been conducted and that the navigational aid is suitable for instrument flight operations in accordance with the U.S. Standard Flight Inspection Manual (NAVAIR 16-1-520).

9.1.8 Instrument Procedures Flight Check. Each terminal instrument procedure shall be flight checked by FAA aircraft for safety and operational suitability in accordance with the Standard Flight Inspection Manual. Commanding officers shall include the results of the FAA flight check when instrument procedures are submitted to NAVFIG for processing. When practical, a separate local check should be accomplished by an aircraft of each category for which minimums are included in the approach procedures.

9.1.9 Terminal Instrument Procedures

9.1.9.1 Submission of New/Revised Procedures. To satisfy the primary requirement of having a current terminal instrument procedure chart in possession of the pilot and controller on a timely basis, new or revised procedures that occur between triennial reporting dates shall be submitted to NAVFIG on the appropriate form (OPNAV Form 3722/1 for approach procedures, OPNAV Form 3722/5 for departure procedures) using report symbol OPNAV 3722-1. Submissions should be made as far in advance of their desired effective date as possible, normally not less than 60 days.

9.1.9.2 Effective Date. NAVFIG will assign an effective date based on the appropriate FLIP terminal publication cycle and the ARTCC computer update cycle. NAVFIG shall forward a letter to the affected ARTCC regarding approval and effective date.

9.1.9.3 Cancellation of Procedures. To provide sufficient time to effect removal of a procedure from FLIP, commanding officers will notify NAVFIG as

soon as the relevant information is known and normally, not later than 30 days in advance of the effective date of cancellation. Advance coordination of cancellations will be effected with appropriate ATC authorities. If necessary, commanding officers shall promulgate cancellation of procedures by NOTAM when the next scheduled terminal FLIP revision date will occur subsequently to the effective date of procedure cancellations.

9.2 NOTAM PROCEDURES

When temporary conditions affecting an approach procedure constitute a hazard to flight, the commanding officer shall issue a NOTAM amending or suspending the affected approach procedure(s). Examples of such conditions are the erection of temporary obstacles that violate criteria requirements, publication of an erroneous approach chart, etc. NOTAMs announcing the temporary withdrawal of a navigational aid from service need not cancel the approved procedure(s). NOTAMs shall not be used to promulgate permanent changes to existing procedures or to promulgate new procedures except for the most urgent operational requirements. Commanding officers shall request and obtain interim approval of new or revised procedures by message from NAVFIG before issuing such NOTAMs. Formal submission on appropriate NAVAIR/OPNAV forms will follow the NOTAM action.

Instrument departure procedures may be NOTAMed. Standard Terminal Arrival Routes are not NOTAM material.

9.3 TERMINAL INSTRUMENT APPROACH PROCEDURES

9.3.1 General

9.3.1.1 Establishment. Commanding officers of naval aviation shore facilities supporting flight operations shall establish procedures to provide instrument approach capability for local and transient flight operations. Such procedures will conform to applicable provisions of this chapter and TERPS. The minimum number of approach procedures consistent with mission requirements will be established. Each low-altitude approach procedure shall prescribe minimums for categories A, B, C, and D aircraft. Category E minima may be specified if an operational justification exists.

Each high-altitude approach procedure shall prescribe minimums for categories C, D, and E aircraft. Separate NAVAIR/OPNAV Forms will be used for formulating and coordinating each procedure except that precision radar or surveillance radar procedures to parallel runways having the same patterns may be submitted on one form. Procedures designed for use by helicopters only shall be so annotated and established in accordance with TERPs.

Proposed terminal instrument approach procedures based on newly commissioned or relocated NAVAIDS should be forwarded to NAVFIG for review at least 60 days prior to flight check.

9.3.1.2 Approval. The NAVFIG shall review, approve, and arrange for publication in the DOD FLIP or on local distribution only booklets/sheets all naval terminal instrument approach procedures, including those designated for “Local use only” or “Not for civil use,” as well as PALS and ICLS procedures.

Note

The term “Local use only” is used to identify specific flight procedures at naval aviation shore activities for use by locally-based or prebriefed transient flight crews only.

9.3.2 Frequency/Transponder Changes.

Procedures and missed approaches shall be designed to avoid the necessity for NAVAID frequency/channel change, and transponder (IFF/SIF) code changes at altitudes below 2,500 feet AGL. Procedures designed primarily for high performance, single-piloted aircraft, or aircraft without dual-receiver capability will be designed to eliminate the need for a pilot to shift navigational aid frequencies after commencing an approach.

9.3.3 Controlled Airspace for Standard Instrument Approach Procedures.

The FAA policy regarding controlled airspace associated with terminal instrument procedures is contained in FAA Order 7400.2. To ensure that aircraft descending in high-altitude instrument approaches involving a procedure/penetration turn remain within controlled airspace, the points at which the aircraft can be expected to descend through 1,500 feet and 1,000 feet AGL must be calculated. The following criteria are used for making such determinations.

1. Penetration turn distance — Compute the planned penetration turn distance by reference to TERPs.

2. Penetration turn completion — Plot a point on the inbound course, outward from the navigational aid, using the distance determined by the preceding paragraph. This is the penetration turn completion point (point A).
3. Altitude — Identify the penetration turn completion altitude by referring to the specific procedure being considered.
4. Descent gradient — Apply a maximum descent gradient of 1,000 feet per nautical mile inbound along the final approach course using point A and the penetration turn completion altitude until the points where elevations of 1,500 and 1,000 feet AGL, respectively, are identified along the final approach course (points B and C).
5. Controlled airspace — Using Points B and C, determine the amount of protected airspace required. The width of the protected airspace areas will be the primary area width specified in TERPs for the specific approach procedure being considered. This protected airspace must be in controlled airspace.

9.3.4 Runway Visual Range. Where RVR equipment is installed and approved for a runway equipped with high-intensity runway lights and appropriate runway markings, RVR visibility minimums as prescribed in TERPs shall be established for straight-in approaches to that runway. The air traffic procedures in FAA Order 7110.65, Air Traffic Control, shall apply for operational use of RVR.

9.3.5 Visual Aids. At facilities where standard or equivalent approach light systems are installed, as prescribed in TERPs, the visibility reduction afforded such systems may be applied. For each procedure containing straight-in minimums, commanding officers shall indicate on the procedure form that visibility credit for lighting has been applied or is desired. Because of variations in lighting systems installed at naval air activities, commanding officers should coordinate with Naval Air Systems Command (PMA251) to ascertain whether or not the lighting installed qualifies for the visibility credit. It shall

remain the commanding officer's prerogative to apply the lighting credit to visibility minimums.

9.3.6 Sidestep Procedures. A sidestep maneuver is the visual alignment maneuver required by a pilot executing an approach to one runway but intending to land on the parallel runway. Straight-in minimums may be authorized on a procedure for a sidestep maneuver to a parallel runway under the following conditions:

1. Runway centerlines are separated by 1,200 feet or less.
2. Only one final approach course is published.
3. Course guidance is provided on or within 3° of the primary runway centerline.
4. The procedure is identified in accordance with TERPs.
5. Final approach obstacle clearance areas shall be established for both runways and shall be determined by the approach guidance provided (i.e., TACAN, ASR, etc.). Both final approach areas shall be used to determine the MDA to the sidestep runway.
6. The obstacle clearance height used for the primary runway shall also be used to determine the MDA for the sidestep maneuver.
7. Visibility minimums shall be established in accordance with either Table 6 or 11 of TERPs, whichever is higher. One-half mile visibility reduction is authorized if ALS, MALSR, or SSALR approach lighting is installed for the sidestep runway. The minimum visibility after applying credit for lights must be no less than 1 mile. When the "sidestep" runway threshold is more than 1,000 feet closer to the FAF than the primary, visibility shall be increased one-quarter mile.



If descent gradient is exceeded, the sidestep maneuver shall not be authorized.

9.3.7 Radar Procedures. When establishing PAR and ASR procedures, the following shall be considered.

9.3.7.1 Lost Communication Procedures.

Standard procedures to follow in event of loss of communication are covered in the DOD FLIP, Flight Information Handbook. However, when airport, airspace, or other conditions (e.g., aircrew/controller training) require a lost communications procedure different from the standard, the ATC facility officer may establish a separate procedure. In such cases, and where practical, the procedure should include a provision to execute a nonradar approach to the airport. If such a provision is not practical, certain items essential for safe and orderly traffic management should be stated to include:

1. Route to fly.
2. Fix to which cleared.
3. Altitude to maintain.
4. ATC facility to contact.

9.3.7.2 Precision Approach Radar Without Glideslope. Commanding officers may desire to establish a surveillance-type procedure that uses the azimuth-only portion of the PAR. The PAR without glideslope procedure can be used when the glideslope is unavailable, for more precise surveillance approaches, or for circling to another runway.

When this type of procedure is desired, NAVAIR Form 3722/1 for a standard PAR procedure can be so annotated or a separate NAVAIR Form 3722/1 may be submitted for approval.

9.3.7.3 ASR Missed Approach Point. A missed approach point other than what is depicted on the extended runway centerline video display (i.e., 1/2 NM from runway) may be authorized provided it is depicted on the extended runway centerline video map.

9.3.8 PALS Criteria Ashore. When PALS or TRN-28 approaches are to be established, they shall be prepared and submitted to NAVFIG for approval in accordance with the criteria detailed in [Appendix O](#).

9.3.9 Marine Remote Area Approach Landing System Criteria

9.3.9.1 Minimums. At Marine Corps air stations, local use [MRAALS](#) training approaches may be authorized by the commanding officer. For air station use, minimums will be determined by using ILS/PAR obstacle clearance criteria based upon the selected glideslope and the corresponding obstacle clearance criteria specified in the TERPs manual.

9.3.9.2 NAVFIG. When MRAALS approaches are to be established, they will be prepared and submitted to NAVFIG.

9.3.10 Publication. When desired, NAVFIG also can arrange for publication of approved approaches in a single sheet or leaflet format, as appropriate.

9.4 DEPARTURE PROCEDURES

9.4.1 General

9.4.1.1 Establishment. Commanding officers of naval aviation shore facilities supporting flight operations shall establish terminal procedures to provide instrument departure capability for local and transient flight operations. Such procedures will conform to applicable provisions of this chapter and TERPS. Commanding Officers will establish the minimum number of departure procedures at their stations consistent with mission requirements. DPs are formulated in coordination with the local ATC authority or the host government.

9.4.1.2 Approval. The NAVFIG shall review, approve, and arrange for publication in the DOD FLIP or on local distribution only booklets/sheets all naval terminal instrument departure and arrival procedures, including those designated for “Local use only” or “Not for civil use.”

9.4.2 DPs. DPs are developed for ATC purposes of reducing pilot/controller communications and to publish departure route descriptions that are often lengthy and complex. DPs must also account for obstacle avoidance through routings, climb gradients, weather minimums, or a combination thereof.

9.4.3 Procedure Design

9.4.3.1 General. DP procedures must be simple, easily understood, and, if possible, limited to a one-page depiction.

A DP should be developed to accommodate as many different types of aircraft as possible, as opposed to developing one DP for high performance aircraft and another for lower speeds/altitudes.

DPs may commence from a runway, airport, or a fix serving one or more runways or airports. When the DP is from specific runways, the DP will serve only one airport.

Terminate the DP/DP transition at the first over-flown NAVAID/fix used to define high-altitude jet routes or low-altitude airways. Procedures for turbo jet aircraft will terminate at fixes depicted on en route high-altitude charts.

DP procedures will be depicted in one of two basic forms:

1. Pilot navigation (Pilot Nav) DPs are established where the pilot is primarily responsible for navigation on the DP route.
2. Vector DPs are established where ATC will provide radar navigational guidance to a field/assigned route or to a fix depicted on the DP. Vector DPs may include altitudes, departure clearances/instructions, and any lost communications/instructions that are required for the safety of aircraft operations. Vector DPs will always indicate the fixes/route to which the pilot will be vectored.

When limitations are necessary, annotate the procedure (e.g., “DME required”).

DPs should be compatible with local-flow traffic management concepts.

9.4.3.2 Naming and Numbering of DPs. Pilot Nav DPs will normally be named to correspond with the fix name where the basic DP route segment terminates. When two or more DPs terminate at a common fix, only

one of the DPs will be named for that fix. The other DP will be named after the city name, airport name, or geographical area name, in that order of preference. The DP will be described with the words “PILOT NAV” in parentheses following the name (e.g., “BRAVO ONE DEPARTURE (PILOT NAV)”).

Vector DPs will normally be named to correspond with the terminal control facility name (e.g., Miami One Departure). Other names for use, in order of preference, are “city name,” “airport name,” or “geographical area name.” The DP will be described with the word “VECTOR” in parentheses following the name (e.g., “ALPHA ONE DEPARTURE (VECTOR)”).

Do not use duplicate DP names and avoid the use of similar-sounding DP names in one geographical area.

When a single DP procedure serves two or more airports, the DP name, text, and procedure shall be identical. Since it is the same DP, it is not considered a duplication of the DP name and would be published under the respective airport name.

Do not use names that imply directions (e.g., north, east, etc.).

DP transition names will always correspond to the fix where the transition route ends.

When DPs or individual transitions are developed for limited application, identify such procedures by suffixing the words “(VECTOR),” “(PILOT NAV),” or “TRANSITION” with the following appropriate contractions: “(HI),” “(LO),” “(COPTER),” or “(PROP)” (e.g., “Eagle Seven Departure (PILOT NAV) (HI)”). When a DP suffix indicating limited application applies to the DP and to all transitions, that suffix will not be repeated in the transition name.

Number each original DP “ONE” (e.g., “Daves ONE Departure”). Number subsequent revisions in numerical sequence through “NINE” and then start over at “ONE.” Renumber DPs only when procedural changes that affect flight safety (e.g., revisions to routings, altitudes, clearances, NAVAID data, climb gradients, etc.) are made. Do not renumber the DP if individual transitions are canceled or if noncritical data are revised.

9.4.3.3 NAVAID/Fix Description. Develop DPs on the basis of VORTAC NAVAIDs wherever possible to provide service to both VOR- and TACAN-equipped aircraft.

Referenced NAVAIDs, radials, and DME distance-defining intersections will be clearly indicated on all Pilot Nav charts and vector DP charts which depict lost communication routings. Do not define intersections on vector DPs without lost communication procedures. DME-fix mileage will be based on NAVAIDs defining the DP course and NOT the NAVAID defining the crossing radial that makes up the fix.

All low DP/DP transition terminating fixes will be those depicted on the appropriate low-altitude chart. All high DP/DP transition termination fixes will be those depicted on the appropriate high-altitude charts.

9.4.3.4 DP/DP Transition Route Information. When DP/DP transition routing is clearly depicted, there is no requirement for textual description of the routing on the graphic. Textual descriptions should complement, not duplicate, the graphic. Transitions may be common to more than one DP.

9.4.3.5 Obstacle Clearance. Criteria in TERPs shall be applied as appropriate.

Where obstructions penetrate applicable surfaces, an appropriate climb gradient to avoid the obstacle shall be established or route relocations shall be applied to avoid the obstacle.

Where climb gradients are established, an appropriate ceiling and visibility minimum shall be established for those aircraft unable to meet the climb gradient requirements. An altitude above which the ceiling/visibility minimums no longer apply will also be established.

9.4.3.6 Communications. Procedure will be designed to avoid necessity for navigational aid, transponder (IFF/SIF) code, and communications changes at altitudes below 2,500 feet above ground level (AGL).

Lost-communication procedures that are different from FAR 91.127 must be clearly explained. Lost communication routings depicted on vector DPs shall ensure obstacle/terrain clearance, adequate NAVAID reception, or serve as a procedural necessity for traffic separation. A pilot must be able to proceed safely from any point along the vector to a depicted routing.

Do not include separate lost-communication route descriptions for Pilot Nav DPs.

9.4.4 Procedure Documentation. OPNAV Form 3722/5 will be used to submit terminal instrument departure procedures for FAA coordination and NAVFIG review, approval, and publication.

The graphic depiction of the departure procedure will include actual flightpaths from runway(s) to the clearance limit and subsequent transitions, as appropriate; all NAVAIDs used in the procedure; all altitude restrictions (obstacle as well as ATC); and SUA, if restricting the procedure in any way.

Subsequent revisions can be submitted by attaching a marked-up copy of the published procedure. Indicate deleted/revised data by using an orange pen/pencil and new/revised data by using a red pen/pencil.

9.5 PERIODIC REVIEW OF INSTRUMENT PROCEDURES

9.5.1 Triennial Review. The NAVFIG at least every three years shall review and approve all instrument procedures to ensure that requirements for obstacle clearance, navigational guidance, safety, and practicality are met.

CHAPTER 10

Fleet Area Control and Surveillance Facility

10.1 BACKGROUND

Safe and efficient use of airspace, surface, and subsurface fleet **OPAREAs** is necessary for both military and civilian activities. The Navy conducted a study in 1959, outlining an airspace management concept applicable to the San Diego offshore **OPAREAs**. This concept was implemented in 1964, thus the inception of the **FACSFAC**. **FACSFACs** are established as the operational need justifies.

10.2 MISSION

FACSFAC is an organization equipped and staffed to manage/schedule **SUA**, **OPAREAs**, and Oceanic Airspace in support of air, surface, and subsurface operations. Additionally, **FACSFACs** are designated by **CNO** as **RACs**. **FACSFACs** manage special use airspace through:

1. Scheduling, coordination and monitoring of surface, subsurface, and airborne units operating within and transiting between offshore **OPAREAs** and the **NAS**.
2. Scheduling and coordination of airborne units operating within assigned airspace of inland operating areas.
3. Scheduling of **MTRs**.
4. Maintaining liaison with other controlling agencies, fleet commands, other military commands, the **FAA**, the **Coast Guard**, and selected state and federal agencies.
5. Providing special use airspace control services to participating military units, other government aircraft, government contract aircraft and, on a not-to-interfere basis to civil aircraft as delineated

in letters of agreement with applicable **FAA** and military activities.

6. Scheduling and coordination of associated commercial and military aircraft services support.

10.3 ORGANIZATION

Each **FACSFAC** is structured to meet the operational needs of a specific area in direct support of fleet requirements. Basic functions of **FACSFAC** include the **OCC**, schedules, airspace, and maintenance.

For the purpose of equipment and manpower, each **FACSFAC** is placed under the operational and administrative control of an aviation type commander. Technical support is received from the program manager for Air Traffic Control and Landing Systems (**NAVAIR PMA-213**).

10.4 FUNCTIONS

10.4.1 Operations Control Center. **OCC** is comprised of two branches, **ROCC** staffed by **ACs** and **SOCC** staffed by **OSs**, to effectively manage and provide real-time scheduling and deconfliction of **OPAREAs**. Additional services for site specific missions may include:

1. Area containment services within assigned airspace and radar coverage.
2. Search and rescue, medical, and humanitarian evacuations.
3. When certified as a Class VI ATC Facility, provide en route ATC services, including positive control of **IFR** aircraft arriving and departing special use airspace.
4. Surveillance, identification, and clearance relay for **NORAD**.

5. OPAREA Link coordination and JOTS/JMCIS services.
6. Command and control support as directed by higher authority.
7. Terminal area control services.
8. Flight planning services to airborne units departing offshore OPAREAs.

10.4.2 Airspace. The airspace office acts as the focal point and central clearinghouse for all airspace matters pertaining to DON activity within a specific FACSFAC's region of responsibility. Additionally, the airspace office provides direct liaison to non-DON activities and the appropriate NAVREP to the FAA. Duties may include but are not limited to:

1. Acting on behalf of the RAC. Specific guidance and area of responsibility is delineated in OPNAVINST 3770.2 (series).
2. Managing and updating the command RAP.
3. Coordinating all matters related to the establishment, use, and reporting requirements of SUA.
4. Monitoring regional airspace encroachment concerns and acting as liaison between agencies involved in airspace issues.
5. Conducting airspace procedures briefings for units whose flight operations will enter, or otherwise impact the NAS.
6. Maintenance of the command airspace LOA/MOU library.
7. Coordinating with FAA and other agencies in matters pertaining to oceanic air traffic control and airspace use including ALTRV and appropriate NOTAM.

10.4.3 Schedules. The schedules office is tasked with the collection, evaluation and dissemination of scheduled services pertaining to fleet operations in cognizant OPAREAs. Duties may include but are not limited to:

1. Coordinating with all scheduling activities to maximize OPAREA utilization in accordance

with priorities set forth by higher authority, keeping safety paramount.

2. Publishing required messages (synopsis) to all users which reflect daily scheduled events.
3. Requesting the FAA issue NOTAMs, and the Coast Guard issue NOTEMARs for hazardous operations within the FACSFAC scheduling authority area and for operations as requested by other scheduling activities.
4. Coordinating with other DOD agencies and FAA when fleet requirements necessitate scheduling areas beyond the FACSFAC scheduling area.
5. Assisting in the planning of OPAREA and FACSFAC service requirements for exercises.
6. Act as coordinating agent for air services.
7. Acting as coordinating agent for civil agencies in matters requiring the use of OPAREAs.
8. Ensuring the timely submission of required reports.
9. Acting as coordinating agent with oil companies in matters pertaining to offshore drilling in the OPAREAs.

10.5 BILLET DESCRIPTIONS

10.5.1 Airspace Officer. The airspace officer should be a graduate of an approved military airspace management course. In addition to those duties delineated in paragraph 10.4.2, the airspace officer may be designated as the CALO in accordance with OPNAVINST 3770.2 (series).

10.5.2 ATCF Officer. In addition to the guidelines set forth in Chapter 3, duties, responsibilities, and authority of the ATCF Officer may include:

1. Maintaining liaison with and providing briefings to the FAA, OPAREA users and other interested commands.
2. Reviewing air and surface training areas established within the OPAREAs, making recommendations for changes to improve utilization and/or safety as appropriate.

3. Assisting in the planning of OPAREA and FACSFAC service requirements for exercises.
4. Reviewing and evaluating command participation in SAR/MEDEVAC/HUMEVAC related incidents and making recommendations for improvement.

10.5.3 Airspace Chief. The airspace chief shall possess the appropriate ATCS certification for the FACSFAC assigned and be a graduate of an approved military airspace management course. The function of the airspace chief is to assist in the management of airspace matters as set forth in [paragraph 10.4.2](#) and OPNAVINST 3770.2 (series). Duties and responsibilities may include but are not limited to:

1. Acting as single point of contact with FAA and other ATC agencies, for the coordination of battle group/flight operations that enter, or otherwise impact, the NAS.
2. Providing ATC ship rider liaison service for carrier battle/amphibious readiness groups when required.
3. Developing, reviewing, and updating stereo routes for accuracy and, when necessary, making recommendations to users for changes to improve utilization and safety.
4. Providing procedure briefings to OPAREA users and other interested commands.
5. Assisting in the planning and coordination of OPAREA and FACSFAC service requirements for fleet/joint exercises.
6. Coordinating air traffic control procedures between FACSFAC controlled airspace and the National Airspace System, including LOAs and MOUs.
7. Acting as the point of contact with the FAA for aircraft carrier post-deployment flyoffs.
8. Functioning as “Trusted Agent.”

9. Maintaining liaison with radar chief concerning air traffic control related matters including:
 - a. Special exercises
 - b. Real-time procedures
 - c. Operational requirements.

10.5.4 ROCC (Radar) Chief. In addition to the guidelines set forth in [Chapter 7](#), duties, responsibilities and authority of the radar chief may include:

1. Recommending to the ATCFO changes to the [FACTS](#) to improve operability and functionality.
2. Investigating, reporting, and collecting all applicable data related to incidents and accidents.
3. Maintaining liaison with the FAA, local Navy and Marine Corps Air Stations, and other agencies concerned with air traffic control matters, including:
 - a. Special exercises
 - b. Real-time coordination procedures
 - c. Operational requirements.
4. Providing air traffic control briefings to aircrews as required.
5. Providing air traffic control briefings to watch teams as required.
6. Assisting in the planning of OPAREA and FACSFAC service requirements for exercises.
7. Assisting in the development, review, and updating of stereo routes.

10.5.5 SOCC (Surface) Chief. The surface chief shall be qualified in accordance with NAVEDTRA 43411-3 PQS for the FACSFAC assigned. The function of the surface chief is to assist in the management of matters relating to surface operations. Duties may include:

1. Responsibility for surface surveillance in offshore OPAREAs.
2. Maintaining a current operational [NTDS/ACDS](#) program.

3. Maintaining an operational Link-11 per OPNAV, fleet, and command directives.
4. Coordinating between surface units and scheduling activities for the use of OPAREAs.
5. Maintaining control and safety of assigned fleet OPAREAs by utilizing all sensors and equipment available for area surveillance.
6. Acting as a clearinghouse for fleet link training and troubleshooting by providing C4I services.
7. Ensuring watch team members are qualified in accordance with applicable PQS.

10.5.6 Facility Watch Supervisor. The FWS is responsible to the Commanding Officer for the operational performance of the watch crew on duty. The FWS shall remain apprised of operational and equipment/systems problems. In addition to the guidelines set forth in [Chapter 3](#), duties and responsibilities may include:

1. Maintaining close coordination with SOCC to effect safe and timely operations in support of fleet requirements.
2. Effecting real-time OPAREA schedule changes based on existing requirements/requests.
3. Coordinating real-time flight operations that enter, or otherwise impact the NAS.
4. Acting on behalf of aircraft carriers as single point of contact with FAA and other ATC agencies for the real-time use/transit of controlled airspace.
5. Coordinating requirements for special handling aircraft or emergency aircraft including SAR and MEDEVAC operations.
6. Ensuring controllers are briefed on special events, equipment/radio problems, precoordinated discrete assignments, hot areas, etc.
7. Reviewing message traffic and taking appropriate action as required.

10.6 OPERATING POSITIONS

10.6.1 ROCC (Radar) Supervisor (RS). The RS is directly responsible to the FWS for the operational control of ROCC. The RS will monitor and assist controllers with required coordination and ensure all controllers are performing at an acceptable level. In addition to the guidelines set forth in [Chapter 7](#), duties and responsibilities may include:

1. Providing real-time coordination with adjacent facilities on any matter that affects the flow of air traffic or any special event.
2. Coordinating with the Surface Supervisor.
3. Relaying information regarding ECM incidents.
4. Resolving any operating area conflicts.
5. Overseeing any special handling aircraft or emergency aircraft requirements including SAR and MEDEVAC operations.
6. Ensuring equipment is operating properly and report any malfunctions to the FWS and duty technician.
7. Ensuring a current and complete ATIS broadcast is transmitted.
8. Maintaining accurate hot event status.

10.6.2 SOCC (Surface) Supervisor (SS). The SS is directly responsible for the operational performance of SOCC. The SS will monitor and assist personnel with required coordination and ensure that all SOCC watchstanders are performing at an adequate level. The SS shall be qualified in accordance with NAVEDTRA 43411-3 PQS for the FACS FAC assigned. Duties and responsibilities may include:

1. Keeping the FWS/RS informed of Surface Operations.
2. Equipment condition/performance.
3. Ensuring equipment is operating properly and report any malfunctions to the duty technician.
4. Maintaining SOCC logs.
5. Ensuring those units involved in “hot” events remain within assigned areas.

6. Supervising training of watch team personnel.
7. Ensuring physical security of spaces and proper handling and storage of classified material.
8. Ensuring incoming message traffic is properly screened and filed.
9. Ensuring changes to OPAREA events are correct and in the proper format.
10. Coordinating with outside agencies/commands.

10.6.3 ROCC Sector Controller (SC). The function of the **SC** is to provide radar services to all aircraft within FACSFAF's area of jurisdiction. Duties and responsibilities include:

1. Providing positive control to aircraft requiring/requesting IFR handling.
2. Providing radar advisory control to VFR aircraft on a work-load permitting basis.
3. Coordinating controlled airspace infringement and hot area containment or boundary alerts.
4. Providing mission coordination assistance.
5. Disseminating weather information.
6. Providing SAR/MEDEVAC/HUMEVAC assistance.
7. Ensuring accuracy of information recorded on flight progress strips.
8. Coordinating with adjacent facilities.

10.6.4 ROCC Assistant Sector Controller (ASC). The function of the **ASC** is to effect coordination with other sectors and adjacent ATC Facilities, receive and relay aircraft movement messages and prepare and post flight progress data. The ASC is responsible for assisting the SC. Duties and responsibilities include:

1. Coordinating aircraft movement with adjacent ATC facilities/sectors.
2. Monitoring sector frequencies, and assisting the sector controller as required.

3. Posting information on flight progress strips.
4. Operating communications equipment associated with the position.

10.6.5 ROCC Flight Data Position (FD). The FD position monitors and operates equipment to provide controllers with information to maximize safe and efficient ATC services. Duties and responsibilities include:

1. Receiving and relaying aircraft movement data.
2. Preparing and posting flight progress strips.
3. Operating FDIO and ATIS equipment.
4. Monitoring and operating ship-to-shore communications.

10.7 FACILITY CERTIFICATION

10.7.1 Prerequisites. Prior to being certified as a Class VI ATCF, FACSFAFs are **MRUs**. In order to attain ATCF certification, the following requirements shall be met:

1. Possess flight check data depicting areas of radio/radar coverage.
2. Possess radar/radio communication redundancy in the areas routinely used for NAS - interface.
3. Validate operator training programs by assuring compliance with FAA, OPNAV, and FACSFAF personnel qualifications standards.
4. Implement controller certification standards in compliance with FAA publications and this manual.
5. Possess auxiliary power to support the FACTS in the event of loss of commercial power.
6. Obtain FACTS interface certification from the FAA.

10.7.2 Validation Visit. To assist FACSFAFs in analyzing command readiness to assume positive control related responsibilities, CNO (N785F) will provide personnel to perform a validation/certification

visit. The technical assistance team will be composed of representatives from the following activities:

1. Chief of Naval Operations (N785F) (chairperson).
2. Commander, Naval Air Systems Command.
3. Cognizant Type Commander.
4. NAVREP from the FAA region responsible for review of FACSFAC letters of agreement.
5. Air Traffic Control or Air Operations Officer from a FACSFAC other than the one being validated.
6. Additional representatives as determined by the team chairperson.

Upon receipt of approval from CNO, FACSFACs are authorized to enter into letters of agreement with the FAA to support civilian flight operations when such support will not interfere with military utilization of the airspace. CNO validation will be granted after an evaluation has been made as to command compliance with the certification prerequisites.

10.8 FLIGHT INFORMATION PUBLICATION VALIDATION

Each FACSFAC shall conduct an annual validation/verification of associated SUA and MTR information published in the DOD FLIP. This validation shall also include a review of FACSFAC entries in the IFR en route supplement.

10.9 EQUIPMENT SITING, ALLOWANCE, LOGISTICS, AND MAINTENANCE

Planning guidance for FACSFAC equipment deployment is contained in appropriate publications produced by the Naval Facilities Engineering Command. Each FACSFAC site is tailored to meet the operational requirements of the specific area and may be configured differently. Policies and procedures concerning FACSFAC equipment allowances, logistics, supply support, fiscal responsibilities, and maintenance are in set forth in NAVAIRINST 5400.137. Standardized baseline FACSFAC operator position equipment configuration and quantity is detailed in OPNAVINST 3722.35.

CHAPTER 11

Carrier Air Traffic Control Center

11.1 GENERAL

11.1.1 Function. The function of the Carrier Air Traffic Control Center is to provide radar ATC services to air traffic within the area of jurisdiction assigned by the appropriate authority. The scope of the services provided will vary according to the delegated airspace assigned, weather, and the type operations being conducted. The functions and responsibilities set forth in this chapter are applicable to all CATCC's regardless of equipment installations or configuration and are intended to be used in conjunction with the CV NATOPS Manual (NAVAIR 00-80T-105) and to the CATC Handbook (NAVAIR AE-CVATC-OPM-000).

11.1.2 CATCC Organization. CATCC is organized into air operations and carrier controlled approach.

11.1.2.1 AirOps. AirOps has overall responsibility and makes real-time decisions necessary for safe and efficient aircraft launch and recovery. These decisions are coordinated with the air wing commander and other aircraft carrier personnel.

11.1.2.2 CCA. CCA is responsible for operational control of aircraft departing the ship and recovery of inbound aircraft after a mission is complete. CCA is roughly equivalent to the approach control branch of an ashore ATC facility as outlined in [Chapter 7](#).

11.2 BILLET DESCRIPTIONS

11.2.1 Air Operations Officer (AO)

1. Review air plan for fuel and logistic requirements.
2. Supervise/coordinate the execution of the air plan.
3. During flight operations, remain informed of the status of all aircraft operating under CATCC control and ensure that all pertinent information is provided to other carrier work centers and

personnel including commanding officer, bridge, PriFly, strike operations, CDC, handler, LSO, etc.

4. Ensure that all pertinent flight information is provided to inbound and outbound flights between the carrier and shore facilities.
5. Conduct airwing and squadron briefings as required to evaluate flight operations.
6. Ensure that records and reports of flight ops are prepared, maintained and disseminated to carrier personnel and submitted to other commands and agencies as required.

11.2.2 Assistant Air Operations Officer (AAO)

The senior assistant [AirOps](#) officer assists the AirOps officer in coordinating and administering the functions of CATCC, as well as performing the duties of AirOps officer during the incumbent's absence.

11.2.3 Air Operations Watch Officer (AOWO)

The AirOps watch officer is a flight quarters watch station whose duties are normally performed by the AirOps officer and/or assistants. During CASE III operations, air operations shall be manned by two PQS qualified AirOps watch officers. Duties, responsibilities and authority include the following:

1. Ensure that CATCC is manned prior to scheduled flight operations and that the checklist and pre-launch information specified in CV NATOPS is accomplished.
2. Ensure that accurate BINGO/divert fuel and foul-deck endurance data is recorded for each aircraft model.
3. Assist CDC and PriFly on all SAR operations as necessary.
4. Manage fuel assets, monitor tanking station assignments and tanking procedures.
5. Provide all relevant personnel with all pertinent information about flight operations, including any changes to the Air Plan.

11.2.4 Air Operations Supervisor. The AirOps supervisor assists the AirOps watch officers(s) by supervising enlisted personnel assigned to AirOps during flight quarters and general quarters. Duties and responsibilities include:

1. Ensure assigned personnel are properly trained and qualified for the following task:
 - a. Air Ops plotter.
 - b. Status board keeper.
 - c. Land/launch recorder.
2. Ensure CATCC systems/equipment are being operated per EMCON restrictions.
3. Ensure that appropriate maintenance facilities are notified of failed or malfunctioning systems/equipment and the information is logged, as required.
4. Ensure prelaunch information is accurate and complete.
5. Ensure that Alert condition information is posted and updated, as necessary.
6. Ensure all communications regarding inbound/outbound flights to shore facilities are transmitted/received and inform relevant personnel.
7. Ensure the master air plan is maintained and that changes and revisions are disseminated to all relevant work centers and personnel, including CDC, PriFly, strike operations, squadron ready rooms, CCA, CVIC, flight deck control, bridge, battle group rep and air wing operations.
8. At the completion of flight operations, ensure alert aircraft information is updated and all reports are completed, disseminated and filed, including the master air plan, land/launch record and daily air operations summary report.

11.2.5 Carrier Controlled Approach Watch Officer. The CCA Watch Officer is responsible for the overall direction of CCA. Duties, responsibilities and authority include:

1. Determining the operational capability of ATC equipment.

2. Ensure that all relevant information about launch and recovery operations is disseminated to CCA including type of departure/recovery (CASE), instrument approach procedure, BRC, break/ramp time, DRR, airspace constraints, ship's in company scheduled flight operations, etc.
3. Monitor aircraft and tanker fuel states, tanker refueling system status and coordinate refueling operations with AirOps and departure control.
4. Conduct air wing and squadron debriefings as required. Establish a program to ensure effective dialog between the CATCC and air wing/transient squadrons.
5. During flight operations, ensure that all aircraft conform to departure and recovery procedures and that adequate separation is provided between departing and recovering aircraft during CASE II and III operations.
6. Promulgate a CATCC Manual ensuring that it is reviewed and updated on an annual basis and forwarded to the appropriate type commander.
7. Ensure that organized cross training on all equipment and positions is conducted to the maximum extent practical.

CCA Officers shall not be normally assigned duties outside their billet description. When unavoidable, they shall be limited to essential duties as determined by the commanding officer.

11.2.6 CATCC Supervisor. The CATCC supervisor is responsible to the CCA Watch Officer for the overall supervision and operational efficiency of CCA. The CATCC supervisor position shall not be combined with a control position. The CATCC supervisor shall be PQS qualified on all positions in CATCC and possess the CATCC ATCS rating. Duties, responsibilities and authority include the following:

1. Assist the CCA watch officer in the performance of duties and responsibilities.
2. Prepare CCA watch station assignments.
3. Ensure that systems and equipment are evaluated, casualties and malfunctions are reported and coordinate as necessary with maintenance personnel for appropriate action.

4. Ensure compliance with EMCON/[HERO](#) conditions.
5. Coordinate aircraft/pilot problems, low fuel states, emergencies, etc., with CCA watch officer.
6. Review all relevant information about scheduled flight operations including the master air plan, tanking plan, [COMMPLAN](#), card-of-the-day, etc.

11.3 OPERATING POSITIONS

11.3.1 Approach Controller (AP). The Approach Controller assesses aircraft closure rate and relative movement, and calculates and predicts the effects that vectors and speed changes will have on aircraft separation. Primary duties of the Approach Controller include the following:

1. Identify all airspace constraints that may/will affect recovery operations.
2. Coordinate with CATCC supervisor for type of recovery (CASE), expected BRC, expected marshal radial for fixed-wing aircraft and helicopters, expected final bearing, expected type of approach, bolter holes. break/ramp time, first push time, DRR, etc.
3. Ensure CCA recovery board is accurate and complete
4. Conduct communications check with plane guard helicopter every 20 minutes during CASE III operations (may be performed by Departure Control).
5. Continue to monitor aircraft after handoff to final control to ensure adequate separation is maintained.

11.3.2 Marshal Controller (MC). The marshal controller determines the appropriate method of marshaling aircraft when adverse weather and airspace constraints exist in the carrier control area; revising the planned recovery order to accommodate aircraft with priority, emergencies, malfunctions, low states,

stragglers, etc. Primary duties of the marshal controller include the following:

1. Calculating first push time and EATs; revising EATs when changes occur in the break/ramp time; creating bolter holes based upon the requirements of individual recoveries.
2. Review master airplan.
3. Identify all airspace constraints that will/may effect recovery operations.
4. Ensure CCA marshal board is accurate and complete.
5. Monitor fuel states.
6. Monitor aircraft in the bolter/wave-off pattern to determine when a Delta may be necessary and implement procedures when instructed.
7. Provide inbound flights with arrival information and assistance, if required. Obtain pilots' names for fly-on aircraft and load report from arriving [COD/VOD](#) aircraft.

11.3.3 Departure Controller (DC). The departure controller is responsible for aircraft departures, monitoring the location and package status of tanker aircraft and the location of low-state aircraft and their fuel requirements. Primary duties of the departure controller include the following:

1. Review the master air plan and the tanking plan.
2. Identify all airspace constraints that may/will affect launch operations.
3. Prior to commencement of flight ops, provide aircraft any changes in flight composition, mission assignment, type of departure (CASE), DRR, BRC, [PIM](#), launch time, etc.
4. Ensure CCA departure board is accurate and complete.
5. Monitor performance of launching aircraft until pilots report KILO or aircraft are handed-off to another controlling agency.

11.3.4 Final Controller (FC). Final control is responsible for controlling aircraft during the final approach segment. Primary duties of the final controller include the following:

1. Provide each aircraft with precision or non-precision approach.
2. Coordinate hand-offs with CATCC Supervisor, approach controller and other final controller.
3. Evaluate system, equipment, and communication status.

11.3.5 Status Board Keepers. The Status Board Keepers provide essential information to CCA and AirOps for following the progress of launch and recovery operations. The status boards provide display of essential information (e.g., aircraft fuel states, emergencies, radio buttons, tanker fuel state, give, bingo/tank fuel states, holding status/location or approach/departure status. Inaccurate or incomplete information can seriously compromise the capability of CATCC to follow the progress of operations and, in the extreme, safety of flight. The status board keeper positions assigned to CATCC are as follows:

1. AirOps status board keeper.
2. Departure status board keeper.
3. Marshal status board keeper.
4. Approach status board keeper.

Note

In ISIS-equipped CATCC's, ISIS Input Operators fulfill the responsibilities of Status Board Keepers.

11.3.6 Sound-Powered Phone Talker/Visual Display Board Operator (VDB). The sound-powered phone talker/VDB operator is a CCA watch station responsible for providing information to other carrier work centers for the coordination of Case II recoveries. This information is used by PriFly for setting the arresting gear and FLOLS and by the LSO to ensure optimum control and assistance in aircraft landings. The sound-powered phone talker/VDB operator should be manned, online and maintaining an

accurate lineup of airborne aircraft during CASE II recoveries. This will help ensure a smooth transition to the CASE III environment, if necessary.

11.3.7 Land/Launch Recorder. The land/launch recorder is an AirOps watch station responsible for maintaining the land/launch record during flight operations. The Record is an account of aircraft launches and landings that includes event numbers, aircraft side numbers, pilot's names, launch times, missions and remarks. Information in the record is also used to derive boarding rate for the air wing and each squadron. At the completion of each launch and recovery, the recorder will compare information with PriFly to ensure the accuracy of the count.

11.3.8 Plotter. The AirOps plotter is an AirOps watch station responsible for maintaining the AirOps plot of the ship's position, completing the prelaunch brief and for handling communications. Primary duties of the AirOps plotter include the following:

1. Receive the ship's position from the bridge every hour between periods of flight operations and every 30 minutes during flight operations. Plot ship's position and correlate the position with the DAIR and SINS position.
2. Determine range and bearing to divert/bingo fields and nearest land, and update the status boards in AirOps and CCA.
3. Depict ship's position in relation to airways, hot areas, etc., on appropriate charts.

11.4 CATC SYSTEMS MAINTENANCE

11.4.1 Carrier Air Traffic Control Technicians

11.4.1.1 Responsibility. Maintenance responsibility for equipment used to accomplish the carrier air traffic control mission of a command is vested in the combat system's department. Maintenance personnel, in addition to corrective maintenance, shall perform preventive maintenance and daily checks in compliance with existing policies in addition to requirements established by local directives.

11.4.1.2 Responsibilities. Technicians assigned CATC maintenance responsibilities shall:

1. Be physically assigned to the CATCC during all CASE II/III operations (minimum of one

qualified SPN-46 or DAIR technician). All other technical specialties shall be readily available.

2. Keep CATCC supervisory personnel apprised of equipment status.
3. Be available to CATCC supervisory personnel after normal working hours to confirm controller judgment regarding equipment malfunctions.

11.4.1.3 Applicable NEC. Electronics technicians actively involved in performing maintenance actions in support of CATC systems must possess the applicable NEC for that equipment.

11.4.1.4 Certification. Local certification of electronics technicians shall be in compliance with PQS augmented as required by local directives.

11.5 CATCC MANUAL

Each CCA Officer shall promulgate a CATCC manual as per the CATC handbook (NAVAIR AE-CVATC-OPM-000) [Appendix L](#).

11.6 CATCC NATOPS EVALUATION

The quality assurance evaluation procedures established for CATCC's shall be accomplished as established by type commander instructions and directives. Quality assurance evaluation personnel shall be under the cognizance of the air traffic control specialist assigned to type commander staffs, and shall use the CATC handbook (NAVAIR AE-CVATC-OPM-000) [Appendix J](#).

Note

Additional provisions of this manual that apply to CATCC are stated in the Preface.

CHAPTER 12

Amphibious Air Traffic Control

12.1 GENERAL

12.1.1 Function. The function of Amphibious Air Traffic Control (AATC) is to provide radar ATC services to air traffic within the area of jurisdiction assigned by the appropriate authority. The scope of the services provided will vary according to the delegated airspace assigned, weather and the type of operations being conducted. The functions and responsibilities set forth in this chapter are applicable to all platforms regardless of equipment installations or configuration and are intended to be used in conjunction with the [LHA/LHD NATOPS Manual \(NAVAIR 00-80T-106\)](#), [AATC Manual \(AE-LHATC-OPM-000\)](#), and air control documents.

12.1.2 AATC Organization. AATC is organized into Amphibious Air Traffic Control Center (AATCC) and Tactical Air Control Center (TACC).

12.1.2.1 AATCC. The centralized air control agency responsible for maintaining status and tactical control of all aircraft not assigned to [CIC/TACC](#). Also responsible for approach and departure control.

12.1.2.2 TACC. The primary air control agency within the Amphibious Area of Responsibility (AOR) from which all air operations supporting the amphibious force are controlled. This control jurisdiction refers to all airborne operations not incidental to the actual launch or recovery of aircraft: instrument departure, approach, and marshal.

12.1.3 Assigned Airspace. AATCC and TACC assigned airspace will be in accordance with Task Force Commander guidance as delineated by the Airspace Control Authority (ACA) in the OPTASK Air/Air Control Plan/Air Control Order or Air Tasking Order.

12.1.4 AATCC Manual. Each Asst AirOps Officer shall promulgate an AATCC Manual.

12.1.5 AATC NATOPS Evaluation. The Air Traffic Control NATOPS Evaluation procedures established for AATC shall be accomplished as established by type commander instructions and directives. Air Traffic Control NATOPS Evaluation personnel shall be under the cognizance of the air traffic control specialist assigned by type commander staff's in accordance with applicable sections of [Appendix B](#).

12.2 BILLET DESCRIPTIONS

12.2.1 Air Operations Officer (AirOps). The AirOps Officer is responsible to the Operations Officer for coordination of all matters pertaining to flight operations and for proper functioning of AATCC. Duties and responsibilities include:

1. Review/develop the Air Plan to ensure deck cycle and deck requirements are executable.
2. Responsible, in conjunction with the TACC Plans and Support Section (PSS) for coordinating air operations in support of the Amphibious Ready Group.
3. Developing, in conjunction with the PSS, the ATF daily [ATO](#) from a consolidation of input from the ACE, SAR Det, AirOps, OIC, Air Boss, and ATF aviation platforms. In the event of conflicting priorities, the PSS will seek resolution from the Det OIC. The PSS will disseminate the ATO within the appropriate timeline. Ensure Ship Airplan matches ATO.
4. Ensure that all operational information (excluding intelligence information) required to carry out aircraft missions is provided to pilots prior to and during flight operations.
5. Ensure that records and reports of flight ops are prepared, maintained, and disseminated to ship-board personnel and submitted to other commands and agencies, as required.
6. Receive, respond to, and prepare all correspondence related to flight operation reports.

12.2.2 OC Division Officer. The OC Division Officer shall not normally be assigned duties outside their billet description. The OC Division Officer coordinates and administers the functioning of AATCC. Duties and responsibilities include:

1. Ensure that the Air Plan is distributed to all relevant ship, ATF, and ACE personnel.
2. Manage the assignment, administration and training of AATCC enlisted personnel.
3. Ensure all systems and equipment are maintained in proper operating order.
4. Provide supervision for the preparation, maintenance, dissemination, and submission or reports and records of flight operations.
5. Assist in the preparation of all correspondence related to AATCC operations.
6. Ensure the procurement and maintenance of charts, publications, and equipment required for flight operations.
7. Perform the duties of AirOps Officer during the incumbent's absence.
8. Coordinate airspace and communications requirements as appropriate.
9. Attend pre-sail planning conferences for operations involving aviation.

12.2.3 AATCC Watch Officer. The AATCC Watch Officer is a flight quarters watch station whose duties are normally performed by the OC Division Officer. Duties and responsibilities include:

1. Ensure that AATCC is manned 1-1/2 hours prior to scheduled flight operations and that the checklist specified in LHA/LHD NATOPS is accomplished.
2. Ensure pre-launch brief information is timely and efficiently distributed.
3. Conduct ACE and squadron briefings as required.
4. Supervise/coordinate the execution of the Air Plan.

5. Remain informed of the status of all aircraft operating under AATCC control, and ensure that all pertinent information about flight operations, including any changes to the Air Plan are provided to other work centers and personnel including Commanding Officer, Bridge, PriFly, TACRON, CIC, Operations Officer, FDC, ATF representative, ACE operations, SAR detachment and the squadron ready room, etc.
6. Ensure that all pertinent flight information is provided to inbound and outbound flights between the ship and shore facilities.
7. Ensure accurate divert/bingo fuel endurance information is recorded for each aircraft model.
8. Notify all relevant work stations/personnel when an aircraft is diverted/bingoed.
9. Ensure that all AATCC systems and equipment are operating adequately and are operated per applicable directives.
10. Assist TACRON, CIC and PriFly on all SAR operations, as necessary.

12.2.4 AATCC Supervisor. The AATCC Supervisor is responsible to the AATCC Watch Officer for the overall operation of AATCC. Duties and responsibilities include:

1. Assist the AATCC Watch Officer in the performance of duties and responsibilities.
2. Ensure that AATCC is properly manned, and assign AATCC personnel to operating positions according to individual qualifications and training requirements. Ensure operational continuity of the AATCC watch team.
3. Recommend the qualification of personnel on individual operating positions.
4. Ensure the completion of all pre-deployment and flight logistic checklists.
5. Ensure that systems and equipment are evaluated, casualties and malfunctions are reported, and coordinate as necessary with maintenance personnel for appropriate action.
6. Identify all airspace constraints that may/will affect launch and recovery operations.

7. Review all relevant information about scheduled flight operations, including the Master Air Plan, COMMLAN, EMCON conditions, etc.
 8. Coordinate with other work centers, as required, to obtain the case departure/recovery, Fox Corpen, Charlie time, ASW datum, etc.
 9. Ensure AATCC status boards are accurate and complete.
 10. Ensure video mapping is accurate and complete, especially airspace constraints and bingo fields.
 11. Ensure compliance with EMCON/HERO conditions.
 12. Brief the AATCC team on traffic, weather conditions, and equipment status.
 13. During flight operations, provide supervision and coordination of AATCC personnel.
 14. Ensure flight plans are filed as required.
 15. Coordinate between the AATCC Watch Officer and the controllers as necessary for the orderly flow of aircraft during amphibious and other non-tactical flight operations.
 16. Monitor all aircraft fuel states.
 17. Coordinate aircraft problems, emergencies, low fuel states, etc., with the AATCC Watch Officer.
 18. After the completion of flight operations, debrief AATCC personnel.
4. Review approach area for potential conflicts. Identify all airspace constraints that may/will affect recovery operations.
 5. Coordinate with AATCC Supervisor for case recovery, expected BRC, Expected marshal radial for fixed-wing aircraft and helicopters, expected type of approach, Charlie time, first push time, etc.
 6. During Case II/III recoveries, provide positive control for all traffic.
 7. Broadcast changes of the BRC and other pertinent recovery information.
 8. Ensure AATCC Recovery (Approach) Board is accurate and complete.
 9. Initiate and/or accept radar handoffs from other control positions/agencies.
 10. After handoff from Marshal Control until handoff to PriFly or Final Control, maintain radar surveillance of assigned areas and provide positive control instructions when required.
 11. Continue to monitor aircraft after handoff to Final Control to ensure adequate separation is maintained.

12.2.5 Approach Control (AP). Approach Control is responsible for controlling inbound aircraft from marshal/TACC until handoff to Final Control, or PriFly. Approach Control establishes the interval for aircraft on final approach. Duties and responsibilities include:

1. Maintain separation and ensure safety of flight.
2. Review the Master Air Plan.
3. Evaluate system/equipment/communication status.

12.2.6 Marshal Control (MC). Marshal Control is responsible for establishing the initial separation and sequencing of aircraft during Case II/III recoveries. Duties and responsibilities include:

1. Maintain separation and ensure safety of flight.
2. Review the Master Air Plan.
3. Evaluate system/equipment/communication status.
4. Review marshal area for potential conflicts. Identify all airspace constraints that may/will affect recovery operations.
5. Coordinate with AATCC Supervisor for case recovery, expected BRC, expected marshal radial for fixed-wing aircraft and helicopters, expected final bearing, expected type of approach, Charlie time, first push time, etc.
6. Ensure AATCC Recovery (Marshal) Board is accurate and complete.

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7. Initiate and/or accept radar handoffs from other control positions/agencies.
 8. Provide inbound flights with arrival information and assistance, if required. Obtain pilot's names for fly-on aircraft and load reports from arriving PMC aircraft.
 9. Issue marshal instructions and clearances as required.
 10. Monitor aircraft adherence to marshal instructions and provide control instructions, when required.
 11. Provide control instructions to aircraft that have commenced approach, when required.
 12. Issue vectors and/or speed changes to maintain separation.
 13. Monitor fuel states.
 14. Monitor aircraft on approach and in the wave-off pattern to determine when a Delta may be appropriate.
 15. Implement Delta procedures when instructed.
6. Ensure AATCC Departure Board is accurate and complete.
 7. Prior to commencement of flight ops, provide aircraft any changes in flight compositions, mission assignment, type of departure (Case), BRC, PIM, launch time, etc.
 8. Relay mission information to aircraft before releasing to another controlling agency.
 9. Initiate an accept radar handoffs from other control positions/agencies.
 10. Provide positive/advisory control information as required by weather conditions.
 11. Provide advisory control of point-to-point flights and Passenger/Mail/Cargo (PMC) aircraft.
 12. Provide instructions, assistance and flight following to diverted/bingoed aircraft.
 13. Maintain count of aircraft launched and remaining to be launched.
 14. Provide relevant launch and recovery information to the plane guard helicopter, when on departure frequency.
 15. Conduct communication check with SAR plane-guard helicopter every 20 minutes during Case III operations (may be performed by Approach Control or Air Boss).

12.2.7 Departure Control (DC). Departure Control is responsible for the orderly flow of departing aircraft and to maintain a constant radar surveillance of the operating area of the ship. Duties and responsibilities include:

1. Maintain separation and ensure safety of flight.
2. Review the Master Air Plan.
3. Evaluate system/equipment/communication status.
4. Review departure area for potential conflicts. Identify all airspace constraints that may/will affect launch operations.
5. Coordinate with the AATCC Supervisor for type of departure (Case), BRC.

12.2.8 Final Control (FC). Final Control is responsible for controlling aircraft on final approach until the pilot reports SEE YOU or MEATBALL, or reaches approach minimums. Duties and responsibilities include:

1. Maintain established separating and ensure safety of flight.
2. Evaluate system/equipment/communication status.
3. Coordinate handoffs with Approach Control.
4. Provide instructions necessary for an aircraft to conduct a precision on non-precision approach.

12.2.9 Assault Control (AC). Assault Control is responsible for the control of aircraft conducting the airborne ship-to-shore movement of air support, troops and supplies during an amphibious operation. Duties and responsibilities include:

1. Ensure safety of flight.
2. Review the Master Air Plan.
3. Evaluate system/equipment/communication status.
4. Review area for potential conflicts. Identify all airspace constraints that may/will affect recovery operations.
5. Operate under the tactical control of the Helicopter Coordination Section (HCS).
6. Control the movement of all aircraft operating in their assigned sector.
7. Maintain and report to the supervisor the status and location of assigned aircraft.
8. Relay wave in/out landing zone times.
9. Relay mission information.
10. Track and adjust control point times.
11. Initiate and accept radar handoffs from other control positions/agencies.

12.2.10 Status Board Keepers. Status board keepers maintain the AATCC status boards during all flight operations, providing essential information for following the progress of launch and recovery operations (e.g., aircraft fuel states, emergencies, radio buttons, mission (MSN) status; holding status/location or approach/departure status). The following is a list of duties and responsibilities:

1. Review the Master Air Plan.
2. Evaluate equipment and communication status.
3. Monitor the appropriate frequencies and display pertinent flight data on status boards.

4. Display/update required information on status boards.
5. Display/update required information on Automatic Status Boards (ASTAB).
6. Coordinate with control positions as required maintaining an accurate and complete account of launch and recovery operations.

12.2.11 Plotter. The Plotter is responsible for maintaining the ship's plot and completing the Pre-launch brief. The following is a list of duties and responsibilities:

1. Receive the ship's position from the Navigator every hour between periods of flight operations and every 30 minutes during flight operations. Plot ship's position and correlate the position with Direct Altitude and Identity Readout (DAIR).
2. Determine the range and bearing to divert/bingo fields and nearest land, and update the status boards in AATCC.
3. Depict ship's position in relation to airways, hot areas, etc., on appropriate charts.
4. Record weather at ship and bingo fields on status boards in AATCC.
5. Obtain airspace constraints from AATCC Supervisor, hot sheet, Flight Information Publication (FLIP, Notice to Airmen (NOTAMS), and messages).
6. Prepare and disseminate Pre-launch Brief information including ship's position, expected BRC, emergency marshal data, and divert field bearings/distances.

12.3 TACTICAL AIR CONTROL CENTER (TACC)

12.3.1 Function. The function of the Tactical Air Control Center is to provide centralized planning, control, coordination and integration of air operations in support of amphibious multi-service, joint operations within the Amphibious Area of Responsibility (AOR).

12.3.2 TACC Organization. TACC functionally operates in two sections, Current Operations (CO) and Future Operations (FO). Future Operations conducts the planning functions of the Air Traffic Control Section (ATCS), Helicopter Coordination Section (HCS), Air Warfare Section (AWS), Air Support Control Section (ASCS), and Plans and Support Section (PSS). Current Operation executes the plan developed by FO. The TACC Watch Officer is responsible for current operations.

12.3.2.1 Air Traffic Control Section. ATCS develops battlefield air structure and control in support of Task Force Commander objectives and scheme of maneuver. It also exercises control and coordination of all air traffic entering, operating within, or traversing the Amphibious Area of responsibility and the coordination of Search and Rescue.

12.3.2.2 Helicopter Coordination Section. HCS exercises coordination of air operations controlled by TACC, AATCC, and other subordinate control agencies.

12.3.2.3 Air Support Control Section. ASCS exercises operational control and coordination of all rotary and fixed-wing aircraft assigned to ground support missions.

12.3.2.4 Plans and Support Section. PSS provides all communications support, conducts current and future planning, and assembles and distributes current air operations data and reports.

12.4 BILLET DESCRIPTIONS

12.4.1 Tactical Air Controller (TAC) Officer-In-Charge (OIC). The TAC/OIC is normally a 0-5 aviator. The OIC performs as both the CATF's Air Officer and Tactical Air Controller (TAC). As the CATF's Air Officer, he is the direct representative and principal advisor to the CATF in all matters pertaining to air operations.

12.4.2 TACC Watch Office (TWO). The TWO functions as the Current Operations Officer and is responsible for the execution of the daily ATO. The TWO is responsible for the conduct of the watch section and the status of all displays in the TACC. The TWO will keep the TAC, Staff Watch Officer (Flag Bridge/Plot), Landing Force Operations Center (LFOC), SACC, AATCC, and the ship's CIC informed of all matters affecting air operations.

12.4.3 TACC Supervisor (TACC SUP). The TACC SUP is designated by the TACRON Commanding Officer. The TACC SUP interfaces with every section in TACC during amphibious operations and assists the TWO through direct supervision of all operating positions within the TACC. The duties of the TACC SUP include, but are not limited to:

1. Ensure proper and qualified manning and relief of all prescribed TACC watch stations.
2. Ensure that the TAC and TWO are fully briefed on the material condition of the TACC and any factors affecting the performance of the watch section.
3. Ensure that the TACC watch team is aware of all pertinent information regarding the control and coordination of aircraft. Brief the TACC on traffic, airspace restrictions, weather conditions and equipment status.
4. Review the ACO/ATO/SPINS.

12.4.4 Tactical Air Traffic Controller (TATC). The TATC is responsible for all air traffic entering, exiting, and operating within the Amphibious Area of Responsibility. Duties of the TATC include, but are not limited to:

1. Check-in all aircraft entering the surveillance area, ensuring they are handed off to the proper control agency.
2. Assign entry/holding/exit points for all aircraft.
3. Alert the TACC Sup to any event, which may affect the air mission.
4. Provide tactical situation updates to aircrew operating in the area.

12.4.5 Tactical Air Director (TAD). The TAD is responsible for the control of all aircraft assigned by the TATC. Duties of the TAD include, but are not limited to:

1. Provides Joint Tactical Air Request (JTAR's) to CAS assets.
2. Receive and relay In Flight Reports (INFLTREP) to appropriate agencies.

12.4.6 Status Board Keepers. The Status Board Keepers provide essential information. The duties of the Status Board Keeper include but are not limited to:

1. Review the ACO/ATO/SPINS.
2. Monitor the appropriate frequencies and display pertinent information on the Status Boards.
3. Continually update pertinent ship, weather, and divert information to maintain its usefulness.
4. Coordinate with other positions and agencies as required to maintain an accurate and complete account of all pertinent information.

12.4.7 Tactical Air Request/Helicopter Request (TAR/HR) Net Operator. The TAR/HR net is the communications link between the Supporting Arms Coordination Center (SACC) and Forward Air Controllers FACs). The duties of the TAR/HR include, but are not limited to:

1. Establishing, maintaining and controlling communications with the Tactical Air Control Party (TACP) and FSCC.

12.5 AATC SYSTEMS MAINTENANCE

12.5.1 Responsibility. Maintenance responsibility for equipment used to accomplish the amphibious air traffic control mission of a command is vested in the Combat Systems/C51 Department. Maintenance personnel shall perform preventive maintenance, corrective maintenance, and daily checks in compliance with existing policies and requirements established by local directives.

12.5.2 Responsibilities. Technicians assigned AATCC maintenance responsibilities shall:

1. Be physically assigned to the AATCC during all CASE II/III operations (minimum of one qualified SPN-35 or Direct Altitude and Identity Readout (DAIR) technician). All other technical specialties shall be readily available.
2. Keep AATCC supervisory personnel apprised of equipment status.
3. Be available to AATC supervisory personnel after normal working hours to confirm controller judgment regarding equipment malfunctions.

12.5.3 Applicable NEC. Electronics technicians actively involved in performing maintenance actions in support of AATC systems must possess the applicable NEC for that equipment.

12.5.4 Certification. Local certification of electronics technicians shall be in compliance with PQS augmented as required by local directives.

Note

Additional provisions of this manual that apply to AATCC are stated in the Preface.

APPENDIX A

Memorandum of Agreement Between Department of Transportation Federal Aviation Administration, and the U.S. Army, the U.S. Navy, and the U.S. Air Force

WHEREAS, by virtue of Section 307(b)(4) of the Federal Aviation Act of 1958 (49 U.S.C. 1348(b)(4)), the Administrator of the Federal Aviation Administration (hereinafter referred to as the FAA) is authorized to provide necessary facilities and personnel for the regulation and protection of air traffic.

WHEREAS, by virtue of Section 303(d) of the Federal Aviation Act of 1958 (49 U.S.C. 1344(d)), the Administrator of the FAA may make such provision as deemed appropriate authorizing, with its consent, the performance of any function under Section 307(b) of the Act by any other Federal department; and

WHEREAS, there are three separate agreements now in effect between the FAA and the Army, Navy, and Air Force, respectively, relating to the operation of air traffic control facilities on military installations; and

WHEREAS, all parties to the three existing agreements wish to supersede such agreements with this separate agreement between the FAA and the three military services;

NOW, THEREFORE, all parties to this agreement mutually agree as follows:

ARTICLE I. Determination of Operational Responsibility.

A. In keeping with requirements of national defense and with due regard for budgetary, manpower, and all other pertinent considerations, the general allocation of responsibility for the operation of each military facility subject to this agreement shall be mutually determined at the national level between the FAA and the appropriate military service. To facilitate the determination of operational responsibility, recommendations concerning the operation of air traffic control

facilities will be made at the local level by appropriate FAA and military personnel.

B. Unless agreement is reached to the contrary, the military services shall provide airport traffic control service (visual flight rules) at those military airports where the cognizant military authority deems that such service is required and said airports are not served by an FAA, state, municipal, or other non-Federal tower.

C. When it is mutually agreed to be more advantageous to establish independent military and FAA approach control facilities, the approach control authority for the military terminal area ordinarily will be delegated to the military. Prior to approval by FAA of this delegation of authority, the military facility must be equipped to transmit and receive on all frequencies necessary to control all categories of IFR traffic normally operating in the area. Additionally, a letter of agreement relating to the control of air traffic shall be consummated between the appropriate local military authority and the appropriate FAA air route traffic control center.

D. The FAA is authorized to assign an ATREP to each military approach control facility covered in Article I, Section C. The function of the ATREP is set out in detail in Article IV.

E. At all military locations not served by an ATREP, authorized FAA personnel may make evaluations of military approach control facilities and those military towers and military ASR/PAR units that exchange control of air traffic directly with FAA facilities. These evaluations are to be conducted at such times as are mutually agreeable to the FAA and the cognizant local military authority. The purpose of such evaluations is to determine whether equipment performance and staffing are adequate for the service being provided; whether personnel qualifications,

certification, and performance meet acceptable standards; and, whether procedures utilized are consistent with the agreements provided for in Article I.C and Article V. All deficiencies which may affect flight safety shall be reported to cognizant military authority for timely corrective action.

F. Delegation of approach control authority may be temporarily suspended by a representative of the FAA area manager or the ATREP if such action is deemed necessary in the interest of flight safety. The commanding officer (or designated representative) of the affected military installation shall be notified prior to the time suspension action is taken and informed of the reason(s) therefore.

G. Withdrawal of any delegation of authority covered by this agreement shall not be authorized prior to approval of FAA and the appropriate military service at the national level.

ARTICLE II. FAA Operations on Military Installations.

A. Where mutually agreed, the FAA will provide exclusive air traffic control services and staffing on military installations. Unless agreed to the contrary, where a military facility is located near an FAA approach control facility, the FAA will perform the approach control function from the FAA facility for both the military and nonmilitary facilities.

B. At jointly staffed air traffic control facilities located on military installations, unless agreed to the contrary, the FAA will staff the approach control (surveillance radar) function and the military service will staff and be responsible for the PAR function.

C. The FAA shall have full authority and responsibility for the operation of its authorized functions.

D. The basic radar system approved for use in the radar approach control function is of the ASR type. Proposals for use of radar systems other than the ASR shall be submitted to the Washington office of the FAA for review. This clause shall not affect those terminal facilities currently utilizing other radar systems, nor is it intended to limit the use of **ARSR** or other slower RPM systems to supplement ASR equipment.

ARTICLE III. Crosstraining at Jointly Staffed ATC Facilities.

In the best interest of the FAA and military services, it is essential that organized crosstraining be accomplished; accordingly, crosstraining programs shall be implemented and training shall be conducted to the maximum extent possible.

A. At the request of the responsible local military authority, the FAA will provide on-site approach control training to designated military personnel. Qualification and training shall be carried out in accordance with FAA regulations and procedures. Military personnel who successfully complete the training program and receive appropriate FAA certificates and ratings are not required to maintain currency on approach control positions. However, qualified military controllers, where current by FAA standards and military supervisors, may be assigned to approach control positions without direct supervision.

B. At the request of the FAA facility air traffic manager, the appropriate military authority will provide on-site PAR training to designated FAA personnel. Qualification and training shall be carried out in accordance with military regulations and procedures. FAA personnel are not required to maintain currency on PAR positions. However, qualified FAA controllers, when current by military standards and when agreeable to both military and FAA supervisors, may be assigned to PAR control positions without direct supervision.

ARTICLE IV. FAA Air Traffic Representatives.

A. The ATREP is responsible to the area air traffic branch. Function is described as follows:

1. To serve as liaison officer between the military and the FAA and between the military and civil users; to resolve local air traffic problems between military and civil users of the terminal area in order that both are afforded the maximum service possible; and to conduct frequent liaison with FAA, civil, and military personnel to determine the adequacy of ATC service is being rendered.
2. To serve as technical advisor to the military in all phases of air traffic control in order to improve ATC service.
3. To evaluate the amount of airspace required for air traffic control in terminal areas and to coordinate approval of airport traffic patterns.
4. To continuously review existing air traffic control and communications procedures and practices

and to recommend action for their revision to improve efficiency.

5. To participate in appropriate intramilitary meetings in which the FAA has an interest.
6. To encourage lecture and training programs for base pilots and civil air user groups and to recommend changes, if necessary, to improve the air traffic control facility training program and to obtain maximum utilization of personnel.
7. To administer control tower operator exams and issue appropriate FAA certificates and ratings.
8. To participate frequently in flights of various types of unit-equipped military aircraft (in which flight as a passenger or crewmember is permitted) for the purpose of evaluating, from the pilot's viewpoint, air traffic control services being rendered and the performance characteristics of aircraft employed at the base.

B. The ATREP will be an FAA signatory to agreements made pursuant to Article I, Section C.

ARTICLE V. Local Agreements at FAA-Staffed Military Installations

At military installations where FAA staffing is provided in whole or in part, a local memorandum of agreement shall be signed between FAA and appropriate military authority. The purpose of the local agreement is to further implement this agreement. Such agreements should cover details such as operational concepts, staffing, training, maintenance of equipment, utilization of space, parking and janitorial service, and security.

ARTICLE VI. Financing

A. Salary, travel and training expenses of FAA air traffic representatives, air traffic controllers, and other personnel furnished by the FAA, pursuant to this agreement, will be borne by the FAA.

B. Salary, travel, and training expenses of military and civilian personnel furnished by the DOD, pursuant to this agreement, will be borne by the appropriate DOD component.

C. The cost of providing normal support (utilities, office space, furniture, parking space, janitorial services, and supplies, etc.) to FAA personnel at jointly staffed air traffic control facilities located on military installations, pursuant to this agreement, will be borne by the host DOD component authority exercising jurisdiction over the military installation involved.

D. Except as otherwise specifically agreed between the parties concerned, the cost of procuring new equipment at joint facilities to accommodate primarily a military requirement, pursuant to this agreement, will be borne by the host component of the DOD.

E. The cost of procuring new facilities and equipment to accommodate primarily an FAA requirement, pursuant to this agreement, will be borne by the FAA.

F. Except as otherwise specifically agreed between the parties concerned, the cost of installing and maintaining equipment will be borne by the party to this agreement which has the responsibility for the air traffic control function being performed.

G. Agreements which include financing arrangements, other than the three separate agreements referred to in the preamble to this agreement, are not superseded by this article.

ARTICLE VII. Miscellaneous Provisions

A. Local military authority will determine the security clearances required of FAA personnel. FAA personnel will be subject to military security requirements and base regulations.

B. The military services shall inform the FAA at the earliest practicable date of plans to deactivate military bases at which FAA personnel are assigned. The FAA shall inform the appropriate military service at the earliest practicable date of plans to reduce services at or to abandon ATC facilities on military installations.

C. Differences which may arise and remain unresolved at the local level will be resolved through appropriate channels of the signatories to this memorandum of agreement.

The FAA and the three military services agree to be bound by all provisions of this agreement as indicated by the signature of their duly authorized officials.

NAVAIR 00-80T-114

UNITED STATES ARMY

By(s): A.S. Collins, Jr

Title: Asst. Chief of Staff for Force Development

Date: 10 June 1969

UNITED STATES NAVY

By(s): Thomas F. Connolly

Title: Deputy Chief of Naval Operations (Air)

Date: 2 June 1969

UNITED STATES AIR FORCE

By(s): John W. Vogt, Maj. Gen. USAF

Title: Asst. Deputy Chief of Staff Plans and Operations

Date: 26 June 1969

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

By(s): D.D. Thomas

Title: Deputy Administrator

Date: 17 July 1969

APPENDIX B

Air Traffic Control NATOPS Evaluation Checklist

B.1 FACILITY MANAGEMENT

effective date of such revision/change? [FAAO 7110.65]

B.1.1 General

1. Does the ATCFO maintain a current Division Officer's Notebook? [OPNAVINST 3120.3]
2. Are operating initials assigned to each controller? [NAVAIR 00-80T-114]
3. Does the division have an effective sponsor program? [OPNAVINST 1740.3]
4. Are facility files maintained using SSIC format? [SECNAVINST 5210.11]
5. Does the ATCFO ensure the maintenance of a continuing, historical file containing required data pertinent to the operation of the facility? [NAVAIR 00-80T-114]
6. Do retention standards/data relating to daily management of Air Traffic comply with the following:
 - a. Daily log/position logs — 6 months?
 - b. Flight plans — 3 months?
 - c. Flight progress strips — 3 months?
 - d. Mishap records/data — as set forth in NATOPS? [NAVAIR 00-80T-114]
7. Is an AAFIF print out on file and up-to-date? [NAVAIR 00-80T-114]
8. Are publications applicable to the naval establishment maintained in the ATCF library? [NAVAIR 00-80T-114]
9. Is CNO (N785F) notified if the ATC Facility has not received a revised FAAO 7110.65/ change to FAAO 7110.65 at least 30 days before the effective date of such revision/change? [FAAO 7110.65]
10. Does the ATCF use Coordinated Universal Time (UTC) for entries on all forms, logs and written records, and radio and landline communications? [NAVAIR 00-80T-114]
11. Does the ATCF use local time for facility work schedules, daily traffic counts, and administrative forms and correspondence? [NAVAIR 00-80T-114]
12. Is the Air Activity Report prepared and distributed in compliance with NATOPS? [NAVAIR 00-80T-114]
13. Does the Base Readiness Report (BASEREP) accurately reflect ATC/airfield deficiencies? [OPNAVINST 3501.167]
14. Was a Vice Admiral Robert B. Pirie Naval Air Traffic Controller of the Year Award nomination submitted? [NAVAIR 00-80T-114]
15. Is facility management familiar with SECNAV policy with regard to the Freedom of Information Act? [SECNAVINST 5720.42/NAVAIR 00-80T-114]
16. Is a Procedures Evaluation Board established? [NAVAIR 00-80T-114]
17. Is a Controller Evaluation Board established? [NAVAIR 00-80T-114]
18. Do ATCF normal working periods and work schedules conform to FAR 65/ATC NATOPS requirements? [NAVAIR 00-80T-114]
19. Are air traffic controllers normally assigned duties outside their professional specialty? [NAVAIR 00-80T-114]
20. Do controllers train and work as an integral team? [NAVAIR 00-80T-114]

NAVAIR 00-80T-114

21. If exemptions to the provisions of General NATOPS for the separation of Naval aircraft have been granted by the local commander, has the chain of command been provided a copy of the exemption? [OPNAVINST 3710.7]
22. Are waivers for deviations from the procedures set forth in FAAO 7110.65 approved by CNO (N785F)? [OPNAVINST 3710.7 and FAAO 7110.65]
23. If applicable, are holiday closures conducted as set forth in NATOPS? [NAVAIR 00-80T-114]
24. If airfield hours have been reduced, or if operating hours are extended, is the ATCFO sensitive to the impact on FAAO 7400.2 airspace requirements? [NAVAIR 00-80T-114]
25. Is the ATCFO a graduate of an ACA1 course (or equivalent DOD or DOT air traffic controller course) and possess an ATCS Certificate? [NAVAIR 00-80T-114]
26. Is the ATCFO normally assigned duties outside the billet description? [NAVAIR 00-80T-114]
27. If applicable, is the AATCFO a graduate of an ACA1 course (or equivalent DOD or DOT air traffic controller course) and possess an ATCS Certificate? [NAVAIR 00-80T-114]
28. Do locally based aviation units provide orientation and indoctrination flights to facility controllers to improve controller work performance? [OPNAVINST 3710.7]
29. Is a program established to ensure effective dialogue between the ATC facility and locally based aviation units; i.e., ATC briefs to units, unit briefs to controllers, tower/radar orientation for aviators, etc.? [NAVAIR 00-80T-114]
30. Does the facility have procedures for handling bomb threats? [OPNAVINST 5530.14]
31. Are safe emergency escape routes posted in and around the facility? [OPNAVINST 5100.19]
32. Is the security (controlled access) of the ATC Facility maintained? [NAVAIR 00-80T-114]
33. Are all visits to the ATC Facility approved by the ATCFO? [NAVAIR 00-80T-114]
34. Are visitors escorted while in the ATC Facility? [NAVAIR 00-80T-114]

B.1.2 Air Operations Manual

1. Has an Air Operations Manual been promulgated to supplement OPNAV 3710.7? [OPNAVINST 3710.7 and NAVAIR 00-80T-114]
2. Does the Air Operations Manual adhere to the basic outline as set forth by NATOPS? [NAVAIR 00-80T-114]
3. Is an annual review of the Air Operations Manual conducted? [NAVAIR 00-80T-114]
4. Does distribution of the Air Operations Manual conform to NATOPS requirements? [NAVAIR 00-80T-114]
5. Does the Air Operations Manual include wheel load capacity of runways and parking aprons? [NAVAIR 00-80T-114]
6. Does the Air Operations Manual include arresting gear configuration based on the active runway? [NAVAIR 00-80T-114]
7. Does the Air Operations Manual include procedures for identifying to airport users, by NOTAM, ATIS, and other appropriate means, conditions that may affect the safe operation of aircraft? [NAVAIR 00-80T-114]
8. Do local course rules specify airspeeds based on information contained in the NATOPS flight manuals applicable to the aircraft operated by the prime user(s) of the airfield concerned? [NAVAIR 00-80T-114]
9. Have operational instructions for providing emergency service been promulgated by the commanding officer? [NAVAIR 00-80T-114]
10. If applicable, do Remotely Piloted Vehicle (RPV) operations comply with the provisions of FAA 7610.4? [FAAO 7610.4]
11. Is priority handling provided to aircraft carrying nuclear cargo? [OPNAVINST 3710.31]

12. Are operating practices reviewed on a continuous basis with a view toward minimizing the impact of "aircraft noise" on the public? [OPNAVINST 3710.7]
13. Are local rules established which minimize vehicle traffic on aircraft movement areas? [NAVAIR 00-80T-114]
14. Are closed-field operations conducted per guidance contained in NATOPS? [NAVAIR 00-80T-114 and OPNAVINST 3710.7]
5. If a letter of agreement specifies the application of separation minima less than that specified in FAAO 7110.65, has appropriate military authority authorized the reduced separation? [FAAO 7110.65]
6. Where aircraft will be controlled by both FAA and Naval ATCFs, is information to be transmitted by each facility the subject of a written agreement? [NAVAIR 00-80T-114]
7. When operations warrant a letter of agreement and MARSAs will be applied, is the authority to invoke MARSAs contained in the letter of agreement? [FAAO 7610.4]

B.1.3 ATC Facility Manual

1. Has an ATC Facility Manual been promulgated? [NAVAIR 00-80T-114]
2. Does the ATC Facility Manual adhere to the basic outline set forth by NATOPS? [NAVAIR 00-80T-114]
3. Is the ATC Facility Manual reviewed and updated on a continuous basis? Was the ink dry prior to NATOPS Evaluation Team arrival? [NAVAIR 00-80T-114]
4. Are copies of the ATC Facility Manual forwarded as set forth in NATOPS? [NAVAIR 00-80T-114]
5. Has an ATC Facility Directive System been established and maintained in a current status? [NAVAIR 00-80T-114]
6. Has the ATCFO clearly specified in a facility directive which operating positions may be combined and under what specific circumstances? [NAVAIR 00-80T-114]

B.1.4 Letters of Agreement

1. Are Letters of Agreement confined to a single subject or purpose? [NAVAIR 00-80T-114]
2. Are Letters of Agreement maintained in a current status? [NAVAIR 00-80T-114]
3. Are copies of Letters of Agreement forwarded to the appropriate NAVREP? [NAVAIR 00-80T-114]
4. At Approach Control facilities, is there a letter of agreement delegating airspace for the approach control function? [NAVAIR 00-80T-114]

B.1.5 Facility Watch Supervisor

8. Are information copies of local letters of agreement not specifically addressed by ATC NATOPS forwarded to CNO (N785F)? [OPNAVINST 3710.7 and NAVAIR 00-80T-114]
9. At out-CONUS locations is the ATCFO aware of the applicable portions of the treaties/agreements that apply to air traffic control? [NAVAIR 00-80T-114]
1. Are Facility Watch Supervisors (FWSs) designated by the commanding officer? [NAVAIR 00-80T-114]
2. Is an FWS on duty at the facility at all times during hours of operation? [NAVAIR 00-80T-114]
3. Are Facility Watch Supervisors qualified on all operating positions within the facility? [NAVAIR 00-80T-114]
4. Has the ATCFO authorized combining the duties of the FWS with those of a branch supervisor? [NAVAIR 00-80T-114]
5. Are Special Category FWSs designated by the commanding officer? [NAVAIR 00-80T-114]
6. Does the FWS ensure that an equipment checkout is performed at the beginning of each shift and malfunctions reported to appropriate agencies? [NAVAIR 00-80T-114]
7. Does the FWS ensure a proper crew briefing and an orderly watch turnover? [NAVAIR 00-80T-114]

NAVAIR 00-80T-114

8. Does the FWS prepare operating position assignments for those personnel under their supervision? [NAVAIR 00-80T-114]
9. Does the FWS ensure position currency and accomplishment and documentation of training? [NAVAIR 00-80T-114]
10. Does the FWS ensure that complaints from pilots, adjacent facilities, and/or the general public are forwarded to the ATCFO? [NAVAIR 00-80T-114]
11. Does the FWS check and sign daily facility logs? [NAVAIR 00-80T-114]
9. If an agreement is reached with an air carrier concerning the air carrier's CRAF CAMI proposal, is ASN (I&E) advised via COMNAV-FACENCOM through the appropriate chain of command? [SECNAVINST 11130]
10. In the event of CRAF carrier proposal is not feasible or an agreement with the air carrier cannot be reached, does the installation commander notify ASN (I&E)? [SECNAVINST 11130]
11. If practice approaches are provided to civil aircraft, has a civil aircraft landing permit been executed and have local arrangements been made in advance with the CO? [NAVAIR 00-80T-114]

B.1.6 Civil Aircraft

1. Are requests for civilian and/or non U.S. Government aircraft to use naval aviation facilities in compliance with procedures set forth by SECNAV? [SECNAVINST 3770.1]
2. Does the commanding officer approve or disapprove applications of landings of civil aircraft at their facility in compliance with the criteria established by SECNAV? [SECNAVINST 3770.1]
3. Are requests for use of more than one facility forwarded to the TYCOM/CNO, as appropriate? [SECNAVINST 3770.1]
4. When civil landing permits are approved, are the minimum insurance requirements set forth by SECNAV adhered to? [SECNAVINST 3770.1]
5. Following cancellation of a civil aircraft landing permit, is a new application (as opposed to reinstatement) required? [SECNAVINST 3770.1]
6. Does the commanding officer notify CNO immediately if he has reason to believe that the use of a landing permit was not in accordance with the terms of the Permit? [SECNAVINST 3770.1]
7. Is emergency service provided to any aircraft upon request? [NAVAIR 00-80T-114]
8. Are unsolicited proposals for CRAF CAMI Program participation, that are received by the installation commander, forwarded to AMC via the chain of command? [SECNAVINST 11130]
12. For joint civil/military airfields or those airfields with charter air carrier operations not exclusively for the military:
 - a. Are initial requests for airfield certification submitted to CNO (N785F) via the chain-of-command NLT 30 days prior to the required certification date? [OPNAVINST 11130.2]
 - b. Does the installation's initial request for airfield certification indicate that the installation is in compliance with applicable DOD directives and maintain the firefighting/rescue capabilities specified in NAVAIR 00-80R-14? [OPNAVINST 11130.2]
 - c. Are requests for renewal of a current airfield certification submitted to CNO (N785F) prior to 1 May of each year? [OPNAVINST 11130.2]

B.1.7 Communications

1. Are procedures for radio frequency changes below 2,500 feet for single-piloted aircraft in compliance with NATOPS? [OPNAVINST 3710.7]
2. At those airports where military single-piloted turbojet aircraft are regularly based, are procedures in place to provide single frequency approaches? [FAA Order 7610.4]
3. Are SAR communications conducted on the frequency 282.8 MHz or other appropriate frequency as directed? [NAVAIR 00-80T-114]

4. Are emergency and distress frequencies 243.0 and 121.5 MHz used only to provide a communications channel to and from airborne and ground stations involved in an actual emergency or distress? [NAVAIR 00-80T-114]
5. Are all radio circuits, interphones, and telephones used for the control of air or vehicular traffic, including crash phone circuits, recorded continuously during hours of operation? [NAVAIR 00-80T-114]
6. Is position recording used for all operating positions? [NAVAIR 00-80T-114]
7. Are UHF guard, VHF guard, primary local control, and primary approach control frequencies recorded independently? [NAVAIR 00-80T-114]
8. Is there a sufficient supply of spare tapes to meet the 15 day retention requirement and replace tapes removed as a result of an accident or incident? [NAVAIR 00-80T-114]
9. Are original recordings retained for at least 15 days? [NAVAIR 00-80T-114]
10. At joint facilities, if the FAA assumes recording responsibilities, have specific procedures/responsibilities been established? [NAVAIR 00-80T-114]
11. If recording equipment fails, is flight clearance and control data entered on appropriate flight progress strips? [NAVAIR 00-80T-114]
12. Are recorder tapes changed by electronics maintenance personnel? [NAVAIR 00-80T-114]
13. Is each recorder channel checked as set forth in NATOPS? [NAVAIR 00-80T-114]
14. During period of required retention, are recorder tapes stored in locked cabinets under the custody of the electronics maintenance officer? [NAVAIR 00-80T-114]
3. Is attendance at the operator's course documented? [NAVAIR 00-80T-114]
4. Are vehicles operating on aircraft operating areas (excluding ramp areas) radio-equipped or escorted by radio-equipped vehicles? [NAVAIR 00-80T-114]
5. Are vehicles not regularly used on the airfield equipped with a checkered flag or amber rotating beacon whenever operations on aircraft operating areas are necessary? [NAVAIR 00-80T-114]
6. If applicable, have permanent restrictions placed on the use of the airfield by transient aircraft (PPR, etc.) been submitted through the chain of command and approved by CNO? [NAVAIR 00-80T-114]
7. Are emergency restrictions of a temporary nature imposed upon transient aircraft announced by message and NOTAM? [NAVAIR 00-80T-114]
8. Do any navigational or operational aids other than those listed in P-80.3 (Section I.C.) that violate the primary surface area have an approved waiver from NAVAIR? [P-80.3/NAVAIR 51-50AAA-2]
9. Does airport lighting and marking conform to established guidelines? [NAVAIR 00-80T-114/NAVAIR 51-50AAA-2]
10. Do the existing runway edge lights, threshold lights and approach lighting systems conform to established guidelines? [NAVAIR 51-50AAA-2]
11. Are displaced threshold markings in compliance with established guidelines? [NAVAIR 51-50AAA-2]
12. Are holding position markings in compliance with established guidelines? [NAVAIR 51-50AAA-2]
13. Are TACAN checkpoint markings in compliance with established guidelines? [NAVAIR 51-50AAA-2]

B.1.8 Airfield

1. Has an airfield vehicle operator's indoctrination course been established? [NAVAIR 00-80T-114]
2. Is the airfield vehicle operator's course attended annually? [NAVAIR 00-80T-114]
14. Are TACAN checkpoint signs illuminated in compliance with established guidelines? [NAVAIR 51-50AAA-2]
15. Is the airfield rotating beacon installed in compliance with established guidelines? [NAVAIR 51-50AAA-2]

NAVAIR 00-80T-114

16. Are wind socks installed at the threshold of each runway and are they illuminated for night operations? [NAVAIR 51-50AAA-2]
17. Are wave-off lights installed in compliance with established guidelines? [NAVAIR 51-50AAA-2]
18. If the airfield mission includes carrier training, does the runway have simulated carrier deck markings in compliance with established guidelines? [NAVAIR 51-50AAA-2]
19. If used in IFR conditions or at night, does the simulated carrier deck have lights? [NAVAIR 51-50AAA-2]
20. Are the helipads on the airfield properly marked? [NAVAIR 51-50AAA-2]
21. If a helipad (not located on a lighted runway or taxiway), is used at night or in low visibility weather during the daytime, does it have perimeter lights? [NAVAIR 51-50AAA-2]
22. Are all objects potentially hazardous to air navigation (including vehicles) properly marked for identification during daylight hours? [NAVAIR 51-50AAA-2]
23. If hazards to air navigation are not marked for identification, does the facility have an approved waiver from NAVAIR on file? [NAVAIR 51-50AAA-2]
24. Are all structures and natural features on the airfield that are 150 feet or more above the airfield elevation, marked with red hazard or obstruction beacons? [NAVAIR 51-50AAA-2]
25. Are Clear Zones I and II graded and free of above ground objects? Has it received special ground treatment or pavement in the designated runway overrun? [P-80.3]
26. Do any trees, shrubs or bushes penetrate the approach departure clearance surface area of Clear Zone III? [P-80.3]
27. Are any human inhabited buildings sited in Clear Zone III? [P-80.3]

B.1.9 NAALS

1. Are ATC related facilities configured with auxiliary power sources sufficient to ensure continuity of ATC services during emergency conditions? [NAVAIR 00-80T-114]
2. Are auxiliary power generators for ATC related facilities including navigational aids operated as directed by the ATCFO? [NAVAIR 00-80T-114]
3. Unless reliable automatic transfer equipment is installed, does the ATCF shift to auxiliary power at least 30 minutes before severe weather is anticipated? [NAVAIR 00-80T-114]
4. Does the ATCF have a program of preventive maintenance and periodic load and no-load operation of auxiliary power sources to ensure maximum continuity of ATC service? [NAVAIR 00-80T-114]
5. When deficiencies are noted in the operational capabilities of NAALS assets, does the command forward new requirements to COMNAVAIRSYS-COM, via the chain of command, using the OCIR procedures described in OPNAVINST 3721.5? [OPNAVINST 3721.5]
6. Is a file of NAALS OCIRs maintained? [NAVAIR 00-80T-114]
7. When commands determine the NAALS equipment is "in excess," are disposition instructions requested from COMNAVAIRSYSCOM? [OPNAVINST 3721.5]
8. Are ATC and Ground Electronics personnel included as members of the Activity Master Planning Board? [OPNAVINST 3721.5/GEMO Manual]
9. Does the ATCFO use OPNAVINST 3722.35 as a reference for minimum baseline planning criteria for ATCF resources? [OPNAVINST 3722.35]
10. In those instances where deviations from OPNAVINST 3722.35 baseline criteria resource allocations are required, does the ATC Facility document such deviation(s) in an OCIR or similar media providing for command endorsements? [OPNAVINST 3722.35]

11. Does the quality of operating positions used in the ATCF conform to the Operating Position Requirements presented in OPNAVINST 3722.35? [OPNAVINST 3722.35]
12. Does the equipment installed in the ATCF conform to the Operating Position Equipment Standards presented in OPNAVINST 3722.35? [OPNAVINST 3722.35]
13. Is corrective and preventive maintenance as well as daily checks performed in compliance with existing policies in addition to requirements established by local directives? [NAVAIR 00-80T-114]
14. Do maintenance technicians keep ATCF supervisory personnel apprised of equipment status? [NAVAIR 00-80T-114]
15. Are maintenance technicians available to ATCF supervisory personnel after normal working hours to confirm controller judgment regarding equipment malfunctions? [NAVAIR 00-80T-114]
16. Are maintenance technicians authorized to recall electronic maintenance personnel to perform corrective maintenance should an after hour outage adversely impact fleet support mission requirements? [NAVAIR 00-80T-114]
17. Is local certification of electronic technicians in compliance with PQS augmented as required by local directives? [NAVAIR 00-80T-114]
18. Unless operational requirements dictate otherwise, are working hour limitations in effect for air traffic controllers (NAVAIR 00-80T-114, [paragraph 3.3.7](#)) imposed on electronic technicians maintaining ATC related equipment? [NAVAIR 00-80T-114]
19. Are prescribed performance standards and tolerances utilized in determining the technical performance of all navigation facilities? [OPNAVINST 3721.18]
20. Is an appropriate Notice to Airmen issued on any navigation facility found not to be performing within standards and tolerances? [OPNAVINST 3721.18]
21. Has a formal certificate been forwarded to the appropriate FAA air traffic operational authority upon satisfactory completion of the initial air navigation facility ground inspection? [OPNAVINST 3721.18]
22. Is ground recertification accomplished at the following intervals:
 - a. TACAN — 4 months?
 - b. NDB — semiannually?
 - c. ILS — 2 months?
 - d. Communications — semiannually?
 - e. En route radar — 4 months?
 - f. Terminal radar:
 - (1) 2 months?
 - (2) When a navigation facility is restored to satisfactory operation after having been out of service?
 - (3) Immediately after an aircraft accident in which the navigation facility may have been involved? [OPNAVINST 3721.18]
23. Has FAA Headquarters concurrence been obtained prior to initiating any modification or alteration which will affect the certificated operating performance of any navigation equipment or facility that has been designated for use in the National Airspace System? [OPNAVINST 3721.18]
24. Are scheduled maintenance shutdowns of navigation facilities which have been certificated for use in the National Airspace System submitted to the appropriate ARTCC for concurrence in sufficient time to allow for NOTAM issuance at least 5 hours prior to shutdown? [OPNAVINST 3721.18]
25. Are NAVAIDS for which a station has cognizance monitored in accordance with applicable technical orders, instruction books, and standards? [NAVAIR 00-80T-114]
26. Are NAVAID monitors not providing automatic visual and audible alarms checked at least hourly and the results logged? [NAVAIR 00-80T-114]

NAVAIR 00-80T-114

27. Is reliable two-way communications available between the NAVAID site and the primary monitor facility when a NAVAID is monitored at the NAVAID site? [NAVAIR 00-80T-114]
28. When the facility assigned monitoring responsibility is not manned continuously and NAVAID(s) are kept on the air, are NATOPS requirements satisfied? [NAVAIR 00-80T-114]
29. Are NAVAIDS placed in a non-radiating status when maintenance is performed which could affect the reliability of the NAVAID? [NAVAIR 00-80T-114]
30. Are NO-NOTAM preventive maintenance periods published? [NAVAIR 00-80T-114]
6. Is a NDB flight inspection conducted when any of the following occur:
 - a. Change in the output level for the purpose of increasing or decreasing service area?
 - b. Changes in the antenna or transmitter which may affect coverage? [OPNAVINST 3721.18]
7. Is a radar special flight inspection conducted when the following occur:
 - a. After an aircraft accident in which the radar system may have been involved?
 - b. After an antenna change, antenna tilt change, or when engineering judgment indicates a probable change in antenna radiation pattern?
 - c. After the installation of a new map overlay or video map plate?
 - d. When NAVAIDS or fixes have been added or relocated or are otherwise not coincident with an overlay or map plate previously approved? [OPNAVINST 3721.18]

B.1.10 Flight Inspection

1. Are navigation facilities flight inspected in accordance with criteria in the United States Standard Flight Inspection Manual? [OPNAVINST 3721.18/NAVAIR 00-80T-114/NAVAIR 16-1-520]
2. Upon completion of flight inspections (if applicable), are appropriate NOTAMs issued/canceled to define any restrictions identified by the flight inspector? [NAVAIR 16-1-520]
3. Are FAA aircraft engaged in flight inspection of NAVAIDS provided maximum assistance? [NAVAIR 00-80T-114]
4. Are ATC procedural discrepancies noted during FAA surveillance flight inspections (on FAA Form 2711) reviewed and corrected? [NAVAIR 00-80T-114]
5. Is an ILS flight inspection conducted when major changes occur in local airport obstructions, buildings, etc. which may affect the radiated localizer course or clearance structure/radiated glide slope path structure? [OPNAVINST 3721.18]
8. Is the radar system maintained to the standards determined and recorded at the time of the commissioning flight inspection? [OPNAVINST 3721.18]
9. Is a TACAN flight inspection conducted when any of the following occur:
 - a. Antenna replacement or major antenna repair?
 - b. Frequency (channel) change?
 - c. Replacement of beacon and/or monitoring equipment?
 - d. Relocation of antenna?
 - e. Nearby construction?
 - f. Significant changes in vegetation growth near the facility? [OPNAVINST 3721.18]
10. Are restrictions to TACAN azimuth disseminated to users? [NAVAIR 16-1-520]

11. Are required preflight preparations and actions required for flight inspections taken by ground personnel? [NAVAIR 16-1-520]
12. Are well qualified operator personnel assigned during commissioning flight inspections to minimize the possibility of operator deviations and permit maximum attention to the isolation of equipment deficiencies? [NAVAIR 16-1-520]
13. Have new/revised instrument procedures been flight inspected by FAA FIFO? [NAVAIR 16-1-520]
14. Are FAA flight inspection aircraft in the area of radar coverage utilized for fix accuracy checks? [NAVAIR 00-80T-114]

B.1.11 Terminal Instrument Approach Procedures (TERPS)

1. Is the Triennial TERPS Report prepared and forwarded in compliance with NATOPS? [NAVAIR 00-80T-114]
2. Are terminal instrument procedures established or revised when a reasonable need is identified or where:
 - a. New navigation facilities are installed.
 - b. Changes to existing facilities necessitate a change to an approved procedure.
 - c. Additional procedures are necessary.
 - d. New obstacles or operational uses require a revision to the existing procedure. [OPNAVINST 3722.16]
3. If an approved instrument approach and/or departure procedure is established, are the following minimum standards met:
 - a. Airport landing surfaces adequate to accommodate the aircraft which can be reasonably expected to use the procedure?
 - b. Runway lighting for night instrument operations?

- c. Navigation facilities which have successfully passed flight inspection?
- d. Obstacles which penetrate FAR 77 imaginary surfaces marked and lighted, insofar as is reasonably possible?
- e. Terminal weather observation and reporting facilities available for the airport to serve as an alternate airport?
- f. Air-to-ground communications available at the IAF and when aircraft executing missed approach reaches the missed approach altitude? [OPNAVINST 3722.16]
4. When interim TERPS database/obstacle data changes occur, is NAVFIG notified in writing as soon as possible? [NAVAIR 00-80T-114]
5. Is the FAA informed when terminal instrument procedures are canceled? [OPNAVINST 3722.16]
6. Is every effort made to formulate terminal instrument procedures IAW the applicable portion of the TERPS Handbook as determined by the type and location of navigation facility and procedure to be used? [OPNAVINST 3722.16]
7. Do terminal instrument procedures which deviate from TERPS standards because of operational necessity, and in which an equivalent level of safety is not achieved, include a cautionary note to identify the hazard and marked "not for civil use"? [OPNAVINST 3722.16]
8. Are changes in instrument procedures which affect fix, course altitude or published minimum prepared and forwarded for approval in the same manner as in the case of new procedures? [OPNAVINST 3722.16]
9. Are all terminal instrument procedures (when established/revised) coordinated with FAA or appropriate agency or an overseas host nation? [OPNAVINST 3722.16]
10. Prior to establishing or revising terminal instrument procedures, is coordination effected to ensure compatibility with air traffic flow and to assess the impact on current or future air traffic programs? [OPNAVINST 3722.16]

NAVAIR 00-80T-114

11. Where action to designate controlled airspace for an instrument procedure is planned, is the airspace action initiated sufficiently in advance so that effective dates of the procedure and the airspace action coincide? [OPNAVINST 3722.16]
12. Is a record of coordination maintained when establishing or revising terminal instrument procedures? [OPNAVINST 3722.16]
13. Are requests for new or revised video maps submitted to NAVFIG on the appropriate form? [NAVAIR 00-80T-114]
14. Does each block of the video map request form have an entry? [NAVAIR 00-80T-114]
15. Does a sketch accompany each initial video map request? [NAVAIR 00-80T-114]
16. Has a MVA chart been developed to allow for vectoring of aircraft? [NAVAIR 00-80T-114]
17. Has the MVA chart been submitted to NAVFIG for review and approval? [NAVAIR 00-80T-114]
18. Does the ATCF update the MVA chart as required? [NAVAIR 00-80T-114]
19. Is the MVA chart reviewed biennially by NAVFIG? [NAVAIR 00-80T-114]
20. Does the ATCF obtain five-letter location identifiers for local instrument procedures? [NAVAIR 00-80T-114]
21. When a facility is contemplating establishment of terminal instrument procedures, are the following source materials submitted to NAVFIG prior to or coincident with the submission of the procedure approval request; airport layout, TERPS Airfield Information Summary, TERPS Obstacle Summary, Precision Approach Procedures Plan and Profile Drawings (if PAR, ILS), Facility Data form, and Flight Inspection Report? [NAVAIR 00-80T-114]
22. Is the Airport Layout drawing prepared as set forth in NATOPS? [NAVAIR 00-80T-114]
23. Is the TERPS Airfield Information Summary completed as set forth in NATOPS? [NAVAIR 00-80T-114]
24. Is the TERPS Obstacle Procedures Plan and Profile Drawings prepared as set forth in NATOPS? [NAVAIR 00-80T-114]
25. Are Precision Approach Procedures Plan and Profile Drawings prepared as set forth in NATOPS? [NAVAIR 00-80T-114]
26. Are new and revised Facility Data (FAA AC Form 8200-14) prepared by the ATCF and forwarded to the FAA Data Evaluation Section? [NAVAIR 00-80T-114]
27. During the formulation of terminal instrument procedures, is coordination effected with the ATC activities that provide the associated en route and approach control service? [NAVAIR 00-80T-114]
28. Do coordinating military and civil authorities sign the appropriate NAVAIR/OPNAV forms for terminal instrument procedures? [NAVAIR 00-80T-114]
29. Are terminal instrument procedure cancellations coordinated well in advance with ATC activities concerned? [NAVAIR 00-80T-114]
30. When operational requirements dictate a departure from TERPS/NATOPS standards, does the request submitted to NAVFIG for authority to deviate contain:
 - a. Explanation of alternatives considered and why they are unacceptable, and
 - b. Information concerning planned use of the procedure by civil aircraft, and
 - c. Justification for the deviation? [NAVAIR 00-80T-114]
31. Is the Terminal Instrument Procedures Standards Waiver (OPNAV Form 3722/16) used to submit waiver requirements? [NAVAIR 00-80T-114]
32. Do requests for approval of terminal instrument procedures utilizing new, relocated, or modified NAVAIDS/radar facilities indicate that a facility flight check has been conducted and the NAVAID suitable for instrument flight operations? [NAVAIR 00-80T-114]
33. Is each terminal instrument procedure flight checked by FAA aircraft for safety and operational suitability? [NAVAIR 00-80T-114]

34. Are the results of the instrument procedures flight check submitted to NAVFIG when instrument procedures are processed? [NAVAIR 00-80T-114]
35. Are new or revised terminal instrument procedures that occur between biennial reporting dates submitted to NAVFIG on the appropriate form? [NAVAIR 00-80T-114]
36. Is submission of new or revised terminal instrument procedures submitted as far in advance (normally not less than 60 days) of their desired effective date? [NAVAIR 00-80T-114]
37. For cancellation of terminal instrument procedures, is NAVFIG notified as soon as relevant information is known (normally not later than 30 days prior to effective date of cancellation)? [NAVAIR 00-80T-114]
38. When the FLIP revision date occurs subsequent to the effective date of procedure cancellation, is cancellation effected by NOTAM? [NAVAIR 00-80T-114]
39. When temporary conditions affecting an approach procedure constitute a hazard to flight, is a NOTAM issued amending or suspending the affected approach procedure? [NAVAIR 00-80T-114]
40. In case of emergencies (i.e., facility outages/out of tolerance conditions, new construction which penetrates critical surfaces, etc.) is a NOTAM issued to change affected instrument procedure minimums? [OPNAVINST 3722.16]
41. Are terminal procedures established to provide instrument approach capability for local and transient flight operations? [NAVAIR 00-80T-114]
42. Do terminal instrument approach procedures conform to TERPS/NATOPS? [NAVAIR 00-80T-114]
43. Does each low-altitude procedure prescribe minimums for category A, B, C and D aircraft? [NAVAIR 00-80T-114]
44. Does each high-altitude procedure prescribe minimums for category C, D and E aircraft? [NAVAIR 00-80T-114]
45. Are terminal instrument approach procedures and missed approaches designed to:
 - a. Avoid the necessity for NAVAID frequency/channel change, and transponder code changes below 2,500 feet AGL.
 - b. Eliminate the need to shift NAVAID frequencies after commencing an approach (for procedures primarily for his performance, single-piloted aircraft; or aircraft without dual receiver capability): [NAVAIR 00-80T-114]
46. Are terminal instrument procedures contained within controlled airspace per FAA policy? [NAVAIR 00-80T-114]
47. When RVR equipment is installed and approved for a runway with HIRL and appropriate runway markings, are RVR visibility minimums established for straight-in approaches to that runway? [NAVAIR 00-80T-114]
48. If visibility credit for approach lighting has been applied or desired for procedure(s) containing straight-in minimums, is the procedure form so indicated? [NAVAIR 00-80T-114]
49. Do sidestep procedures conform to conditions as set forth in NATOPS? [NAVAIR 00-80T-114]
50. When establishing PAR/ASR procedures, are the guidelines as set forth in NATOPS given consideration? [NAVAIR 00-80T-114]
51. If applicable and when established, are PALS and TRN-28 approaches prepared and submitted as set forth in NATOPS? [NAVAIR 00-80T-114]
52. Are terminal procedures established to provide instrument departure capability for local and transient flight operations? [NAVAIR 00-80T-114]
53. Do terminal instrument departure procedures conform to TERPS/NATOPS? [NAVAIR 00-80T-114]
54. Are instrument departure procedures formulated in coordination with the local ATC authority or the host government? [NAVAIR 00-80T-114]

NAVAIR 00-80T-114

55. If applicable are instrument arrival procedures established with the concurrence of the host government ATC service? [NAVAIR 00-80T-114]
56. Are instrument departure/arrival procedures designed to avoid necessity for NAVAID, transponder code, and communication changes below 2,500 feet AGL? [NAVAIR 00-80T-114]
57. Are instrument departure procedures submitted to the FAA for coordination and to NAVFIG for review, approval and publication using the proper OPNAV form? [NAVAIR 00-80T-114]
58. Are instrument arrival procedures submitted using the proper OPNAV form or by including a copy of a host government procedure? [NAVAIR 00-80T-114]
5. Following an aircraft accident or incident, are statements obtained from controller and supervisory personnel involved? [NAVAIR 00-80T-114]
6. Are typewritten transcriptions prepared for all formal accident packages? [NAVAIR 00-80T-114]
7. Are procedures/equipment in place to re-record pertinent original voice recordings as soon as possible after an accident occurs? [NAVAIR 00-80T-114]
8. Are tabs removed from cassettes containing re-recordings? [NAVAIR 00-80T-114]
9. Are requests for viewing or duplicating original recordings that may be evidence in a non-U.S. Government investigation referred to CNO (N785F)? [NAVAIR 00-80T-114]

B.1.12 Incidents

1. During aircraft emergencies, are only those personnel absolutely necessary and required to provide technical advice allowed within the ATC Facility? [NAVAIR 00-80T-114]
2. Following an aircraft accident or incident, Do ATCF supervisory personnel:
 - a. Notify appropriate personnel designated in local directives?
 - b. Request and obtain a weather observation?
 - c. Cause the removal and safeguarding of any tapes which are, or may be, pertinent to the accident or incident? [NAVAIR 00-80T-114]
3. Are ATCF personnel who appear to have contributed to an accident or an incident which jeopardizes safety of aircraft temporarily relieved of operational duty and referred to a military flight surgeon for physical/psychological evaluation? [NAVAIR 00-80T-114]
4. If subsequent in-depth investigation reveals that the controller was responsible for or contributory to the error, are the minimum prerequisite actions as listed in ATC NATOPS, [paragraph 3.7.7](#), taken prior to reassignment to operational duty? [NAVAIR 00-80T-114]
10. Are tapes or information thereon released to another party only with the consent of the Commanding Officer? [NAVAIR 00-80T-114]
11. Is a chain of custody established for all original voice and video recordings prior to release to appropriately authorized agencies or officials? [NAVAIR 00-80T-114]
12. Are ATC hazards reported immediately to supervisory personnel? [NAVAIR 00-80T-114]
13. Is the ATCFO briefed on ATC hazards? [NAVAIR 00-80T-114]
14. Does the ATCFO identify any and all deficiencies contributing to ATC hazards and take appropriate corrective actions? [NAVAIR 00-80T-114]
15. Does the ATCFO report ATC hazards per NATOPS requirements? [NAVAIR 00-80T-114]
16. Are ATC hazards which involve civilian aircraft reported by letter within 10 days of the occurrence to the appropriate NAVREP and type commander? [NAVAIR 00-80T-114]
17. Is routine ATC hazard numbering independent of severe ATC hazard numbering? [NAVAIR 00-80T-114]

18. Have local procedures been established for ATC personnel to follow when observing violations of flying regulations? [NAVAIR 00-80T-114/OPNAVINST 3710.7]
19. Are procedures in place to ensure that any equipment alterations or adjustments made on equipment which might have contributed to an incident are not conducted without the consent of the ATCFO? [NAVAIR 00-80T-114]
20. Are procedures in place to ensure that if a radar facility is, or is suspected to have been, involved in an accident or incident, is the following action is taken?
 - a. A check of scope, video map, and cursor alignment?
 - b. If doubt exists that equipment performance is satisfactory, is such equipment placed out of service until complete technical evaluation and appropriate flight checks can be accomplished? [NAVAIR 00-80T-114]
6. Does the ATCFO suspend from ATC duties all air traffic controllers who have not met physical examination requirements? [NAVAIR 00-80T-114]
7. Do military flight surgeons conduct interviews and/or physical examinations for ATC personnel? [NAVAIR 00-80T-114]
8. Are policies regarding use of drugs/sedatives known to controllers and enforced by ATCF management? [NAVAIR 00-80T-114]
9. Do ATC personnel who have donated blood perform ATC functions or directly supervise personnel performing these functions only after a minimum of 24 hours has elapsed since the blood was donated? [NAVAIR 00-80T-114]
10. Are requests for waivers of physical standards processed as set forth in NATOPS? [NAVAIR 00-80T-114]
11. If classified NPQ, are military air traffic controllers not permitted to transfer to perform ATC duties until a waiver of physical standards is approved by BUPERS/CMC? [NAVAIR 00-80T-114]

B.1.13 Medical

1. Do all air traffic controllers meet the physical requirements of FAR Part 67 and maintain a current annual physical per physical standards established in MANMED? [NAVAIR 00-80T-114]
2. Do all air traffic controllers have a current Clearance Notice (or civilian equivalent for non-military personnel) on file? [NAVAIR 00-80T-114]
3. Do air traffic controllers achieve and maintain an optimal state of physical and emotional health? [NAVAIR 00-80T-114]
4. Do air traffic controllers report any physical disposition to superiors and assume operational duties only when fit to do so? [NAVAIR 00-80T-114]
5. Does the ATCFO ensure that ATC personnel are adequately observed and appropriate grounding action taken when necessary? [NAVAIR 00-80T-114]

B.2 FLIGHT PLANNING

B.2.1 General

1. Is a daily operations log maintained by the supervisor on duty? [NAVAIR 00-80T-114]
2. Does the daily operations log contain all required information? [NAVAIR 00-80T-114]
3. Is a position log maintained for each operating position? [NAVAIR 00-80T-114]
4. Have position relief checklists been established for each supervisory/operating position and are they used? [NAVAIR 00-80T-114]
5. Are checklists established to ensure that hazardous cargo information is passed to all affected base support agencies? [OPNAVINST 3710.31]

NAVAIR 00-80T-114

6. Is Coordinated Universal Time (UTC) used for entries on all forms, logs and written records, and radio and landline communications? [NAVAIR 00-80T-114]
7. Is local time used for facility work schedules, daily traffic counts, and administrative forms and correspondence? [NAVAIR 00-80T-114]
8. Does the FWS ensure that an equipment checkout is performed at the beginning of each shift and malfunctions report to appropriate agencies? [NAVAIR 00-80T-114]
9. Is a reliable and accurate clock visible from each operating position? [NAVAIR 00-80T-114]
10. Are time checks obtained at the start of each watch? [NAVAIR 00-80T-114]
11. Are clocks set to agree with those of the approach control facility? [NAVAIR 00-80T-114]
12. Are ATC procedures and phraseology as prescribed in FAA Order 7110.65? [NAVAIR 00-80T-114]
13. Are procedures established to ensure aircraft are kept informed of the latest reported weather and actual field conditions? [OPNAVINST 3710.7]
14. Do individuals perform duties as a controller under general supervision only at those sectors or positions qualified? [NAVAIR 00-80T-114]
15. When assigned to operating positions, are trainees under the direct and constant supervision of a controller qualified on the position concerned? [NAVAIR 00-80T-114]
16. Does the OJT instructor use the same radio console as the trainee when override capability does not exist from an adjacent console? [NAVAIR 00-80T-114]
17. Does each controller possess an ATCS Certificate? [NAVAIR 00-80T-114]
18. Does each controller possess a CTO Certificate or Airman Written Test Report? [NAVAIR 00-80T-114]
19. Is the Flight Planning Chief designated in writing by the ATCFO? [NAVAIR 00-80T-114]
20. Does the Flight Planning Chief properly perform the duties and responsibilities set forth in [paragraph 5.1.3.1](#)? [NAVAIR 00-80T-114]
21. Do Flight Planning Supervisors properly perform the duties set forth in NATOPS? [NAVAIR 00-80T-114]
22. Do Flight Planning Dispatchers properly perform the duties set forth in NATOPS? [NAVAIR 00-80T-114]
23. Is the notification of an on-station mishap as set forth by NATOPS? [NAVAIR 00-80T-114]
24. Is the notification of an off-station mishap as set forth by NATOPS? [NAVAIR 00-80T-114]
25. Is the crash grid map system prepared/used as set forth by NATOPS? [NAVAIR 00-80T-114]
26. Is a crash locator grid readily available at all stations on the primary or secondary aircraft Fire and Rescue Network? [NAVAIR 00-80T-114]
27. Is the flight planning area convenient to the flight planning dispatcher desk and weather office? [NAVAIR 00-80T-114]
28. Is the flight planning area clearly marked to guide transient aircrews? [NAVAIR 00-80T-114]
29. Are flight planning spaces monitored throughout working hours by qualified personnel? [NAVAIR 00-80T-114]
30. Do accommodations for flight planning include:
 - a. Wall space for the display of required aeronautical information
 - b. Plotting tables and storage for charts
 - c. Publications and forms required by aircrews? [NAVAIR 00-80T-114]
31. When a Service "B"/Dial LABS/AIS equipment outage occurs or is anticipated, are ARTCC, FSS and the repair facility notified? [NAVAIR 00-80T-114]
32. Are Service "B"/Dial LABS/AIS outages in excess of 24 hours reported to the Service "B" Program manager? [NAVAIR 00-80T-114]

33. When aircraft carrying hazardous cargo are declared missing or overdue, is the appropriate RCC informed of the nature of the hazardous cargo and of positive measures required to accomplish the rescue? [OPNAVINST 3710.31]

B.2.2 Flight Plans

1. Does the Flight Planning Branch provide for planning, receiving and processing flight plans? [NAVAIR 00-80T-114]
2. Are flight plan and flight movement messages completed/processed in accordance with procedures outlined in FAAO 7110.10? [NAVAIR 00-80T-114]
3. Do flight planning personnel ensure that flight plans are closed out when pilots either verbally confirm closing the flight plan or deliver a copy of the flight plan to flight planning? [NAVAIR 00-80T-114]
4. Are modifications to a written flight plan made only with the concurrence of the pilot in command? [NAVAIR 00-80T-114]
5. Are copies of all flight plan forms, flight schedules, OPS logs, aircraft clearance/arrival reports and other associated forms filed with flight plans retained for a period of 3 months? [NAVAIR 00-80T-114]

B.2.3 Charts and Publications

1. Does the Flight Planning Branch maintain a current inventory of aeronautical charts, publications, applicable directives, and NOTAM files? [NAVAIR 00-80T-114]
2. Are aeronautical data and facility information accurately published in flight information publications? [NAVAIR 00-80T-114]
3. Are procedures established to ensure that facility information in publications remain accurate and complete? [NAVAIR 00-80T-114]
4. Are FLIP changes submitted in order to coincide with publication cycles? [OPNAVINST 3721.20]

5. Are FLIP changes submitted for any reportable condition expected to last more than 90 days? [OPNAVINST 3721.20]
6. Are PCN, ECN, TCN or UCN installed promptly in flight information publications? [NAVAIR 00-80T-114]
7. Are sufficient FLIPs, navigation equipment and related information applicable to the mission of the activity available? [NAVAIR 00-80T-114]
8. Is local area information (VFR corridors, terrain hazards, etc.) prominently displayed to assist aircrews? [NAVAIR 00-80T-114]
9. Is a general flight planning chart prominently displayed? [NAVAIR 00-80T-114]

B.2.4 NOTAM's

1. Does NAVMETOC notify appropriate personnel when NOTAM traffic arrives (if applicable)? [OPNAVINST 3721.20]
2. Are all dates and times used in processing NOTAMs in Coordinated Universal Time (UTC)? [OPNAVINST 3721.20]
3. Are NOTAMs transmitted as soon as possible after receipt? [OPNAVINST 3721.20]
4. Are NOTAMs maintained up-to-date for ready reference? [NAVAIR 00-80T-114]
5. Is the coordination, transmission and posting of a NOTAM completed within 15 minutes? [OPNAVINST 3721.20]
6. Are NOTAM Summaries and hourly updates posted within 15 minutes of receipt? [OPNAVINST 3721.20]
7. Are NOTAMs processed utilizing the codes and system criteria discussed in Chapter 3 of the NOTAM instruction? [OPNAVINST 3721.20]
8. Are the processing procedures outlined in Chapter 4 of the NOTAM instruction strictly adhered to? [OPNAVINST 3721.20]
9. If any active base NOTAMs are missing from the Summaries, are they looked for on the first hourly update? [OPNAVINST 3721.20]

NAVAIR 00-80T-114

10. If sections of the Summary are posted which contain garbled or unreadable text, is a notice posted at the top of the affected column? [OPNAVINST 3721.20]
11. When NOTAMs are repeatedly garbled or not received, do personnel report the problems and follow up on corrective action? [OPNAVINST 3721.20]
12. Are NOTAM Display Boards installed in compliance with the requirements outlined in the NOTAM instruction? [OPNAVINST 3721.20]
13. Are NOTAMs canceled when the condition no longer exists? [OPNAVINST 3721.20]
14. Are problems that create NOTAM processing delays documented and maintained for 30 days? [OPNAVINST 3721.20]
15. Are NOTAM control and management policies in compliance with the NOTAM instruction? [OPNAVINST 3721.20]
16. Are any NOTAMs active for more than 90 days? [OPNAVINST 3721.20]
17. If unusual requirements require a NOTAM to be active for more than 90 days, are letter extensions requested from the DOD NOTAM coordinator? [OPNAVINST 3721.20]
18. If the facility determines that a NAVAID (that is not part of the National Airspace System) can be back in operation in less than 2 hours, are the requirements stipulated in Chapter 2 of the NOTAM instruction adhered to? [OPNAVINST 3721.20]
19. If the Commanding Officer determines it is necessary to publish information listed as non-NOTAM information (paragraph 3-3 of OPNAVINST 3721.20), is coordination effected with the DOD NOTAM coordinator? [OPNAVINST 3721.20]
20. If additional NOTAM summaries and updates are required, is coordination conducted with the DOD NOTAM coordinator at least 72 hours in advance? [OPNAVINST 3721.20]

21. Is classified information included on NOTAMs? [OPNAVINST 3721.20]

B.3 CONTROL TOWER

B.3.1 General

1. Is a daily operations log maintained by the supervisor on duty? [NAVAIR 00-80T-114]
2. Does the daily operations log contain all required information? [NAVAIR 00-80T-114]
3. Is a position log maintained for each operating position? [NAVAIR 00-80T-114]
4. Have position relief checklists been established for each supervisory/operating position and are they used? [NAVAIR 00-80T-114]
5. Are checklists established to ensure that hazardous cargo information is passed to all affected base support agencies? [OPNAVINST 3710.31]
6. Is UTC used for entries on all forms, logs and written records, and radio and landline communications? [NAVAIR 00-80T-114]
7. Is local time used for facility work schedules, daily traffic counts, and administrative forms, and correspondence? [NAVAIR 00-80T-114]
8. Does the FWS ensure that an equipment checkout is performed at the beginning of each shift and malfunctions reported to appropriate agencies? [NAVAIR 00-80T-114]
9. Is a reliable and accurate clock visible from each operating position? [NAVAIR 00-80T-114]
10. Are time checks obtained at the start of each watch? [NAVAIR 00-80T-114]
11. Are clocks set to agree with those of the approach control facility? [NAVAIR 00-80T-114]
12. Are ATC procedures and phraseology as prescribed in FAA Order 7110.65? [NAVAIR 00-80T-114]
13. Is the broadcasting of information which is available to the pilot in flight information publications held to a minimum? [NAVAIR 00-80T-114]

14. Are procedures established to ensure aircraft are kept informed of the latest reported weather and actual field conditions? [OPNAVINST 3710.7]
15. Are weather reports, advisories, and radar monitored to determine when severe weather activity is approaching the facility? [NAVAIR 00-80T-114]
16. Are PIREPs requested when required? [FAAO 7710.65]
17. Do individuals perform duties as a controller under general supervision only at those sectors or positions qualified? [NAVAIR 00-80T-114]
18. When assigned to operating positions, are trainees under the direct and constant supervision of a controller qualified on the position concerned? [NAVAIR 00-80T-114]
19. Does the OJT instructor use the same radio console as the trainee when override capability does not exist from an adjacent console? [NAVAIR 00-80T-114]
20. Does each controller possess an ATCS Certificate? [NAVAIR 00-80T-114]
21. Does each controller possess a CTO Certificate or Airman Written Test Report? [NAVAIR 00-80T-114]
22. Is the Control Tower Chief designated in writing by the ATCFO? [NAVAIR 00-80T-114]
23. Does the Control Tower Chief possess a CTO rating for the control tower assigned? [NAVAIR 00-80T-114]
24. Is the Control Tower Supervisor position normally not combined with a control position? [NAVAIR 00-80T-114]
25. Are wheels down reports completed at an appropriate point? [OPNAVINST 3710.7]
26. Is airfield lighting operated per FAAO 7110.65? [NAVAIR 00-80T-114]
27. Are light signals used for controlling vehicles only when the control tower experiences an outage of radio equipment? [NAVAIR 00-80T-114]
28. Are the conditions and/or limitations of the tower radar display operation specified by facility directive or letter of agreement, as appropriate? [NAVAIR 00-80T-114]
29. Is an airfield diagram displayed in the control tower? [NAVAIR 00-80T-114]
30. Does the airfield diagram include all required items? [NAVAIR 00-80T-114]
31. Is an airport status board displayed in the control tower? [NAVAIR 00-80T-114]
32. Does the airport status board include all required items? [NAVAIR 00-80T-114]
33. Is the tower visibility chart(s) prepared and maintained in conjunction with NAVMETOC personnel? [NAVAIR 00-80T-114]
34. Does the tower visibility chart(s) contain all required information? [NAVAIR 00-80T-114]
35. Does the Commanding Officer certify air traffic controllers to observe, record and disseminate Tower Visibility Observations? [NAVMETOC-INST 1500.3]
36. Is the qualification/certification of controllers as tower visibility observers per NAVMETOCINST 1500.3? [NAVAIR 00-80T-114/NAVMETOC-INST 1500.3]
37. Do air traffic controllers, who are required to take tower visibility observations, requalify as Tower Visibility Observers at each new duty station? [NAVMETOCINST 1500.3]
38. Are approaching/departing aircraft notified (directly or via ATIS) concerning HERO/EMCON conditions in effect? [NAVAIR 00-80T-103]
39. Are aircraft with "hung" ordnance of any type prohibited from hot refueling? [NAVAIR 00-80T-103]
40. Are explosive loaded combat aircraft prohibited from the fuel pits? [NAVAIR 00-80T-103]

NAVAIR 00-80T-114

41. Are aircraft with pods and dispensers loaded with decoy flares prohibited from hot refueling? [NAVAIR 00-80T-103]
42. Are aircraft with hung ordnance prohibited from conducting touch-and-go or FCLP training? [NAVAIR 00-80T-103]
43. Is every effort made to ensure that aircraft with hung ordnance are handled expeditiously and that flight over inhabited areas/public roadways is minimized? [NAVAIR 00-80T-103]
44. Do aircraft with hung ordnance normally have priority over routine air traffic? [NAVAIR 00-80T-103]
45. Are aircraft with externally carried unexpended ordnance prohibited from conducting touch-and-go or FCLP training when the landing pattern flight path is over inhabited areas/public roadways? [NAVAIR 00-80T-103]
46. Do cargo aircraft loaded with explosives proceed to and from the duty runway by a route that affords the greatest practical separation to inhabited buildings, combat aircraft parking area, and explosive storage areas? [NAVAIR 00-80T-103]
47. Are cargo aircraft loaded with explosives prohibited from making stops when proceeding to or from the duty runway except as necessary for safe ground operation of the aircraft? [NAVAIR 00-80T-103]
48. Is a safe emergency escape route available for tower controllers? [OPNAVINST 5100.19]
4. Do Local Controllers properly perform the duties set forth in NATOPS? [NAVAIR 00-80T-114]
5. Do Local Controllers maintain a continuous visual surveillance of their airspace and airport movement areas? [NAVAIR 00-80T-114]
6. Do Ground Controllers properly perform the duties set forth in NATOPS? [NAVAIR 00-80T-114]
7. Do Ground Controllers exercise general surveillance of the airport movement area? [NAVAIR 00-80T-114]
8. Do Flight Data operators properly perform the duties set forth in NATOPS? [NAVAIR 00-80T-114]
9. Do Clearance Delivery operators properly perform the duties set forth in NATOPS? [NAVAIR 00-80T-114]
10. Is the responsibility for updating and monitoring ATIS broadcasts and disseminating current ATIS messages assigned to a specific position of operation? [NAVAIR 00-80T-114]
11. Which Control Tower Branch operating positions, if any, have been added, deleted, combined, or integrated to meet local requirements? [NAVAIR 00-80T-114]
12. Does the control tower retain final responsibility and authority for separation and control of all aircraft in the surface area during FCLP operations? [NAVAIR 00-80T-114]
13. Where authorized, are preventive control procedures in compliance with NATOPS? [OPNAVINST 3710.7]

B.3.2 Responsibilities

1. Does the Control Tower Chief properly perform the duties and responsibilities set forth in NATOPS? [NAVAIR 00-80T-114]
2. Do Control Tower Supervisors properly perform the duties set forth in NATOPS? [NAVAIR 00-80T-114]
3. Do Control Tower Supervisors possess a CTO rating for the control tower assigned? [NAVAIR 00-80T-114]
14. Where applicable, are reduced runway separation standards in compliance with? [OPNAVINST 3710.7]
15. Where applicable, are reduced runway separation standards for "other military" services in compliance with NATOPS? [OPNAVINST 3710.7]
16. Where applicable, are procedures for intersection takeoffs in compliance with NATOPS? [OPNAVINST 3710.7]

17. Are runway braking action advisories issued in compliance with NATOPS? [OPNAVINST 3710.7]
18. Are tower controllers thoroughly indoctrinated in the external gear down indications of the aircraft normally operated from their facility? [NAVAIR 00-80T-114]
19. Workload permitting, do tower controllers closely observe each aircraft in the final stages of the landing approach? [NAVAIR 00-80T-114]
20. Do tower controllers remind pilots to check wheels down at an appropriate position in the pattern unless the pilot has previously reported wheels down? [NAVAIR 00-80T-114]
21. When using emergency and distress frequencies in an actual emergency/distress and time permits, do facility personnel identify that they are on guard frequencies? [NAVAIR 00-80T-114]
22. Is the notification of an on-station mishap as set forth by NATOPS? [NAVAIR 00-80R-14]
23. Is the notification of an off-station mishap as set forth by NATOPS? [NAVAIR 00-80R14]
24. Is the crash grid map system prepared/used as set forth by NATOPS? [NAVAIR 00-80R-14]
25. Is a crash locator grid readily available at all stations on the primary or secondary aircraft Fire and Rescue Network? [NAVAIR 00-80R-14]
26. Do controllers refrain from transmitting to aircraft during the most critical phases of flight — final approach, touchdown, landing roll, takeoff and initial climb to the first turn away from the airfield unless conditions affecting safety of flight are observed or known to exist? [NAVAIR 00-80T-114]
27. Are local operating procedures prescribed for OLS rheostat positioning to facilitate setting the optimum intensity during varying light conditions? [NAVAIR 00-80T-114]

B.3.3 Equipment

1. Is the Control Tower equipped as specified in NATOPS? [NAVAIR 00-80T-114]
2. Do two-way direct communications exist between the control tower and LSO/RDO during FCLP operations? [NAVAIR 00-80T-114]
3. Are telephones in the control tower assigned unpublished numbers or modified so as not to ring in the control tower? [NAVAIR 00-80T-114]
4. If the airfield has a PAPI system, is it manually controlled from the control tower? [NAVAIR 51-50AAA-2]
5. If installed, are the waveoff lights on the OLS and the wheels-up waveoff lights interconnected and controllable from a single control in control tower? [NAVAIR 00-80T-114/NAVAIR 51-50AAA-2]
6. Do daily equipment checks ensure the tower radar display system accuracy and proper display alignment? [NAVAIR 00-80T-114]
7. Is the mobile/portable control tower under the operational custody of the ATCFO? [NAVAIR 00-80T-114]
8. Is BRANDS site unique data (SUDs) incorporated into the facility's operational software program? [NAVAIR 00-80T-114]
9. Are changes to BRANDS SUDs submitted to NAWC AD (4.5.8) as set forth in the Shore CCSB Policy and Procedures Manual? [NAVAIR 00-80T-114]
10. Are two pair of binoculars (7 x 50 power or stronger) available in the control tower? [NAVAIR 00-80T-114]
11. Is a dedicated emergency fire and rescue radio network provided? [NAVAIR 00-80T-114]
12. Is a fixed base station for the fire and rescue radio network installed in the control tower? [NAVAIR 00-80T-114]
13. Is a direct wire primary aircraft emergency alarm intercommunication system (crash phone) installed in the control tower and at other locations set forth by NATOPS? [NAVAIR 00-80R-14]

NAVAIR 00-80T-114

14. Is a secondary aircraft emergency alarm intercommunication system installed as set forth by NATOPS? [NAVAIR 00-80R-14]
15. Are the primary and secondary aircraft emergency alarm intercommunication systems (crash phone) tested daily? [NAVAIR 00-80R-14]
16. Are there evacuation alarms for remote sites near the runways (PAR/PALS/TACAN, etc.), are they tested daily and are the results logged? [NAVAIR 00-80T-114]

B.3.4 Airfield

1. If installed, is the OLS turned on at all times when the associated runway is in use? [NAVAIR 00-80T-114]
2. Are mobile shelters/communication trailers used by LSO/RDO moved outside the 750-foot lateral clearance zone when FCLP operations have been completed or equipment is not in use? [NAVAIR 00-80T-114]
3. Is unidirectional arresting gear de-rigged and cables removed prior to runway use when engagement direction is opposite runway of intended use? [NAVAIR 00-80T-114]
4. If unidirectional arresting gear cannot be promptly de-rigged and cables removed for emergencies requiring immediate landing, do controllers inform the pilot of the arresting gear hazard? [NAVAIR 00-80T-114]
5. Are the arresting gear "out of battery" lights visible from the tower? [E-28 Service Change No. 31]

B.4 RADAR

B.4.1 General

1. Is a daily operations log maintained by the supervisor on duty? [NAVAIR 00-80T-114]
2. Does the daily operations log contain all required information? [NAVAIR 00-80T-114]

3. Is a position log maintained for each operating position? [NAVAIR 00-80T-114]
4. Have position relief checklists been established for each supervisory/operating position and are they used? [NAVAIR 00-80T-114]
5. Are checklists established to ensure that hazardous cargo information is passed to all affected base support agencies? [OPNAVINST 3710.31]
6. Is Coordinated Universal Time (UTC) used for entries on all forms, logs and written records, and radio and landline communications? [NAVAIR 00-80T-114]
7. Is local time used for facility work schedules, daily traffic counts, and administrative forms and correspondence? [NAVAIR 00-80T-114]
8. Does the FWS ensure that an equipment checkout is performed at the beginning of each shift and malfunctions reported to appropriate agencies? [NAVAIR 00-80T-114]
9. Is a reliable and accurate clock visible from each operating position? [NAVAIR 00-80T-114]
10. Are time checks obtained at the start of each watch? [NAVAIR 00-80T-114]
11. At non-approach control facilities, are clocks set to agree with those of the approach control facility? [NAVAIR 00-80T-114]
12. At approach control facilities, are clocks set to agree with those of the en route facility? [NAVAIR 00-80T-114]
13. Are ATC procedures and phraseology as prescribed in FAA Order 7110.65? [NAVAIR 00-80T-114]
14. Is the broadcasting of information which is available to the pilot in flight information publications held to a minimum? [NAVAIR 00-80T-114]
15. Are procedures established to ensure aircraft are kept informed of the latest reported weather and actual field conditions? [OPNAVINST 3710.7]
16. Are weather reports, advisories, and radar monitored to determine when severe weather activity is approaching the facility? [NAVAIR 00-80T-114]

17. Are PIREPs requested when required? [FAAO 7110.65]
18. Do individuals perform duties as a controller under general supervision only at those sectors or positions qualified? [NAVAIR 00-80T-114]
19. When assigned to operating positions, are trainees under the direct and constant supervision of a controller qualified on the position concerned? [NAVAIR 00-80T-114]
20. Does the OJT instructor use the same radio console as the trainee when override capability does not exist from an adjacent console? [NAVAIR 00-80T-114]
21. Does each controller possess an ATCS Certificate? [NAVAIR 00-80T-114]
22. Does each controller possess a CTO Certificate or Airman Written Test Report? [NAVAIR 00-80T-114]
23. Does the Radar Chief possess the appropriate ATCS certification for the facility assigned? [NAVAIR 00-80T-114]
24. Is the Radar Chief designated in writing by the ATCFO? [NAVAIR 00-80T-114]
25. Are Approach Controllers TRACON-rated? [NAVAIR 00-80T-114]
26. Which Radar Branch operating positions, if any, have been added, deleted, or combined to meet local requirements? [NAVAIR 00-80T-114]
27. Are wheels down reports completed at an appropriate point? [OPNAVINST 3710.7]
28. When a Ground Controlled Approach (GCA) unit is located on an airport which is provided IFR service by an FAA facility, are details concerning the release of arriving and/or departing aircraft to the unit contained in a letter of agreement? [FAAO 7610.4]
29. At non-remoted radar facilities, is the radar manned for effective control of aircraft on 15-minute notice after the facility has been alerted of impending instrument operations? [NAVAIR 00-80T-114]
30. Are unauthorized scope markings used in lieu of an adequate video mapper or electronic cursor? [NAVAIR 00-80T-114]
31. Is video map data limited to reduce scope clutter and increase operational efficiency? [NAVAIR 00-80T-114]
32. Does each video map display a minimum of two permanent echoes? [NAVAIR 00-80T-114]
33. To the extent practicable, is fix and/or video map accuracy verified with position reports made by pilots, by cross-reference to airborne navigation equipment or known geographic positions? [NAVAIR 00-80T-114]
34. Is a usable target return maintained along the entire airway/route or arrival/departure control routes for which radar service is provided? [NAVAIR 00-80T-114]
35. Does the surveillance approach course line coincide nearly as practicable with the runway center-line extended? [NAVAIR 00-80T-114]

B.4.2 Responsibilities

1. Does the Radar Chief properly perform the duties and responsibilities set forth in NATOPS? [NAVAIR 00-80T-114]
2. Do Radar Supervisors properly perform the duties set forth in NATOPS? [NAVAIR 00-80T-114]
3. Are Radar Supervisors qualified on all radar operating positions and do they possess the ATCS rating for the facility assigned? [NAVAIR 00-80T-114]
4. Is the Radar Supervisor position normally not combined with a control position? [NAVAIR 00-80T-114]
5. Do Approach Controllers properly perform the duties set forth in NATOPS? [NAVAIR 00-80T-114]
6. Do Departure Controllers properly perform the duties set forth in NATOPS? [NAVAIR 00-80T-114]
7. Do Flight Data operators properly perform the duties set forth in NATOPS? [NAVAIR 00-80T-114]

NAVAIR 00-80T-114

8. Do Final Controllers properly perform the duties set forth in NATOPS? [NAVAIR 00-80T-114]
9. Are trainees assigned to final control positions only when the weather is at or greater than 1000/3? [NAVAIR 00-80T-114]
10. Has the ATCFO prescribed weather conditions under which a trainee nearing qualification or who has achieved a prior RFC rating may be authorized to conduct a radar approach? [NAVAIR 00-80T-114]
11. Does the Radar Chief provide written approval when a specific trainee is authorized to use these reduced weather conditions? [NAVAIR 00-80T-114]
12. If equipped with an AN/SPN-42T, do procedures conform as closely as possible with CV NATOPS? [NAVAIR 00-80T-114]
13. If applicable, is standards CCA phraseology used when a pilot specifically requests a PALS approach? [NAVAIR 00-80T-114]
14. Is controller/ATC supervisor determination of radar acceptability usurped by non-controller personnel? [NAVAIR 00-80T-114]
15. Where surveillance approach guidance is provided to an airport for a circling approach, is approach guidance discontinued at a point 1 mile from the airport, the MAP, or at a pre-established point beyond which radar or communications coverage ceases to exist? [NAVAIR 00-80T-114]
16. If PAR azimuth is used to conduct a surveillance approach, is the pilot informed that mileage information will be from touchdown? [NAVAIR 00-80T-114]
17. If PAR approaches are conducted when ASR is unusable, does a non-radar instrument approach position the aircraft over a NAVAID/DME fix within PAR coverage or does an adjacent radar facility provide a direct radar handoff to the PAR controller? [NAVAIR 00-80T-114]
18. Are procedures for Final Approach Abnormalities during radar approaches in compliance with NATOPS? [OPNAVINST 3710.7]
19. Are mandatory missed approach procedures in compliance with NATOPS? [OPNAVINST 3710.7]
20. When using emergency and distress frequencies in an actual emergency/distress and time permits, do facility personnel identify that they are on guard frequencies? [NAVAIR 00-80T-114]
21. Do controllers refrain from transmitting to aircraft during the most critical phases of flight — final approach, touchdown, landing roll, takeoff and initial climb to the first turn away from the airfield unless conditions affecting safety of flight are observed or known to exist? [NAVAIR 00-80T-114]

B.4.3 Equipment

1. Is the radar facility equipped as specified in NATOPS? [NAVAIR 00-80T-114]
2. At approach control facilities, does radar mapping capability meet minimum requirements? [NAVAIR 00-80T-114]
3. Is RATCF DAIR/DAIR site unique data (SUDs) incorporated into the facility's operational software program? [NAVAIR 00-80T-114]
4. Are changes to RATCF DIAR/DAIR SUDs submitted to NAWC AD (4.5.8) as set forth in the Shore CCSB Policy and Procedures Manual? [NAVAIR 00-80T-114]
5. Is radar performance verified on a periodic basis by a FAA flight inspection? Are reports of these inspections on file in the ATC Facility? [NAVAIR 00-80T-114]
6. Are primary and secondary radar performance checks and fix/map accuracy checks made on a continuous basis, but at least once each watch? [NAVAIR 00-80T-114]
7. Is PAR course deviation within 30 feet or 0.2 degree, whichever is greater, at the runway threshold? [NAVAIR 00-80T-114]
8. Is the PAR glidepath angle within 0.2 degree of the published angle? [NAVAIR 00-80T-114]
9. Is the PAR radar (azimuth and elevation) capable of detecting an aircraft on the runway centerline extended at an altitude of 2,000 feet and distance equal to the maximum scope range? [NAVAIR 00-80T-114]

B.5 TRAINING

B.5.1 General

1. During practical controller certification examinations, is a qualified controller responsible for the control of air traffic assigned to the position of operation? [NAVAIR 00-80T-114]
2. When assigned to operating positions, are trainees under the direct and constant supervision of a controller qualified on the position concerned? [NAVAIR 00-80T-114]
3. Does the OJT instructor use the same radio console as the trainee when override capability does not exist from an adjacent console? [NAVAIR 00-80T-114]
4. Is crosstraining conducted on all positions and equipment to the maximum extent possible? [NAVAIR 00-80T-114]
5. Are procedures prescribed concerning the mixing of live and simulated targets on the same indicator? [NAVAIR 00-80T-114]
6. Is the extent of each controller qualification level readily available to supervisory personnel? [NAVAIR 00-80T-114]
7. Do supervisors at all levels in the ATC Facility continuously observe and evaluate controllers? [NAVAIR 00-80T-114]
8. Has the ATCF established a training and standardization program to ensure individual and watch team training is accomplished? [NAVAIR 00-80T-114]
9. Is the training and standardization program based on facility requirements and reviewed annually? [NAVAIR 00-80T-114]
10. Does the facility training and standardization program include applicable subjects required for controller certification as set forth in FARs? [FAR 65]
11. Is the Training Chief/EPDS designated in writing by the ATCFO? [NAVAIR 00-80T-114]
12. Does the Training Chief possess all ATCS ratings and an FWS designation at the assigned facility? [NAVAIR 00-80T-114]
13. Does the Training Chief properly perform the duties and responsibilities set forth in NATOPS? [NAVAIR 00-80T-114]
14. Is there an indoctrination program for newly assigned air traffic controllers? [NAVAIR 00-80T-114]
15. Are training schedules retained for one year? [NAVAIR 00-80T-114]
16. Does the facility training program consist of an ATC Facility Manual, Local Qualification Standards (LQS), and Lesson Topic Guides (LTG) as set forth by NATOPS? [NAVAIR 00-80T-114]
17. Does the facility training program encompass each operating/supervisory position within the facility? [NAVAIR 00-80T-114]
18. Are training lectures conducted which cover operational characteristics and limitations of aircraft normally served by the facility? [NAVAIR 00-80T-114]
19. Are training lectures conducted which cover physiological and psychological factors incident to flight? [NAVAIR 00-80T-114]
20. Are controllers instructing OJT qualified and experienced at the position in which the training is conducted? [NAVAIR 00-80T-114]
21. Are controllers instructing OJT designated an OJT Instructor? [NAVAIR 00-80T-114]
22. Are trainees allotted productive OJT time at each position for which qualification is required? [NAVAIR 00-80T-114]
23. Are time limitations for position qualification based on the maximum productive training hours allotted for that position (except RFC which is to be based on maximum number of approaches)? [NAVAIR 00-80T-114]
24. When a trainee reaches 70% of the maximum allotted position OJT time, are determinations made as set forth in NATOPS? [NAVAIR 00-80T-114, [paragraph 8.2.7.2](#)]

NAVAIR 00-80T-114

25. Has the ATCFO prescribed monthly currency requirements for each operating position? [NAVAIR 00-80T-114]
26. Are simulator approaches counted for currency only by the controller making the approach? [NAVAIR 00-80T-114]
27. Do PALS final controllers maintain currency as described in NATOPS for RFC? [NAVAIR 00-80T-114]
28. Has the ATCFO instituted procedures for monitoring air traffic controller currency? [NAVAIR 00-80T-114]
29. Is each individual who is facility rated/position qualified, or designated as a supervisor, evaluated at least annually? [NAVAIR 00-80T-114]
30. Are supervisors administered written proficiency examinations annually? [NAVAIR 00-80T-114]
31. In case of unsatisfactory performance during an annual evaluation, is the person evaluated made aware of deficiencies and reevaluated within 30 days? [NAVAIR 00-80T-114]
32. Is tape talk conducted for trainees at the 25% level of PTH (and as needed thereafter), and is it documented in the trainees ATC Certification/Qualification Record? [NAVAIR 00-80T-114]
33. Are controllers trained in all functions of the ATCF? [NAVAIR 00-80T-114]
34. Do Branch Chiefs qualify controllers on operating positions as set forth in NATOPS? [NAVAIR 00-80T-114]
35. Are branch supervisors designated by the ATCFO? [NAVAIR 00-80T-114]
36. Are the forms in NATOPS used as transmittals to PSD to ensure standardized entry of qualifications on page 4 of service records? [NAVAIR 00-80T-114]
37. Is a copy of the appropriate qualification form made a permanent part of the individual's ATC Certification/Qualification Record? [NAVAIR 00-80T-114]
38. Is the ATC Certification/Qualification Record maintained as set forth in NATOPS? [NAVAIR 00-80T-114]
39. Is the ATC Certification/Qualification Record forwarded to an individual's next command? [NAVAIR 00-80T-114]
40. When a controller transfers subsequent to ATCS revocation, separates, transfers to Fleet Reserve or retires, is the ATC Certification/Qualification Record retained at the ATCF for six months? [NAVAIR 00-80T-114]

B.5.2 Certification/Suspension/Revocation

1. Has a CTO Examiner (Primary and/or Alternate) been designated? [FAAO 7220.1]
2. Is a permanent record of air traffic controller ratings entered on page 4 of the service record? [NAVAIR 00-80T-114]
3. Are individual position qualifications entered in the individual training record? [NAVAIR 00-80T-114]
4. When approved by the ATCFO, is the ATCS rating recorded on the ATCS Certificate, the Certification/Qualification Record, and the individual service record? [NAVAIR 00-80T-114]
5. When a controller is eligible for an ATCS rating, does the ATCS Examiner administer appropriate examinations? [NAVAIR 00-80T-114]
6. Are the types of ATCS ratings used in conformance with NATOPS? [NAVAIR 00-80T-114]
7. At those facilities where the TRACON or RATCF rating is applicable, is radar final controller normally a position qualification? [NAVAIR 00-80T-114]
8. Has the commanding officer designated an individual who may suspend or revoke an ATCS facility rating? If so, who has been designated? [NAVAIR 00-80T-114]
9. In every case of ATCS Certificate revocation, is the individual concerned afforded an opportunity to submit a statement to accompany the recommendation for revocation? [NAVAIR 00-80T-114]

10. Are revocations of ATCS ratings reflected on the ATCS Certificate, in the Certification/Qualification Record, and in the individual service record? [NAVAIR 00-80T-114]
11. Are ATCS rating suspensions properly recorded in the Certification/Qualification Record? [NAVAIR 00-80T-114]
12. Does facility management suspend controllers from participating in ATC duties when notified by CAAC personnel of alcohol dependency or drug abuse by controllers? [NAVAIR 00-80T-114]
13. Are ATCS ratings suspended when controller performance of duties adversely affects the facility efficiency or safety of flight? [NAVAIR 00-80T-114]
14. If a decision is made to revoke an ATCS rating, is the individual promptly notified in writing? [NAVAIR 00-80T-114]
15. If a decision is made to suspend an ATCS rating, position qualification and/or supervisory designation, is the individual promptly notified in writing? [NAVAIR 00-80T-114]
16. In cases where an ATCS rating is reissued following suspension, has the controller requalified on all applicable positions within the time limitations in place? [NAVAIR 00-80T-114]
17. Are cases where revocation of ATCS Certificate are considered in compliance with NATOPS? [NAVAIR 00-80T-114]
18. When the ATCFO determines that a recommendation for revocation of ATCS Certificate is appropriate, are associated ratings immediately suspended? [NAVAIR 00-80T-114]
19. When the ATCFO determines that a recommendation for revocation of ATCS Certificate is appropriate, is the controller concerned afforded 3 working days in which to submit a written statement concerning the recommendation or to decline the opportunity in writing? [NAVAIR 00-80T-114]
20. Are recommendations for revocation of an ATCS Certificate submitted from the Commanding Officer to CNO (N785F) via the type commander, with a copy of the ISIC (if other than type commander)? [NAVAIR 00-80T-114]
21. Do recommendations for revocation of ATCS Certificate contain information required by NATOPS? [NAVAIR 00-80T-114]
22. Upon receipt of CNO approval of revocation of the ATCS Certificate, does the Commanding Officer notify the individual and make the appropriate service record page 4 entry? [NAVAIR 00-80T-114]
23. Upon receipt of CNO approval of revocation of the ATCS Certificate, is eligibility for advancement (i.e., recommendation for advancement) removed for Navy controllers? [NAVAIR 00-80T-114]
24. Upon receipt of CNO approval of revocation of the ATCS Certificate is exam invalidation directed for Navy controllers who are "selectees" for advancement? [NAVAIR 00-80T-114]
25. Is the striker designation removed for revocations of ATCS Certificate of nonrated (E3 and below) personnel? [NAVAIR 00-80T-114]
26. If involved in any ATCS Certificate reinstatement action, does the ATCFO ensure that the applicant is aware that the request must be submitted via the chain of command via an aviation type commander to CNO (N785F)? [NAVAIR 00-80T-114]

B.6 FACS FAC

B.6.1 General

1. Is a daily operations log maintained by the supervisor on duty? [NAVAIR 00-80T-114]
2. Does the daily operations log contain all required information? [NAVAIR 00-80T-114]
3. Is a position log maintained for each operating position? [NAVAIR 00-80T-114]
4. Have position relief checklists been established for each supervisory/operating position and are they used? [NAVAIR 00-80T-114]

NAVAIR 00-80T-114

5. Are checklists established to ensure that hazardous cargo information is passed to all affected base support agencies? [OPNAVINST 3710.31]
6. Is Coordinated Universal Time (UTC) used for entries on all forms, logs and written records, and radio and landline communications? [NAVAIR 00-80T-114]
7. Is local time used for facility work schedules, daily traffic counts, and administrative form and correspondence? [NAVAIR 00-80T-114]
8. Does the FWS ensure that an equipment checkout is performed at the beginning of each shift and malfunctions reported to appropriate agencies? [NAVAIR 00-80T-114]
9. Is a reliable and accurate clock visible from each operating position? [NAVAIR 00-80T-114]
10. Are time checks obtained at the start of each watch? [NAVAIR 00-80T-114]
11. Are clocks set to agree with those of the host en route facility? [NAVAIR 00-80T-114]
12. Are ATC procedures and phraseology as prescribed in FAA Order 7110.65? [NAVAIR 00-80T-114]
13. Is the broadcasting of information which is available to the pilot in flight information publications held to a minimum? [NAVAIR 00-80T-114]
14. Are procedures established to ensure aircraft are kept informed of the latest reported weather and actual field conditions? [OPNAVINST 3710.7]
15. Are weather reports, advisories, and radar monitored to determine when severe weather activity is approaching the facility? [NAVAIR 00-80T-114]
16. Are PIREPs requested when required? [FAAO 7110.65]
17. Do individuals perform duties as a controller under general supervision only at those sectors or positions qualified? [NAVAIR 00-80T-114]
18. When assigned to operating positions, are trainees under the direct and constant supervision of a controller qualified on the position concerned? [NAVAIR 00-80T-114]
19. Does the OJT instructor use the same radio console as the trainee when override capability does not exist from an adjacent console? [NAVAIR 00-80T-114]
20. Does each controller possess an ATCS Certificate? [NAVAIR 00-80T-114]
21. Does each controller possess a CTO Certificate or Airman Written Test Report? [NAVAIR 00-80T-114]
22. Is the FACSFAC structured to meet the operational needs of its specific area in direct support of fleet requirements? [NAVAIR 00-80T-114]
23. Does the Airspace Officer properly perform the duties set forth in NATOPS? [NAVAIR 00-80T-114]
24. Does the ATCFO properly perform the duties and responsibilities set forth in NATOPS? [NAVAIR 00-80T-114]
25. Does the Airspace Chief properly perform the duties and responsibilities set forth in NATOPS? [NAVAIR 00-80T-114]
26. Is the Airspace Chief a graduate of an approved military airspace management course? [NAVAIR 00-80T-114]
27. Does the Airspace Chief possess the appropriate ATCS Certification for the FACSFAC assigned? [NAVAIR 00-80T-114]
28. Does the ROCC (Radar) Chief properly perform the duties and responsibilities set forth in NATOPS? [NAVAIR 00-80T-114]
29. Is the SOCC (Surface) Chief qualified per NAEDTRA 43411-3 PQS for the FACSFAC assigned? [NAVAIR 00-80T-114]
30. Does the Facility Watch Supervisor (FWS) properly perform the duties and responsibilities set forth in NATOPS? [NAVAIR 00-80T-114]

31. Does the FWS remain apprised of operational and equipment/systems problems? [NAVAIR 00-80T-114]
32. Does the ROCC (Radar) Supervisor properly perform the duties and responsibilities set forth in NATOPS? [NAVAIR 00-80T-114]
33. Is the SOCC (Surface) Supervisor qualified per NAVEDTRA 43411-3 PQS for the FACSFC assigned? [NAVAIR 00-80T-114]
34. Do ROCC Sector Controllers properly perform the duties set forth in NATOPS? [NAVAIR 00-80T-114]
35. Do ROCC Assistant Sector Controllers properly perform the duties set forth in NATOPS? [NAVAIR 00-80T-114]
36. Do ROCC Flight Data operators properly perform the duties set forth in NATOPS? [NAVAIR 00-80T-114]
37. Have FACSFC ATC Facility certification requirements been met? [NAVAIR 00-80T-114]
38. When a Service "B"/Dial LABS/AIS equipment outage occurs or is anticipated, are ARTCC, FSS and the repair facility notified? [NAVAIR 00-80T-114]
39. Are Service "B"/Dial LABS/AIS outages in excess of 24 hours reported to the Service "B" Program Manager? [NAVAIR 00-80T-114]
40. When aircraft carrying hazardous cargo are declared missing or overdue, is the appropriate RCC informed of the nature of the hazardous cargo and of positive measures required to accomplish the rescue? [OPNAVINST 3710.31]
41. Are flight plan and flight movement messages completed/processed in accordance with procedures outlined in FAAO 7110.10?
42. Are modifications to a written flight plan made only with the concurrence of the pilot in command? [NAVAIR 00-80T-114]
43. Are copies of all flight plan forms, flight schedules, OPS logs, aircraft clearance/arrival reports and other associated forms filed with flight plans retained for a period of 3 months? [NAVAIR 00-80T-114]
44. Has the FACSFC conducted an annual validation/verification of associated DOD FLIP information? [NAVAIR 00-80T-114]
45. Are aeronautical data and facility information accurately published in flight information publications? [NAVAIR 00-80T-114]
46. Are procedures established to ensure that facility information in publications is accurate and complete? [NAVAIR 00-80T-114]
47. Are FLIP changes submitted in order to coincide with publication cycles? [OPNAVINST 3721.20]
48. Does the Radar Chief possess the appropriate ATCS certification for the facility assigned? [NAVAIR 00-80T-114]
49. Is the Radar Chief designated in writing by the ATCFO? [NAVAIR 00-80T-114]
50. Which operating positions, if any, have been added, deleted, or combined to meet local requirements? [NAVAIR 00-80T-114]
51. Are unauthorized scope markings used in lieu of an adequate video mapper or electronic cursor? [NAVAIR 00-80T-114]
52. Is video map data limited to reduce scope clutter and increase operational efficiency? [NAVAIR 00-80T-114]
53. Does each video map display a minimum of two permanent echoes? [NAVAIR 00-80T-114]
54. To the extent practicable, is fix and/or video map accuracy verified with position reports made by pilots, by cross-reference to airborne navigation equipment or known geographic positions? [NAVAIR 00-80T-114]
55. Is a usable target return maintained along the entire airway/route or arrival/departure control routes for which radar service is provided? [NAVAIR 00-80T-114]

NAVAIR 00-80T-114

56. Is radar performance verified on a periodic basis by a FAA flight inspection? Are reports of these inspections on file in the ATC Facility? [NAVAIR 00-80T-114]
57. Are primary and secondary radar performance checks made on a continuous basis, but at least once each watch? [NAVAIR 00-80T-114]
58. When using emergency and distress frequencies in an actual emergency/distress and time permits, do facility personnel identify that they are on guard frequencies? [NAVAIR 00-80T-114]
10. If a RAC, does the activity maintain SUA usage documentation and act as the interface for operational matters dealing with non-DON activities? [OPNAVINST 3770.2]
11. If a RAC, does the activity serve as DON focal point and central clearinghouse for all SUA matters that pertain to any DON activity within their regional area of responsibility? [OPNAVINST 3770.2]
12. If a RAC, does the activity perform its duties as delineated in OPNAVINST 3770.2? [OPNAVINST 3770.2]

B.7 AIRSPACE MANAGEMENT

B.7.1 General

1. Are periodic meetings on airspace usage held with FAA? [OPNAVINST 3770.2]
2. Is modification (expansion or reduction) of ATC airspace responsibility approved by CNO? [NAVAIR 00-80T-114]
3. Are the procedures used to initiate rulemaking actions per FAR par 11? [FAA Order 7400.2]
4. Are coordinates submitted or used in airspace matters in North American Datum 1983 (NAD 83)? [FAA Order 7400.2]
5. Are the geographic coordinates of a NAVAID used as a reference point in a controlled airspace description provided in degrees, minutes, and seconds? [FAA Order 7400.2]
6. Are charted reporting points established IAW FAAO 7400.2? [FAA Order 7400.2]
7. Do names assigned for waypoints, intersections, ATC coordination, and DME fixes not collocated with a NAVAID consist of a single five-letter pronounceable name? [FAA Order 7400.2]
8. Are new airspace requirements submitted to the cognizant RAC for consolidation and submission to the appropriate TYCOM? [OPNAVINST 3770.2]
9. If a RAC, does the activity serve as the central regional coordination point for scheduling and controlling SUA? [OPNAVINST 3770.2]
13. Has the activity designated an individual to serve as Command Airspace Liaison Officer (CALO)? [OPNAVINST 3770.2]
14. If applicable, does the CALO perform the duties as delineated in OPNAVINST 3770.2? [OPNAVINST 3770.2]
15. If applicable, are petitions to the FAA Administrator for review, extension, or revision of determinations issued by FAA regional officials submitted to CNO (N785F) via the cognizant NAVREP? [OPNAVINST 3770.2]
16. If applicable, are petitions to the FAA Administrator for reconsideration of a FAA Headquarters administrative denial submitted to CNO (N785F) by the Chain of command, with a copy to the cognizant NAVREP? [OPNAVINST 3770.2]
17. Are procedures governing ATCAA operations specified in letters of agreement between local military commands and the cognizant ATC facility? [OPNAVINST 3770.2]
18. In the case of ATCAA identification, is coordination effected between adjacent ATC facilities to avoid use of similar sounding names? [OPNAVINST 3770.2]
19. Do ATCAA requirements comply with OPNAVINST 3770.2? [OPNAVINST 3770.2]
20. Are MTRs established or modified IAW FAA Order 7610.4? [OPNAVINST 3770.2]
21. If an originating activity, are MTRs visually surveyed prior to submission for publication/annually to confirm existing obstructions/locate new obstructions? [OPNAVINST 3770.2]

22. Are noise sensitive areas (e.g., wilderness areas, wildlife refuges) avoided in the development of IR or VR routes and additional SUA? [OPNAVINST 3770.2]
23. Do proposals for new or revised MTRs comply with OPNAVINST 5090.1? [OPNAVINST 3770.2]
24. Do facilities that schedule Military Training Routes (IR routes) maintain records of IR usage in terms of individual aircraft operations for the preceding calendar year? [FAAO 7610.4]
25. Do facilities that schedule Military Training Routes (IR/VR routes) coordinate planned utilization of IR/VR routes with their tie-in FSS? [FAAO 7610.4]
26. Do facilities that schedule Military Training Routes (VR routes) have established procedures to ensure all VR users are knowledgeable of the respective route procedures? [FAAO 7610.4]
27. Are all letters of agreement/procedures pertaining to airspace usage signed by the commanding officer of the naval activity concerned and the RAC? [OPNAVINST 3770.2]
28. Are all letters of agreement/procedure, prior to final approval, forwarded to the NAVREP (or the cognizant authority for which the airspace was designated) for review to determine if the agreement alters airspace? [OPNAVINST 3770.2]
29. Are copies of all letters of agreement/procedure forwarded to the cognizant NAVREP for information? [OPNAVINST 3770.2]
30. Are requests for installation, commissioning, decommissioning, removal, or relocation of NAVAIDS submitted via the appropriate chain of command to CNO (N785F)? After approval is the NAVREP notified to initiate appropriate airspace action? [OPNAVINST 3770.2]
31. Are proposals involving the establishment, relocation or discontinuance of NAVAIDS forwarded to the FAA Regional Air Traffic Division for non-rulemaking study? [FAA Order 7400.2]
32. Is a daily recording of SUA, ATCAA and MTR usage including a "Record of release" maintained in accordance with OPNAVINST 3770.2? [OPNAVINST 3770.2]
33. Is annual (CY basis) MTR usage reported by 20 January to NAVREP with information copy to TYCOM and RAC? [OPNAVINST 3770.2]
34. Are SUA/ATCAA and MTR usage reports maintained at the command for three years? [OPNAVINST 3770.2]

B.7.2 Special Use Airspace

1. At those facilities that exercise air traffic control in airspace that contains an ADIZ boundary, are procedures in place to ensure personnel forward specific information dealing with flight plans, position reports, penetration reports, departure times, and other information on aircraft that propose to operate or are operating within the ADIZ to the appropriate ARTCC that provides Aircraft Movement Information Service (AMIS)? [FAAO 7610.4]
2. Do letters of agreement/procedure concerning special use airspace contain scheduling and activation/deactivation procedures, as well as activation/deactivation times? [FAAO 7610.4]
3. Are procedures governing operations within ATCAA's and MOA's specified in letters of agreement with the controlling agency? [FAAO 7610.4]
4. When designated as the "scheduling agency" for a MOA/ATCAA, does the facility establish a real-time activity schedule indicating airspace use times and forward the schedule and any subsequent changes to the controlling agency? [FAAO 7610.4]
5. When designated as the "scheduling agency" for a MOA/ATCAA, has the facility developed procedures with the military using units to ensure that they inform the scheduling agency, as soon as possible, of any periods of nonuse (1 hour or longer) after the initial schedule has been established? [FAAO 7610.4]
6. Is special use airspace designated, modified, or revoked IAW the policy, procedures, and criteria contained in FAAO 7400.2? [FAA Order 7400.2]

7. Prior to submission for approval, are SUA proposals coordinated with locally affected ATC facilities and military units, local FAA representatives/liaison officers (where assigned), and the ARTCC having jurisdiction over the affected airspace? [FAA Order 7400.2]
8. If applicable, when was the last FAA SUA Review conducted? [FAA Order 7400.2]
9. If applicable, is the annual SUA utilization report submitted IAW FAAO 7400.2? [FAA Order 7400.2]
10. Is annual (FY basis) SUA/ATCAA usage reported by 1 December to NAVREP with information copy to TYCOM and RAC? [OPNAVINST 3770.2]
11. For reporting annual utilization, is ATCAA usage reported in conjunction with associated MOA (unless a stand-alone ATCAA)? [OPNAVINST 3770.2]
12. Under the joint-use concept, is SUA released to other airspace users whenever the airspace is not required? [OPNAVINST 3770.2]
13. Are joint-use letters of procedure implemented between the using agency and controlling agency in regard to SUA? [OPNAVINST 3770.2]
14. Do joint-use letters of procedure include provisions for preemptive use of warning areas by the using agency? [OPNAVINST 3770.2]
15. Unless it is impractical because of the area's small size, location or high degree of usage, is SUA designated for joint use? [OPNAVINST 3770.2]
16. If a Using Agency, is SUA made available for the conduct of operations or training by other agencies on a shared-use basis, provided such operations or training can be safely contained within the airspace and not derogate the mission of the Using Agency? [OPNAVINST 3770.2]
17. If SUA is designated for part-time use by NOTAM, have the prerequisites of OPNAVINST 3770.2 been met? [OPNAVINST 3770.2]
18. Are requests for designation, establishment, alteration, or revocation of SUA approved by the TYCOM? [OPNAVINST 3770.2]
19. After approval, are requests for designation, establishment, alteration, or revocation of SUA submitted to the appropriate FAA regional headquarters via the cognizant NAVREP? [OPNAVINST 3770.2]
20. If applicable, are warning area times of use established by NOTAM or a special time of use other than continuous? [OPNAVINST 3770.2]
21. Is the volume and time of use of SUA the absolute minimum required to contain the user activities including safety zones? [OPNAVINST 3770.2]
22. Are environmental factors considered at the inception and development of SUA plans, programs, and actions? Is certification/documentation of environmental effect in compliance with OPNAVINST 5090.1? [OPNAVINST 3770.2]

B.7.3 Terminal Airspace

1. Are reviews of proposed construction or alteration of structures affecting navigable airspace expeditiously forwarded to the NAVREP in the event an aeronautical objection is to be registered? [OPNAVINST 3770.2]
2. Do reviews of proposed construction or alteration of structures affecting navigable airspace include evaluation of aeronautical effect as well as evaluation of electromagnetic effect? [OPNAVINST 3770.2]
3. Are obstruction standards in FAR 77.28 applied to existing and proposed man-made objects including mobile objects, objects of natural growth, and terrain wherever they may be located? [FAA Order 7400.2]
4. When responding to notices of proposed construction, are determinations made with respect to impact on aeronautical operations and procedures, airport operations and efficiency, and/or air navigation facilities as well as line-of-sight and physical or electromagnetic interference effect of the proposal on the use of the navigable airspace and the operation of air navigation facilities? [FAA Order 7400.2]

5. Is the marking and lighting of Navy-owned obstructions to air navigation IAW standards in Advisory Circular 70/7460-1? [FAA Order 7400.2]
6. Is the FAA given reasonable prior notice if the runway layout is substantially altered? [FAA Order 7400.2]
7. Does the ATCFO ensure that the command be particularly sensitive to airport projects or airport layout plan changes which would, if accomplished, lead to the relocation, replacement, or modification of ATC, NAVAID and communications facilities? [FAA Order 7400.2]
8. Does terminal airspace supporting ATCF operations meet the general IFR and VFR airspace requirement guidelines presented in FAAO 7400.2? [FAA Order 7400.2]
9. When responding to notices of landing area (i.e., airport) proposals, is an airspace review conducted to evaluate the effect on the safe and efficient utilization of airspace and the effect that such proposals may have on the movement and control of air traffic, associated resources and ATC program planning? [FAA Order 7400.2]
10. Is controlled airspace in terminal areas designated, modified, or discontinued IAW the policy, procedures, and criteria contained in FAAO 7400.2? [FAA Order 7400.2]
11. Is the communications requirement for a surface area properly met? [FAA Order 7400.2]
12. Is the weather observation reporting requirement for a surface area properly met? [FAA Order 7400.2]
13. If a part-time surface area, is a provision added in the designation to allow for changes by NOTAM when minor variations in the time of designation are anticipated? [FAA Order 7400.2]

B.8 GROUND ELECTRONICS MAINTENANCE (GEM)

B.8.1 GEM Administration

1. Does the Ground Electronics Maintenance Officer (GEMO) fully understand the duties and responsibilities of the office in order to carry out the Air Traffic Control (ATC) support mission of the division? [EE 003-BA-GYD-010/GEMO Manual 210]
2. Does the GEMO maintain copies of past Air Traffic Control Facility (ATCF) Quality Assurance (QA) Survey reports? [NAVAIR 00-80T-114]
3. Are there *major* or *minor* discrepancies identified during previous QA Surveys which have not or could not be resolved? Explain!
4. Is there an organization manual for the division? Does the organization manual contain charts which reflect the management structure? [OPNAVINST 3120.32, EE 003-BA-GYD-010, Figs. 2-1.2-2 and 2-3]
5. Does the organization manual broadly define the duties and responsibilities of each billet assignment from the division officer through the branch petty officers? [EE 003-BA-GYD-010]
6. Is the watch quarter and station bill current and posted in a conspicuous location? [EE 003-BA-GYD-010/200.1 and Navy Regulations]
7. Is the authorized allowance and onboard strength of military and civilian personnel adequate to support the mission assigned? [OPNAVINST 1000.16 and OPNAV 1000/2]
 - a. Is the GEM division staffed to support the systems installed in compliance with standards established by Navy Training Plans (NTPs) [Assigned NTPs]
 - b. Does electronic technicians assigned possess a Navy Enlisted Code (NEC) relative to their work assignment? Are personnel enrolled in

- a structured OJT program to obtain NEC certification for the systems on which they are not NEC qualified? [Equipment specific NTPs and JQS]
8. Is classified material under the cognizance of the GEM Division stowed in compliance with OPNAVINST 5510.1 series? [OPNAVINST 5510.1]
 9. Are classified material destruction bills posted in conspicuous locations? Are training classes held on a scheduled basis to keep involved personnel knowledgeable of destruction procedures? [OPNAVINST 5510.1 series]
 10. Is the GEMO or Leading Chief Petty Officer (LCPO) knowledgeable of the procedures for monitoring navigation aids? [EE 003-BA-GYD-010/2.6.1.3.1]
 11. Is the GEMO cognizant of Notice to Airman (NOTAM) procedures for radar and NAVAIDS removed from service for routine or corrective maintenance? [EE 003-BA-GYD-010/2.6.1.3.1]
 12. Does the GEMO have cognizance of or file copies of Letters of Agreement, Letters of Procedures, or Memorandums of Agreement between the command and commands/organizations adjacent to their command? [EE 003-BA-GYD-010/260.3]
 13. Does the command have an active Master Planning Board and/or a Naval Air Traffic Control, Air Navigational Aids and Landing System (NAALS)/Ground Electronic Planning Board? Does the GEMO serve as a technical advisor to these boards? [OPNAVINST 3721.5 series, EE 003-BA-GYD-010/300.1 – 300.2]
 14. Does the GEMO maintain a file of policy directives for the equipment assigned to their cognizance promulgated by the sponsoring systems command? [EE 003-BA-GYD-010/ Table 2-1]
 15. Is the GEMO knowledgeable of the location and radiated power output of electronic transmitting equipment and antennas used by other commands or activities on the station? [NAVELEX 0101.106, OPNAVINST 8020.8]
 16. Is the GEMO or his designated LCPO held accountable for the frequency assignment of equipment transmitting onboard the station? [OPNAVINST 2400.20/NTP-6]
 17. Are adequate measures in place to secure electronic equipment at remote facilities and unmanned sites? [EE 003-BA-GYD-010/Chapter 8]
 18. Are man hours tracked and documented for routine and corrective maintenance in accordance with Navy Maintenance and Material Management System 3M? Are the man hours expended documented in the Micro-Organizational Maintenance Management System (MOMMS) database? [OPNAVINST 4790.4B]
 19. Does the GEM division have a billet authorization for a storekeeper? Is the billet filled on a full-time bases? [NAVSUP MANUAL, OPNAV 1000/2]
 20. Are full-time, trained personnel assigned to manage the MOMMS program? [OPNAV 4790.4B, EE 003-BA-GYD-010/410.2]
 21. Does the GEMO or their designated 3M coordinator monitor and track the submission of OPNAV-4790/2Ks and OPNAV 4790/CKs? [OPNAV 4790.4B]
 22. Does the GEMO maintain a current file of command generated Operational Capability Improvement Request (OCIRs)? [OPNAV 3721.5 series]
 23. Are the GEMO and division personnel assigned to support ATC systems maintenance fully cognizant of the specifics of their duties? [NAVAIR 00-80T-114/3.5.1.1]
 24. Does the GEMO maintain a Casualty Report (CASREP) log for systems/equipment supported? [NWP 10-1-10, EE 003-BA-GYD-010/400.3]
 25. Are CASREPs associated with ATC systems outages coordinated with designed personnel with the ATC Division? [Local Memorandum of Agreement (MOU)]
 26. Are training programs relating to harassment of any type attended by all members of the GEM division? Is this attendance documented in individual training records? [Type Commander and Command instructions]

27. Do the GEMO and his work force fully understand the consequences of arbitrarily relocating Navigation Aids (NAVAID)? [EE 003-BA-GYD-010/330.7]
28. Are the personnel assigned to the GEM division with a need to know, knowledgeable of the contents and proficient in executing the duties prescribed to support Flight Inspections? [United States Standard Flight Inspection Manual (NAV-AIR 16-1-520)]
29. Are the GEMO and his senior staff cognizant of the sources for technical assistance for specific systems/equipment assigned for their oversight? [EE 003-BA-GYD-010/B-13]
30. Does the GEM division have sufficient vehicles assigned to assure timely access to all systems/equipment under their cognizance? [Subjective: Each location will be assessed based upon span of control, system diversity and geographic/weather conditions]
31. Does the GEMO understand the procedures to follow in requesting Service Life Extension for a system/systems under their cognizance? [EE 001-BA-GYD-010/400.2]
32. Does the GEMO fully understand the OCIR process? [OPNAVINST 3721.5 series]
33. Is the GEMO a member of the Command Training Committee? [local directive]
34. Has the command designated a point of contact and responsible official for issues relating to the DoD Air Traffic Control and Landing Systems (ATCALs) data base (DADS)?
3. Are minor property records maintained for items costing more than \$2,500.00 but less than \$15,000.00? [NAVCOMP Form 274]
4. Does equipment performance meet or exceed the standards established by the United States Inter-agency Ground Inspection Manual? [OPNAVINST 3721.18]
5. Has the command funded the GEM division Operation Target (OPTAR) to assure adequate resources to support systems installed? [Answer derived by comparing budget call input to budget approved]
6. Are controls in place to preclude over expenditure of authorized OPTAR funds? [Local directives]
7. Does the GEM division have the most recent copy of the Coordinated Shore Based Allowance List (COSBAL)? [EE 003-BA-GYD-010/530.10, OPNAVINST 4442.13 and SPCCINST 4441.175]
8. Do the COSBAL and Allowance Parts Lists (APLs)/Allowance Equipment Lists (AELs) reflect the equipment and systems installed? [SPCCINST 4441.175]

B.8.3 GEM Publications, Records and Reports

1. Are the following publications retained in the GEM division technical library? Are the available publications up to date?
 - a. Division Officers Guide
 - b. DoN Correspondence Manual [SEC-NAVINST 5216.5]
 - c. DoN Navy Directives Issuance System [SEC-NAVINST 5215.1]
 - d. Standard Organization and Regulations of the United States Navy [OPNAVINST 3120.32]
 - e. Communications Equipment Allowance for Internal Security, Industrial Control, and Passive Defense Networks [OPNAVINST 2300.5]

B.8.2 GEM Material

1. Are all electronic systems with a value of \$15,000.00 or more accounted for on the command's plant account inventory? [NAVCOMP Manual]
2. Are controlled equipment custody records maintained to identify highly pilferable items? [NAV-SUP 306]

NAVAIR 00-80T-114

- f. Personnel Qualification Standards (PQS) [OPNAVINST 3500.34]
 - g. Catalog of Navy Training Courses [CANTRAC, NAVEDTRA 10500]
 - h. Naval Shore Electronic Criteria [NAVELEX 0101,100 series]
 - i. Electronic Information Maintenance Bulletin (EIMB) [NAVSHIPS 0967-000 series]
 - j. Electronic Information Bulletin (EIB) [NAVSHIPS 0967-001]
 - k. Naval Air Traffic Control, Air Navigation Aids and Landing Systems (NAALS) Program [OPNAVINST 3721.5]
 - l. United States Interagency Ground Inspection Manual for Air Traffic Control and Navigation Aids [OPNAVINST 3721.18]
 - m. Ships' Maintenance Material Management (3M) Manual [OPNAVINST 4790.4]
 - n. Facilities Project Manual [OPNAVINST 11010.20]
 - o. NATOPS Air Traffic Control Manual [NAVAIR 00-80T-114]
 - p. United States Standard Flight Inspection Manual [NAVAIR 16-1-520/FAA OAP 8200.1]
 - q. Policy and Procedures for BESEP [SPAWAR-INST 2804.1]
 - r. Facilities Planning Factor Criteria for Navy and Marine Corps Shore Installation [NAVFAC P-80]
 - s. Definitive Designs for Navy Shore Facilities [NAVFAC P-272]
 - t. Shore Facilities Planning [NAVFACINST 11010.44] [OPNAVINST 3770.2]
 - u. FAA/NAVY MOA for Logistic Support [AAC-229]
 - v. MEASURE Users Manual [OP 43P6A]
 - w. Metrology Requirements List (METRL) [NAVSEA OD 45847]
 - x. Ships Configuration and Logistics Support Information System [NAVSEA Technical Specification 9090-700A]
 - y. Operational Reports [NWP 10-1-10]
 - z. Cable Plant Standards and Criteria for Navy Air Traffic Control Facilities [NAVELEX 0967-456-8010]
 - aa. Funding and Approval Policy for Coordinated Shore Based Allowance List (COSBAL) [OPNAVINST 4442.13]
 - ab. COSBAL Management [SPCCINST 4441.175]
 - ac. Technical Manuals on all supported equipment. One copy of each in the technical library and a copy available for referenced at the equipment site
 - ad. Ground Electronic Maintenance Officers Guide [EE 003-BA-GYD-010/GEMO]
2. The following reports/records should be checked for currency and completeness?
- a. Telecommunications Operating Requirements (TELCOR) Documentation System [OPNAVINST 2010.3]
 - b. Frequency Usage Report [OPNAVINST 2400.7]
 - c. Naval Telecommunications System (NTS) Management Policy Telecommunications Service Request (TSR) [NAVCOMTELCO-MINST 2800.1]
 - d. Telecommunications Service Request [DCA Circular 310-130-1]
 - e. Preventative Maintenance Schedules posted and up to date in each work center? [OPNAVINST 4790.4]

3. Are as-built drawings available for each equipment/system installation? [NAVELEX 0101,110]
4. Are all General Purpose Electronic Test Equipment (GPETE) items covered under the MEASURE Calibration Program? [NAVSEA OD 45845]
5. Does the command maintain a current copy of the Ship/Shore Portable Electrical/Electronic Test Equipment Requirements List (SPETRL)? [OP 43P6A]
8. Is basic first aid and Cardiopulmonary Resuscitation (CPR) training provided and mandatory for each technician assigned to the division? Is this a continuing requirement? [EIMB General 3-21, NAVELEX 0101.110A 1.5]
9. Is prevention and treatment of electrical shock a continuing part of the division training program? [EIMB General 3-3, NAVELEX 0101,110A 1.19.1 c.d.]

B.8.5 GEM Safety

B.8.4 GEM Training

1. Has the GEMO instituted a training program for the continuing development of all personnel assigned to the division? [EE 003-BA-GYD-010/620]
2. Does the training program contain elements for long range, quarterly, and monthly training? [EE 003-BA-GYD-010/620]
3. Has the GEMO or LCPO designated a senior petty officer to schedule, track and record individual training accomplishments? [EE 003-BA-BYD-010/630.4]
4. Is the training petty officer aware of the technical training assistance available to the division in the form of On the Job Training (OJT) from the cognizant Technical Authority? [EE 003-BA-GYD-010/630.5]
5. Has the training petty officer established Personnel Qualification Standards (PQS) courses for personnel assigned to work on equipment covered by PQS? [EE 003-BA-GYD-010/640]
6. Has the training petty officer received and/or developed a comprehensive Job Qualification Requirements (JQRs) course on systems installed but not under the auspices of the PQS program? [EE 003-BA-GYD-010/640.1]
7. Are personnel training records and practical factors provided to personnel as a part of the check out process? [BUPERS MANUAL]
1. Does the GEM division have a safety program structured to disseminate NAVOSH information to division personnel and support contractors? [OPNAVINST 5100.23, EE 030-BA-GYD-010/710]
2. Are all personnel informed of the types and uses of hazardous materials found in division work spaces? [EE 003-BA-GYD-010/720]
3. Are safety warning and precaution signs posted in conspicuous locations in each of the division work centers? [EE 003-BA-GYD-010/700, DD Form 2272]
4. Do technical personnel (selected at random) know the tag-out procedures for working on electrical/electronic equipment? [Code of Federal Regulations (CFR) 29CFR 1910.147]
5. Are safety precautions written to cover unusual hazards found in GEM division spaces such as climbing equipment, handling radioactive tubes, floor coverings, fuse box covers, tag-out procedures, and safe driving? [EE 003-BA-GYD-010/730.1]
6. Has the GEMO and/or his designated safety petty officer established a target safety program to include noise control and hearing conservation, asbestos, sight conservation, and personal protective equipment? [OPNAVINST 5100.232 Chapters 7, 18, 19, and 20]
7. Is all electronic/electrical equipment properly grounded? [CFR 1910.243, 1910.304F]
8. Are properly constructed shorting probes easily located within each work center? [NAVELEX 0101, 110A (1,3)]

- 9. Are safety elements such as first aid kits, goggles, masks, gloves, and blankets attached to an approved safety board easily accessible in each work center? [OPNAVINST 5100.23, Chapter 20]
- 10. Are fire extinguishers readily available in each work center, are they correctly located, and is the inspection date current? [CFR 1910.157, (D2) and (D4)]
- 11. Are all unmanned spaces equipped with smoke/ fire alarms that activate remotely located site specific alarms in a 24 hour manned location? [NAVFAC DM-8-6.3.4, NAVFAC DM-8 chapter 9, section 3]
- 12. Does the Air Traffic Control Tower have an emergency egress/escape ladder? [CFR 1910.35-39, NFC 101 4.1.11/chapter 5]
- 13. Do personnel (selected at random) know the procedures to use when treating electrical shock? [NAVELEX 0101, 110A 1.19.1c,d]

B.8.6 Maintenance Procedures

- 1. Do division personnel perform maintenance actions in accordance with the 3M MDS manual/ systems manuals? [OPNAV 4790.4]
- 2. Are daily, weekly, semiannual, and annual work assignments given to personnel possessing the corresponding equipment Navy Enlisted Codes (NEC)? [EE 003-BA-GYD-010/220.3]
- 3. Do cable cross connect records indicate the changes since the system involved was installed? Specific attention should be placed on the ATC Intra/Inter facility coordination lines: i.e., cross reference chart for LINC/S/MCI# in comparison to the NAVELEX numbers and repair responsibilities for each [EE 003-BA-GYD-010/240.4]
- 4. Are OPNAV 479/2K maintenance action forms completed as work is accomplished? [OPNAV 4790.4]
- 5. Is an OPNAV 4790/CK completed for each equipment/system installed? Is an OPNAV 4790/CK completed for each equipment/system removed from service? [OPNAV 4790.4]

- 6. Is each OPNAV 4790/CK change in equipment sent to the Configuration Data Manager (CDM)? [NAVSEAINST 4130.12]

B.8.7 ATC Facility Overview

- 1. Prepare a general assessment of the GEM division's operational capability to support the ATC related mission of the command.

- 2. Prepare an assessment of the observed cooperation/coordination between the ATC Division and the Ground Electronic Maintenance Division.

- 3. Prepare an assessment of the effectiveness of the NAALS Ground Electronic Planning Board and/or Command Master Planning Board.

4. Prepare additional comments as required.

APPENDIX C

Sample Format for FAA/USN Letter of Agreement Concerning Control of Air Traffic

<p>(Name) Air Route Traffic Control Center and NAS (Name)</p> <p>LETTER OF AGREEMENT</p> <p style="text-align: right;">Effective (date) _____</p> <p>Subj: Air Traffic Control Procedures (or as appropriate)</p> <ol style="list-style-type: none"> 1. Purpose: (General statement of responsibilities and description of necessary coordination) 2. Cancellation: (As required) 3. Scope: (Specify areas, names, and types of facilities involved) 4. Responsibilities: (Specify operational concepts) 5. Certification of Equipment: (See OPNAVINST 3721.18) 6. Procedures <ol style="list-style-type: none"> a. ATC assigned airspace: List procedures to be followed for requesting and authorizing airspace, handling aircraft to and from the airspace, and notifying when no longer required. b. Transfer of control: Specify transfer procedures/release of aircraft to ASR/PAR. c. Departures: Specify required advance time for filing flight plans. Outline additional items required in the flight plan (e.g., type of departure(s), ECHO item procedures). When applicable, include authorization for local GCA unit(s) to provide limited departure control service. d. En Route: Include information that ATC is responsible for effecting separation in assigned airspace whenever nonparticipating aircraft are cleared to operate within such airspace. e. Arrivals: Special instructions. f. General: <ol style="list-style-type: none"> (1) Single frequency approach procedures (2) Missed approach procedures (3) Flameout approach procedures (4) Special VFR operations (5) Provisions for handling movement of national defense aircraft in emergencies (OPNAVINST 3722.30), security control of air traffic and air navigation aids. 7. Attachments: (List, as required, items such as chart of ATC assigned airspace areas, common reference/handoff points, etc.) <p>Air Traffic Representative _____ Manager (name) (ARTCC) _____</p> <p>Commanding Officer, NAS (name) _____</p> <p style="text-align: right;">(Title of other appropriate authority) _____</p> <p>Distribution List _____</p>

Figure C-1. Sample Format for FAA/USN Letter of Agreement Concerning Control of Air Traffic

APPENDIX D

Sample Format for Local FAA/ USN Memorandum of Agreement Regarding the Operation of Joint FAA/ Military ATC Facilities

MEMORANDUM OF AGREEMENT	
	Effective (date)_____
Subj: Operation of joint FAA/NAS_____ ATC Facility	
1. Operational concepts: (division of responsibilities)	
2. Staffing/personnel assignment:	
3. Logistic support:	
4. Equipment:	
a. Maintenance	
b. Certification (see OPNAVINST 3721.18)	
5. Training/certification of personnel:	
6. Space assignment/layout:	
7. Janitorial service:	
8. Security:	
9. Parking:	

Manager of Joint FAA/NAS ATC Facility _____	Commanding Officer NAS _____

Figure D-1. Sample Format for MOA

APPENDIX E

Air Traffic Control Contingency Plan

E.1 GENERAL

This plan is intended to provide continuity of Navy and Marine Corps flight operations within airspace for which the FAA has jurisdiction in the event of a significant disruption to the FAA ATC system.

E.1.1 Scope and Applicability. This plan applies to naval aviation shore activities within the continental United States.

E.1.2 Background. Significant disruptions to the FAA system may include, but are not limited to, loss of services resulting from power failures, earthquakes, floods, hurricanes, fires, civil disturbances, or personnel absenteeism. Personnel absenteeism may be because of epidemics, walkouts, "sickouts," illegal strikes, and the like. A significant disruption is considered to be a peacetime situation, short of national emergency, where the operational capability of one or more FAA ARTCC areas to provide required services is seriously reduced. In the past, the absence of a coordinated Navy/Marine Corps plan to be used in the event of disruptions in the ATC system has necessitated a concentration of decisionmaking disruptions. The intent of this contingency plan is to decentralize authority by delegating contingency actions to the lowest echelons capable of carrying out the required actions and making appropriate decisions.

E.1.3 Assumptions. The following assumptions form the basis on which this contingency plan is formulated:

1. The FAA will maintain primary cognizance for overall management of the ATC system.
2. At least 30 percent of the ATC system will remain functional.
3. Military ATC facilities and services will be fully available.
4. A national emergency will be declared if the FAA ATC system becomes nonoperational (i.e., greater than 70 percent loss of capability).
5. FARS will not be waived in situations less than a national emergency.

E.2 CONCEPT OF OPERATIONS

Associate Administrator for Air Traffic will determine that a significant disruption has occurred and will so notify the NMCC which will, in turn, notify the headquarters of the individual military services. The Air Traffic Control System Command Center (ATCSCC) in Herndon, Virginia will provide centralized direction of the ATC systems. Upon notification of a significant disruption, CNO will take action to cooperate with the FAA by reducing IFR operations in areas affected by the disruption while maintaining overall continuity of naval air operations to the maximum extent possible. The basic elements of the general plan are:

1. Upon notification that the ATCSCC Air Traffic Services Cell has been activated, CNO (N785F) will ensure that one Navy or Marine Corps officer is on duty at the ATCSCC at all times for the duration of the disruption. The functions of this officer are:
 - a. Act as liaison between FAA headquarters and CNO/CMC action officers
 - b. Attend to the interests of naval aviation as they may be affected by events occurring in the ATCSCC Air Traffic Services Cell.
 - c. Keep interested offices within CNO and CMC apprised of significant events.
2. CNO (N785F) will notify all naval aviation commands of the nature and extent of the disruption and direct compliance with this contingency plan.
3. Naval aviation shore facilities shall activate local contingency plans to minimize effects of ATC disruptions on naval air operations.

4. Operational commanders shall:

- a. Reduce IFR operations in affected areas to those operations specified below (areas affected will be specified in CNO notification message).
 - (1) Active air defense missions and active antisubmarine warfare missions.
 - (2) Flights in support of combat operations or forces.
 - (3) Flights in support of peacetime emergency plans.
 - (4) Flights involving safety of lives or property (e.g., search and rescue, air evacuation, hurricane evacuation, airlift forces in support of domestic crises, etc.).
 - (5) Flights supporting important peacetime service, joint or unified/specified command exercises or missions.
 - (6) Other flights specifically approved by one of the following commanders or higher authority:
 - (a) Naval Air Force Commanders.
 - (b) Chief of Naval Air Training.
 - (c) Marine Corps Air Base Commanders.
 - (d) Fleet Marine Force Commanders.
 - (e) Commander, Naval Air Systems Command.
 - (f) Commander, Naval Air Reserve Forces.
- b. Institute flow control procedures to smooth IFR traffic in affected areas (e.g., shift operations where possible to times of low traffic density such as at night or early morning hours).
- c. Conduct flights in accordance with VFRs in affected areas if feasible.

d. Reroute IFR flights to avoid affected areas if possible.

e. Use MARSAs in affected areas, if feasible.

- 5. Aircraft commanders shall list the words “military priority” in the remarks section of the flight plan for all IFR flights, any part of which will be conducted in affected areas. “Military priority” signifies that the flight falls into one of the categories set forth in [subparagraph 4a of paragraph E.2](#).
- 6. Active air defense interceptor missions and active antisubmarine warfare missions are vital to national defense and are given priority over all other military and civil aircraft by procedural handling by ATC for the particular operations as specified in coordinated agreements or authorizations. ATC services shall be provided to all other “military priority” flights in affected areas on a first come, first served basis.

E.3 ADMINISTRATIVE CONSIDERATIONS

As need dictates, commanding officers of naval aviation shore facilities may cancel leave for military ATC personnel, recall military personnel on annual leave, and extend the length of the work day and work week.

FAA may redeploy air traffic coordinators, air traffic representatives, regional, area, and facility ATC personnel to those facilities most affected by disruption. However, FAA ATC personnel may not be redeployed by FAA from military facilities without the concurrence of the military commanders.

E.4 COORDINATING ACTION REQUIRED

To support this plan, commanding officers having ATC facilities under their cognizance shall coordinate with appropriate local/regional FAA ATC officials and/or nearby military commanders to develop local contingency plans (e.g., letters of agreement or procedure) for use in the event of disruptions to ATC service affecting the military facility. Appropriate contingency actions might include:

- 1. Between the military airfield(s) and international airspace, designation of egress and ingress corridors within which the military would assume

responsibility for separation between military traffic.

2. Designation of blocks of special use airspace for exclusive military use within which the military would assume responsibility for separation of aircraft.
3. Increasing the area of jurisdiction for which approach control service has been delegated to military facilities.
4. Delegation of authority to military approach control facilities to provide service for airfields normally provided such service by FAA facilities.

Example: NAS Propbase is normally provided approach control service by Libertytown FAA approach control. NAS Jetbase, which is 15 miles from NAS Propbase, has its own military approach control facility. A local contingency plan might provide for NAS Jetbase to supply approach control service to NAS Propbase and Libertytown Municipal Airport in the event of a disruption to FAA provided services.

5. In joint FAA/military facilities, assignment of approximately crosstrained military personnel to operating positions normally filled by FAA personnel.

APPENDIX F

Mishap Investigation Report

MISHAP INVESTIGATION REPORT ENCLOSURE
 ADVICE TO WITNESSES
 OPNAV 3752/1, REV. (11-81) S/N 0107-LF-037-5206

REPORT SYMBOL
 OPNAV 3752-1

**THIS IS PART OF A LIMITED USE NAVAL AIRCRAFT MISHAP INVESTIGATION REPORT.
 LIMITED DISTRIBUTION AND SPECIAL HANDLING REQUIRED IN ACCORDANCE WITH OPNAVINST 3750.6**

*PLEASE READ THIS STATEMENT CAREFULLY.
 CERTIFY THAT YOU UNDERSTAND IT BY YOUR SIGNATURE AT THE BOTTOM*

I understand that:

- a. I have been requested to voluntarily provide information to a board conducting an investigation of a Naval aircraft mishap.
- b. I am *not* being requested to provide a statement under oath or affirmation.
- c. Disclosure of personal information by me is voluntary, and that failure to provide such information would have no direct effect on me.
- d. The purpose of the information provided by me is to determine the cause of a naval aircraft mishap and/or the damage and/or injury occurring in connection with that mishap.
- e. All information provided by me to the Aircraft Mishap Board will be used **ONLY** for safety purposes.
- f. The information provided by me shall **NOT** be used:
 - (1) In any determination affecting my interests.
 - (2) As evidence or to obtain evidence in determining misconduct or line of duty status of killed or injured personnel.
 - (3) As evidence to determine my responsibility or that of other personnel from the standpoint of discipline.
 - (4) As evidence to assert affirmative claims on behalf of the government.
 - (5) As evidence to determine the liability of the government for property damage caused by a mishap.
 - (6) As evidence before administrative bodies, such as Naval Aviator/Naval Flight Officer Evaluation Boards (USN) or Field Flight Performance Boards (USMC).
 - (7) In any other punitive or administrative action taken by the Department of the Navy.
 - (8) In any other investigation or report of the mishap about which I have been asked to provide information.

SIGNATURE		PRINT NAME (First, Middle, Last)	
DATE	RANK/RATE	SERVICE	TELEPHONE NO.
WHERE YOU MAY BE LOCATED			

STATEMENT (Continue on reverse and attach separate sheet(s) if necessary).

ATC-F01

Figure F-1. OPNAV 3752-1

APPENDIX G

Air Traffic Control Specialist Mishap Statement

PERSONNEL STATEMENT
DEPARTMENT OF THE NAVY

The following is a report concerning the mishap involving _____, at _____
(acft. I.D. (s)) (location)

_____ , on _____ , _____ UTC
(city - state) (month, day, year) (time)

My name is _____ , _____ ,
(first - M.I. - last) (opr. init.)

am an Air Traffic Control Specialist at
the _____
(facility name and location)

I was on duty in the _____ . I wa
(facility name)

working _____ , from _____ UTC to
(position name/number) (time on Position Log)

_____ GMT.
(time off Position Log)

NOTE: Statements shall be written in the first person: "I am," "I did," etc. Include only the facts: what you heard, did or observed. DO NOT abbreviate proper wording: 10,000 feet, 180 degrees, northeast, aircraft, 1800 UTC, flight, etc.

ATC-F02

Figure G-1. Air Traffic Control Specialist Mishap Statement

APPENDIX H

Air Traffic Activity Report

H.1 AIR TRAFFIC ACTIVITY REPORTS

See [Figures H-1](#) to [H-3](#) for the air traffic activity reports.

AIR TRAFFIC ACTIVITY REPORT					
TO: CHIEF OF NAVAL OPERATIONS CODE N785F 2000 NAVY PENTAGON WASHINGTON, DC 20350-2000			1. REPORT PERIOD 1 January – 31 December 19		
2. NAME OF ACTIVITY SUBMITTING REPORT			3. LOCATION IDENTIFIER		
4. NAME OF AIRFIELD THIS REPORT					
5. CONTROL TOWER OPERATIONS	MILITARY		CIVIL		TOTAL
	NAVY/MARINE CORPS	OTHER MILITARY	AIR CARRIER	GENERAL AVIATION	
AIRPORT					
OVERFLIGHT					
TOTAL					
6. RADAR APPROACHES					
	MODE I	MODE IA	MODE II	MODE III	TOTAL
7. PALS APPROACHES					
8. Training Device Use – Type Device _____					
(1) Number of hours used _____					
(2) Number of radar approaches accomplished _____					
(3) Number of hours of pattern control, vector to outlying fields, etc. _____					
(4) Number of hours not used because of maintenance outage _____					
9. Remarks (use additional pages if desired)					
APPROVED					
COPY TO: TYPE COMMANDER NAVREP (Specific Region) CMC (Aviation) (USMC only) FAA ATREP					

Figure H-1. Control Tower Operations

AIR TRAFFIC ACTIVITY REPORT					
TO: CHIEF OF NAVAL OPERATIONS CODE N785F 2000 NAVY PENTAGON WASHINGTON, DC 20350-2000			1. REPORT PERIOD 1 January – 31 December 19		
2. NAME OF ACTIVITY SUBMITTING REPORT			3. LOCATION IDENTIFIER		
4. NAME OF AIRFIELD THIS REPORT					
5.	MILITARY		CIVIL		TOTAL
APPROACH CONTROL OPERATIONS	NAVY/MARINE CORPS	OTHER MILITARY	AIR CARRIER	GENERAL AVIATION	
IFR					
VFR					
TOTAL					
6. RADAR APPROACHES					
	MODE I	MODE IA	MODE II	MODE III	TOTAL
7. PALS APPROACHES					
8. Training Device Use – Type Device _____					
(1) Number of hours used _____					
(2) Number of radar approaches accomplished _____					
(3) Number of hours of pattern control, vector to outlying fields, etc. _____					
(4) Number of hours not used because of maintenance outage _____					
9. Remarks (use additional pages if desired)					
APPROVED					
COPY TO: TYPE COMMANDER NAVREP (Specific Region) CMC (Aviation) (USMC only) FAA ATREP					

Figure H-2. Approach Control Operations

AIR TRAFFIC ACTIVITY REPORT					
TO: CHIEF OF NAVAL OPERATIONS CODE N785F 2000 NAVY PENTAGON WASHINGTON, DC 20350-2000			1. REPORT PERIOD 1 January – 31 December 19		
2. NAME OF ACTIVITY SUBMITTING REPORT			3. LOCATION IDENTIFIER		
4. NAME OF AIRFIELD THIS REPORT					
5.	MILITARY		CIVIL		TOTAL
SPECIAL USE AIRSPACE OPERATIONS	NAVY/MARINE CORPS	OTHER MILITARY	AIR CARRIER	GENERAL AVIATION	
TOTAL					
6. Training Device Use – Type Device _____ (1) Number of hours used _____ (2) Number of hours not used because of maintenance outage _____					
7. REMARKS (use additional pages if desired)					
APPROVED					
COPY TO: TYPE COMMANDER NAVREP (Specific Region) CMC (Aviation) (USMC only) FAA ATREP					

Figure H-3. Special Use Airspace Operations

APPENDIX I

Minimum Vectoring Altitude Chart

I.1 AREA OF CONSIDERATION

The area considered for obstacle clearance shall be the maximum range of the primary radar, except for GCA facilities, in which the distance may be limited to the maximum range the facility is expected to vector aircraft. This area may be subdivided into sectors as necessary to gain relief from obstacles. There is no prescribed limit on the size, shape, or orientation of the sectors; however, they must be designed in consideration of aircraft maneuvering ability, obstacle clearance requirements, and air traffic flow requirements. Vectoring charts should be designed to emphasize simplicity and safety in radar traffic control applications.

I.2 OBSTACLE CLEARANCE

Obstacle clearance shall be provided over all obstacles within the vectoring area/segments and within a 3-mile (5 miles at distances greater than 40 miles from the antenna) buffer area surrounding the area/segments. Apply 1,000 feet of obstacle clearance in areas and 2,000 feet in areas designated as mountainous in the FLIP. MVAs should provide at least 300 feet above the floor of controlled airspace. Include a rationale if selected altitudes do not provide 300 feet above the controlled airspace floor. Resultant altitudes are rounded off to the nearest 100 feet, i.e., 1,149 feet may become 1,100 feet, and 1,150 feet shall become 1,200 feet.

Where lower MVAs are required in designated mountainous areas to achieve compatibility with terminal routes or to permit vectoring to an instrument approach procedure, 1,000 feet of obstacle clearance may be used.

I.3 PREPARATION

1. Minimum Vectoring Altitude Charts should be drawn on an appropriate topographical chart. An aeronautical sectional chart is the preferred method since controlled airspace is included on the chart. However, where four or less sectors can

be identified, the compass rose diagram on the REQUEST/APPROVAL form may be used.

2. Center the MVA chart on the ASR antenna site, even if other NAVAIDS are used to describe sectors.
3. Segment the chart into areas as required by the different minimum vectoring altitudes. Configuration of the segments will vary with local terrain and operational considerations. Use the following methods as applicable: (See [Figure I-1](#) for an example chart.)
 - a. Describe the segments by using magnetic bearings from the radar antenna site and radar display range marks or by radials or radials and arcs from VOR/TACAN/VORTACs.
 - b. To facilitate correlation between vectoring charts and radar displays, make segment boundaries coincident or compatible with map overlay or video map data.
 - c. Make each sector large enough to accommodate vectoring of aircraft. In some cases, it may be desirable to combine adjoining smaller areas having different altitudes into a single large area with one altitude.
 - d. Establish segment boundaries at least 3 miles (5 miles at distances greater than 40 miles from the antenna) from the obstruction determining the minimum vector altitude.
 - e. To avoid a large area with an excessively high minimum vectoring altitude because of an isolated prominent obstruction, enclose the obstruction with a buffer of at least 3 miles (5 miles at distances greater than 40 miles from the antenna) from the obstruction. Do this to facilitate vectoring around the obstruction.
 - f. Determine the minimum IFR vectoring altitude in each area by applying [paragraph I.2](#).

Note

Minimum vectoring altitudes are established irrespective of the flight checked radar coverage in the sector concerned. They are based on obstruction clearance criteria only. It is the responsibility of the controller to determine that a target return is adequate for radar control purposes.

- g. Ensure that an assumed 200-foot mast height is applied to MVA computations for those sectors overlaying designated shipping lanes.
- h. An MVA established outside of controlled airspace will be so noted and will consider obstacle clearance only.

- i. Ensure that minimum vectoring altitudes are compatible with vectoring altitudes established for associated radar instrument approach procedures.
- j. Depict the segment identification and the minimum vectoring altitude in each segment.
- k. Complete the Minimum Vectoring Altitude Chart Computations sheet (**Figure I-2**).

I.4 REVIEW AND APPROVAL

Forward the completed Request/Approval — U.S. Navy Minimum Vectoring Altitude Chart, the MVA chart, and the supporting documentation to NAVFIG for review and approval.

REQUEST/APPROVAL — U.S. NAVY MINIMUM VECTORING ALTITUDE CHART					
Airport name:		Location (city, state, country):		Effective date:	
Type radar equipment:		Ant LAT/LONG:		Assigned variation:	
Other NAVAIDs:		Point of contact:		Phone number:	
		E-mail:			
ATCF Officer		Date		Commanding Officer	
Date		Date		Date	
APPRV	DISAPP	NAVFIG PROC SPCLST	Date	HD. NAVFIG	Date

OPNAV Form 3722-7 MVAC (Oct 02)

Figure I-1. Request/Approval — U.S. Navy Minimum Vectoring Altitude Chart

APPENDIX J

OJT Performance Evaluation

■ J.1 RADAR FUNCTIONS AND DUTIES

J.1.1 Separation

1. Separation is ensured: provides control instructions or restrictions to ensure that separation standards are maintained at all times.
 - a. Issues control instructions or restrictions to prevent loss of separation.
 - b. Ensures separation standards are maintained at all times.

J.1.2 Control Judgement

1. Awareness is maintained: continuous attention is provided to all facets of the control environment to ensure that discrepancies do not exist; takes action to resolve any discovered discrepancies; and ensures that other personnel/facilities affected by these discrepancies are notified. Develops an accurate “picture” of the existing traffic and displays the ability to forecast future positions and relationships of aircraft.
 - a. Controls in a manner to ensure future separation or flow problems will not exist; generally reacts to situations before they are imminent.
 - b. Ensures awareness of all facts concerning the control situation.
 - c. Ensures flight strip information is in agreement with aircraft/route position.
 - d. Verifies if a discrepancy exists any time an unusual or nonstandard situation occurs.
 - e. Considers subsequent controller requirements.

f. Keeps alert for possible problem situations from other controllers/facilities.

g. Does not use control procedures which result in unnecessary work loads and stress being placed on other controllers/facilities.

2. Good judgment is applied: issues control instructions or restrictions that are correct or reasonable control procedures that provide for efficient flow of traffic. Obtains all available facts about the control situation, fully and accurately determines aircraft requirements, and carefully plans procedures prior to issuing instructions.

a. Determines the requirements of aircraft.

b. Issues necessary restrictions.

c. Does not accept handoffs of aircraft that are in conflict or about to lose separation.

d. Utilizes correct vector procedures.

e. Utilizes correct speed control procedures.

f. Correctly evaluates the factors affecting safety of aircraft.

g. Correctly evaluates the factors affecting traffic flow.

h. Informs aircraft and appropriate personnel of existing significant situations.

i. Does not control in a manner which allows significant situations to develop resulting in system errors, lessening of safety, or unnecessary slowing of traffic.

j. Does not allow or order unneeded separation.

k. Does not have to issue additional instructions because previous actions or decisions were incorrect or unnecessary.

3. Control actions are correctly planned: controls traffic within area of responsibility in an orderly manner.
 - a. Control procedures do not tend to cause unnecessary complexity and confusion.
 - b. Does not terminate or activate radar control too soon.
 - c. Correctly sequences traffic flow.
4. Positive control of situation is provided: controller takes command of control situations; does not act in a hesitant and uncertain manner.
 - a. Acts decisively; appears to have confidence.

J.1.3 Traffic Management

1. Prompt action to correct errors is taken: recognizes when an error exists or has been made and takes prompt action to initiate a correction.
 - a. Does not commit errors in call sign, instruction, or information.
 - b. Acts rapidly to correct errors.
 - c. Recognizes when incorrect information has been passed to aircraft or other ATC personnel.
2. Traffic overload is prevented when possible: observes present and forecast traffic to predict whether or not an overload may occur and takes appropriate actions to prevent or lessen an overload situation.
 - a. Recognizes potential overload situations.
 - b. Initiates action to prevent or limit the overload.
 - c. Initiates holding procedures; does not allow clearances when traffic overload is developing.
3. Aircraft radar identity is maintained: determines aircraft position through appropriate use of beacon, turn procedures, or coordination with

other sectors/facilities; maintains positive identification during the entire time the aircraft is within the area of responsibility.

- a. Employs correct beacon or radar procedures.
 - b. Reidentifies aircraft when a doubt exists.
 - c. Detects errors in identity.
4. Professional manner is maintained: demonstrates the ability to think clearly and act rapidly during stressful situations; conveys a positive and professional impression at all times.
 - a. Continues to control in an effective manner when the control situation becomes stressful.
 - b. Conveys to other controllers, pilots and related personnel the impression of a skilled professional who can successfully handle the situation.
 - c. Remains calm under stress.

J.1.4 Operating Methods and Procedures

1. Flight strip postings are complete or correct: posts all required information on flight strips.
 - a. Posts altitude changes, estimated times, radar contact, etc.
 - b. Posts data in correct area of strip.
 - c. Uses required colors.
 - d. Detects and/or corrects flight strip errors or update changes.
2. Letters of agreement/directives are adhered to: performance of control functions and duties are in compliance with agreed-upon facility procedures, handbooks, or directives.
 - a. Adheres to noise abatement routing procedures.
 - b. Adheres to facility directives and local routing restrictions.
3. Navigational assistance is provided: issues appropriate control instructions to avoid conflicting situations, to obtain operational advantages, to

avoid congested areas, or to provide shorter routes.

- a. Provides navigational assistance when an operational advantage to the pilot or controller would be gained.
4. Handoff procedures are correctly performed: verifies aircraft position or coordinates any restrictions or special instructions; uses correct interphone procedures.
 - a. Verifies aircraft position or altitude.
 - b. Satisfactorily coordinates special restrictions or instructions.
 - c. Correctly updates flight strips.
 - d. Performs handoff at appropriate time/position.

J.1.5 Coordination and Communication

1. Necessary traffic advisories are provided: follows the required format when passing traffic information and passes traffic advisories when work load permits.
 - a. Issues safety advisories as appropriate.
 - b. Provides traffic advisories to aircraft on work load permitting basis.
 - c. Provides advisory service to all radar identified aircraft.
 - d. Issues complete traffic information in the required format.
2. Coordination is thorough: coordinates all information that is pertinent to the situation. Ensures that personnel receiving information have all of the contents or acknowledges all information received on position.
 - a. Ensures that all required information has been passed.
 - b. Verifies or acknowledges all information exchanges.
 - c. Keeps supervisor informed of emergency status information.

3. Communication is clear and concise: ensures that all data passed or received is understood; does not have to repeat information using different words to convey the intended meaning.
 - a. Ensures information is understood.
 - b. Makes intentions known.
 - c. Provides useful information that is timely, accurate, and clear.
 - d. Does not have to repeatedly explain intentions.
4. Makes necessary transmissions: transmits information that is required over radio or interphone; does not transmit information as separate messages when it would be more efficient to combine information.
 - a. Does not make unnecessary use of radio or interphones.

J.1.6 Phraseology

1. Standard phraseology adhered to: uses words and phrasings in accordance with the requirements of the duty being performed.
 - a. Uses approved procedural words, phrases, and formats.
 - b. Improvises when necessary.
2. Voice quality: quality of the controller's voice is such that it is easy to understand speech.
 - a. Easy voice pitch or timbre is satisfactory.
 - b. Voice is not harsh, grating, or causes lack of understanding.
3. Speech rate is correct: other personnel or pilots have no difficulty understanding what has been said because controller speaks too rapidly or too slowly.
 - a. Speaks neither too fast nor too slow.
 - b. Adjusts speech rate to ensure accurate receipt of information.

J.1.7 Equipment

1. Equipment status information is maintained: maintains knowledge of equipment operating status or NAVAIDs used by aircraft flying through area; reports malfunctioning equipment as required.
 - a. Determines status of equipment performance.
 - b. Reports malfunctions.
2. Adjustment of control display is correct: adjusts the radar presentation to exhibit the best display possible; recognizes when maintenance assistance is necessary; takes steps to ensure that control is provided when radar display has deteriorated beyond safe limits.
 - a. Displays entire control area.
 - b. Adjusts gain so that targets are sharp and distinct.
3. Equipment capabilities are fully utilized/understood: utilizes available equipment to the fullest extent possible; displays knowledge of capabilities and limitations of equipment and its associated backup.
 - a. Uses best equipment available.
 - b. Is aware of built-in delay in radio equipment.
 - c. Is aware of secondary equipment when primary fails.

J.2 CONTROL TOWER FUNCTIONS AND DUTIES

J.2.1 Separation

1. Separation is ensured: provides control instructions or restrictions to ensure that separation standards are maintained at all times.
 - a. Issues control instructions or restrictions to prevent loss of separation.
 - b. Ensures that separation standards are maintained at all times.

- c. Plans departure route prior to issuing takeoff clearance to maintain safe separation.
- d. Detects and corrects unsafe separation of VFR and IFR traffic.
- e. Detects unsafe aircraft maneuvering.

J.2.2 Control Judgment

1. Awareness is maintained: continuous attention is provided to all facets of the control environment to ensure that discrepancies do not exist; takes action to resolve any discovered discrepancies; and ensures that other personnel/facilities affected by these discrepancies are notified. Develops an accurate "picture" of the existing traffic, and displays the ability to forecast positions and relationships of aircraft.
 - a. Ensures control of ground vehicle traffic when required.
 - b. Does not engage in conversations about miscellaneous matters when the developing situation calls for attention.
 - c. Considers subsequent controller requirements.
 - d. Keeps alert for possible situations from other controllers.
 - e. Ensures that flight strip information is in agreement with aircraft route/position.
 - f. Ensures awareness of all facts concerning the control situation.
 - g. Detects radio communication failures.
 - h. Does not use control procedures which result in unnecessary work loads and stress being placed on other controllers/facilities.
 - i. Makes no unnecessary moves around the CAB.
2. Uses good control judgment: issues control instructions or restrictions that are correct or reasonable. Employs control procedures to allow for efficient flow of traffic. Obtains all available

facts about the control situation, fully and accurately determines aircraft requirements, and carefully plans procedures prior to issuing instructions.

- a. Allows or orders only necessary altitude, heading, or speed changes.
 - b. Allows or orders only needed separation.
 - c. Controls in a manner which allows no significant situations to develop resulting in errors, lessening of safety, or unnecessary slowing of traffic.
 - d. Determines the requirements of aircraft.
 - e. Informs aircraft and appropriate personnel of existing significant situations or hazardous conditions.
 - f. Issues minimum additional instructions because previous actions or decisions were incorrect or unnecessary.
 - g. Correctly evaluates the factors affecting safety of aircraft.
 - h. Correctly evaluates the factors affecting traffic flow.
 - i. Issues no unnecessary restrictions.
 - j. Unsafe approach and missed approach aircraft are determined early and cause no unnecessary delay or handling problems.
3. Control actions are correctly planned: controls traffic within the area of responsibility in an orderly manner, and carefully plans procedures prior to issuing instructions.
- a. Applies flow control procedures at the appropriate time to prevent unnecessary slowdown of traffic.
 - b. Control procedures are orderly.
 - c. Plans effective/expeditious runway use.
 - d. Plans taxi traffic, which eliminates unnecessary stops, delays, and communication.

- e. Correctly sequences flight strips.
 - f. Transfer of control to ground control is timely.
 - g. Transfer of control to local control is timely.
 - h. Turnoff instructions are timely.
 - i. Traffic data is closely monitored.
4. Positive control of situation is provided: controller takes command of control situations; acts in an expedient and decisive manner.
- a. Acts with poise and self-confidence.

J.2.3 Traffic Management

1. Prompt action to correct errors is taken: recognizes when an error exists or has been made and subsequently takes prompt corrective action.
- a. Commits minimum errors in call sign, instruction, or information.
 - b. Acts rapidly to correct the error.
 - c. Recognizes when incorrect information has been passed to aircraft or other personnel and/or facilities.
2. Effective traffic flow is maintained: takes into account aircraft characteristics and effect on traffic flow; uses runways and taxiways to best advantage; sequences timely landing and departure clearances to effect an orderly traffic flow, resulting in no unnecessary delays.
- a. Makes effective use of turnoff taxiways.
 - b. Makes effective use of runways.
 - c. Presents orderly traffic flow with proper aircraft spacing to departure radar.
 - d. Provides prompt landing clearances, traffic advisories, terminal weather, and other pertinent information.
 - e. Secures, through coordination, adequate airspace for arrival aircraft.
 - f. Considers aircraft characteristics and their effect on traffic flow.
 - g. Taxi traffic is managed efficiently and effectively.

3. Aircraft identity is maintained: determines aircraft position through visual means or coordination with other personnel/facilities; maintains positive identification during the entire time the aircraft is within the area of responsibility.
 - a. Use of radar displays is adequate.
 - b. Uses tally sheet or other aid to maintain identity when it becomes necessary because of traffic load.
 - c. Employs correct fix, turn, or radio procedures.
 - d. Detects errors in identity.
 - e. Reidentifies aircraft when a doubt exists.
4. Professional manner is maintained: demonstrates the ability to think clearly and act rapidly during stressful situations; conveys a positive and professional impression at all times.
 - a. Continues to control in an effective manner when the control situation becomes stressful.
 - b. Conveys to other controllers, pilots, and related personnel the impression of a skilled professional who can successfully handle the situation.
 - c. Remains calm under stress.
5. Never exceeds clearance authority.
6. Readback procedures are adhered to.
7. Uses appropriate clearance fixes.
3. Letters of agreement/directives are adhered to: performance of control functions and duties are in compliance with agreed-upon facility procedures, handbooks, or directives.
 - a. Adheres to noise abatement routing procedures.
 - b. Adheres to directives and local routing restrictions.
4. Terminal weather information is provided: changes in weather such as visibility and wind are monitored and provided as necessary to aircraft, controllers, and other facilities.
 - a. Monitors weather information in an adequate manner.
 - b. Notes significant changes in terminal weather conditions.
 - c. Provides terminal weather information to aircraft and controller/facilities as necessary.
 - d. Issues appropriate ATIS information when necessary.

J.2.4 Operating Methods and Procedures

1. Flight strip postings are complete and correct: posts all required information on flight strips and updates them as required.
 - a. Detects and/or corrects flight strip errors or update changes.
 - b. Posts altitude changes, estimated time, route changes, etc.
 - c. Posts data in correct area of strip.
 - d. Postings are legible.
2. Clearance delivery is correct/complete/timely: issues clearances in the correct format or order; is specific and uses correct phraseology.
 - a. Uses specific terms to describe a fix.
5. Handoff procedures are correctly performed: verifies aircraft position or coordinates any restrictions or special instructions; uses correct interphone procedures.
 - a. Ensures departure radar awareness of unusual departure routes.
 - b. Performs handoff at appropriate time/position.
 - c. Satisfactorily coordinates special restrictions or instructions.
 - d. Verifies aircraft position or altitude.
 - e. Correctly updates flight strips.

J.2.5 Coordination and Communication

1. Necessary traffic advisories are provided: follows the required format when passing traffic information; passes traffic advisories when work load permits.
 - a. Provides traffic advisories to aircraft on work load permitting basis.
 - b. Issues complete traffic information in the required format.
2. Coordination is thorough: coordinates all information that is pertinent to the situation. Ensures that personnel receiving information have all of the contents and acknowledges all information received on position.
 - a. Ensures that all required information has been passed.
 - b. Verifies or acknowledges all information exchanges.
 - c. Coordinates revisions and updates in ATIS information.
 - d. Keeps supervisor informed of emergency status information.
 - e. Issues PIREP and NOTAM information in a timely manner.
3. Communication is clear and concise: ensures that all data passed or received is understood; does not have to repeat information using different words to convey the intended meaning.
 - a. Ensures information is understood.
 - b. Makes intentions known.
 - c. Provides useful information that is timely, accurate, and clear.
 - d. Does not have to explain intentions more than once.
4. Makes only necessary transmissions: transmits only information that is required over radio or interphone; or transmits information as combined messages when it is more efficient to combine information.
 - a. Only necessary use of radio or interphones.
 - b. Over coordination does not result from having too much information.

J.2.6 Phraseology

1. Standard phraseology is adhered to: uses words and phrases in accordance with the requirements of the duty being performed.
 - a. Uses approved procedural words, phrases, and formats.
 - b. Improvises only when necessary.
2. Voice quality: quality of the controller's voice is such that it is easy to understand.
 - a. Voice pitch or timbre is satisfactory.
 - b. Voice is not harsh, grating, or causes lack of understanding.
3. Speech rate is correct: other personnel or pilots have no difficulty understanding what has been said because controller speaks too rapidly or too slowly.
 - a. Speaks neither too fast nor too slow.
 - b. Adjusts speech rate to ensure accurate receipt of information.

J.2.7 Equipment

1. Equipment status information is maintained: maintains knowledge of equipment operating status; reports malfunctioning equipment as required.
 - a. Determines status of equipment performance.
 - b. Reports malfunctions.
2. Equipment operations are thoroughly understood: is familiar with all equipment in control tower; understands all procedures, needs no help on malfunction procedures; has no difficulty switching to backup equipment.
 - a. Knows procedures for operating all equipment.
 - b. Has no difficulty in operating radio equipment, lighting equipment, and/or other control tower equipment.
 - c. Is familiar with backup equipment or procedures.
 - d. Uses tower radar display to full capabilities.

1. WEATHER	2. WORK LOAD	3. COMPLEXITY	4. TOTAL HOURS ON THIS POSITION	5. ROUTING
	Light Moderate Heavy	Routine not difficult Occasionally difficult Most difficult Very difficult		
TYPE OF EVALUATION	Initial	Annual	Special (Specify)	
EVALUATION				
EVALUATION FACTOR	EXPECTED PERFORMANCE			
A. Separation	1. SEPARATION IS ENSURED.			
B. Control Judgment	2. AWARENESS IS MAINTAINED.			
	3. GOOD CONTROL JUDGMENT IS APPLIED.			
	4. CONTROL ACTIONS ARE CORRECTLY PLANNED.			
	5. POSITIVE CONTROL OF SITUATION IS PROVIDED.			
C. Traffic Management	6. PROMPT ACTION TO CORRECT ERRORS IS TAKEN.			
	7. EFFECTIVE TRAFFIC FLOW IS MAINTAINED.			
	8. AIRCRAFT IDENTITY IS MAINTAINED.			
D. Operating Methods and Procedures	9. PROFESSIONAL MANNER IS MAINTAINED.			
	10. FLIGHT STRIP POSTINGS ARE COMPLETE AND CORRECT.			
	11. CLEARANCE DELIVERY IS CORRECT/COMPLETE/TIMELY.			
	12. LETTER OF AGREEMENT/DIRECTIVES ARE ADHERED TO.			
	13. NAVIGATIONAL ASSISTANCE IS PROVIDED.			
E. Coordination and Communication	14. WEATHER INFORMATION IS PROVIDED.			
	15. HANDOFF PROCEDURES ARE CORRECTLY PERFORMED.			
	16. NECESSARY TRAFFIC ADVISORIES ARE PROVIDED.			
	17. COORDINATION IS THOROUGH.			
F. Phraseology	18. COMMUNICATION IS CLEAR AND CONCISE.			
	19. MAKES NECESSARY TRANSMISSIONS.			
	20. STANDARD PHRASEOLOGY IS ADHERED TO.			
	21. VOICE QUALITY.			
	22. SPEECH RATE IS CORRECT.			

Figure J-1. OJT Performance Evaluation (Sheet 1 of 2)

G. Equipment	23. EQUIPMENT STATUS INFORMATION IS MAINTAINED.		
	24. COMPUTER ENTRIES ARE CORRECT.		
	25. ADJUSTMENT OF CONTROL DISPLAY IS CORRECT.		
	26. EQUIPMENT CAPABILITIES ARE FULLY UTILIZED/UNDERSTOOD.		
H. Other (Specify)	27.		
	28.		
	29.		
OVERALL EVALUATION: _____ QUALIFIED _____ NOT QUALIFIED _____			
COMMENTS (Identify manner in which the controller demonstrated the weakness(es) checked)			
REMEDIAL TRAINING	Date Training		Initials
	Started	Completed	Trainer
	Trainee		
Training summary (date and nature of each training session including retesting) _____			
Type/Print Name, Grade & Title			Signature

Figure J-1. OJT Performance Evaluation (Sheet 2)

APPENDIX K

Air Traffic Control Certification/Qualification Record

K.1 PURPOSE

Individual air traffic controller certification/qualification records shall be established that contain

the information as specified in this appendix. This action provides ATC management a cumulative and standardized presentation of professional history for assigned personnel.

SECTION I	
AIR TRAFFIC CONTROLLER DOCUMENTATION	
A.	ANNUAL MEDICAL UP CHIT
B.	TEMPORARY GROUNDING CHITS AND UP CHITS
C.	COPY OF AWT RESULTS/CTO CERTIFICATE/ATCS CERTIFICATE
D.	AIR TRAFFIC CONTROLLER HISTORY PAGE COVERING PAST DUTY STATION ACHIEVEMENTS AND QUALIFICATIONS
SECTION II	
QUALIFICATIONS AND ACHIEVEMENTS	
A.	POSITION QUALIFICATION AND ANNUAL POSITION EVALUATIONS
Note	
THERE SHOULD BE ENOUGH DIVISIONS IN THIS SECTION TO SEPARATE FACILITY POSITIONS FROM ONE ANOTHER.	
B.	DESIGNATION LETTERS
	— FACILITY WATCH SUPERVISOR
	— RADAR SUPERVISOR
	— TOWER SUPERVISOR
	— BRANCH CHIEF
	= TRAINING CHIEF
	= TOWER CHIEF
	= RADAR CHIEF
	= FLIGHT PLANNING CHIEF
	= OUTLYING FIELDS CHIEF
	— CTO EXAMINER
	— OJTI
	— TERPS SPECIALIST
C.	MISCELLANEOUS
	— AWARDS
	— SAVES

Figure K-1. Contents of ATC Certification/Qualification Record (Sheet 1 of 2)

SECTION III	
TRAINING	
A. ON-THE-JOB TRAINING DOCUMENTATION	
— TRAINING/QUALIFICATION SUMMARY	
= START/STOP/QUAL DATES	
= PTH TOTALS	
Note	
MAKE ONE SECTION FOR EACH POSITION CONTROLLER IS ACTIVELY TRAINING ON. THERE IS NO NEED TO RETAIN OJT EVALUATIONS AFTER CONTROLLER QUALIFICATION.	
B. WRITTEN POSITION TEST RESULTS	
C. CONTROLLER EVALUATION DOCUMENTATION	
— PROGRESS REVIEW DOCUMENTS	
— 70 PERCENT CONTROLLER EVALUATION BOARD DOCUMENTS	
— REVOCATION DOCUMENTATION	
D. SCHOOLS COMPLETED	
SECTION IV	
ACCIDENTS/INCIDENTS INVOLVEMENT	
A. ACCIDENTS ATTRIBUTED TO AIR TRAFFIC CONTROLLER ACTIONS	
B. OPERATIONAL DEVIATION INVOLVING CONTROLLER	
C. OPERATIONAL ERROR INVOLVING CONTROLLER	
SECTION V	
ADVANCEMENT/PROMOTION	
A. RECOMMENDATION	
B. PARS	
C. COURSE TRANSMITTALS	
D. EXAM RESULTS	
E. FROCKING LETTERS	
F. ADVANCEMENT AUTHORIZATION	
SECTION VI	
GMT/PQS/SHIPBOARD QUALIFICATIONS	
A. TOPICS	
B. 3M	
C. DAMAGE CONTROL	
D. EAWS /ESWS	

Figure K-1. Contents of ATC Certification/Qualification Record (Sheet 2)

APPENDIX L

Personnel Support Detachment Transmittal Forms

(SAMPLE)

MEMORANDUM Date _____

From: Air Traffic Control Facility Officer

To:

Subject: Air Traffic Control Facility Watch Supervisor Designation ICO

Rate	Name	SSN

Ref: (a) NAVAIR 00-80T-114, ATCF NATOPS
(b) (C.O. letter of designation)

- Per references (a) and (b), request subject designation, effective _____ be entered in SNM's service record. (Date)
- Upon completion of action, request your endorsement and return of this memo.

//s// _____

FIRST ENDORSEMENT Date _____

From:

To: Air Traffic Control Facility Officer

- Service record entry was completed on _____ as requested. (Date)

//s// _____

ATC-F04

Figure L-1. Facility Watch Supervisor Designation

(SAMPLE)

MEMORANDUM Date _____

From: Air Traffic Control Facility Officer

To:

Subj: Air Traffic Control Specialist (ATCS) Rating ICO

Rate	Name	SSN
------	------	-----

Ref: (a) NAVAIR 00-80T-114, ATCF NATOPS

1. Per reference (a), request the following page 4 service record entry:

Air Traffic Control Specialist _____ (see chapter 4),
Facility Rating; effective _____.
(Date)

2. Upon completion of action, request your endorsement and return of this memo.

//s// _____

FIRST ENDORSEMENT Date _____

From:

To: Air Traffic Control Facility Officer

1. Service record entry was completed on _____ as requested.
(Date)

//s// _____

ATC-F05

Figure L-2. Air Traffic Control Specialist (ATCS) Rating

(SAMPLE)

MEMORANDUM Date _____

From: Air Traffic Control Facility Officer

To: OIC, NAVMETOCDET _____

Subj: Request for Tower Visibility Observer Designation

Ref: (a) NAVAIR 00-80T-114
(b) NAVOCEANCOMINST 1500.3B

1. Per references (a) and (b), it is requested that _____ be designated as a Tower Visibility Observer.

//s// _____

FIRST ENDORSEMENT Date _____

From: OIC, NAVMETOCDET

To: Air Traffic Control Facility Officer

1. Subject request is approved/disapproved.

//s// _____

ATC-F06

Figure L-3. Air Traffic Control Certification Record

APPENDIX M

TERPs Airfield Information Summary Instructions

TERPS AIRFIELD INFORMATION SUMMARY INSTRUCTIONS	
<u>GENERAL</u>	
These instructions are for completing forms OPNAV 3722/10 and 3722/11. After an initial submission of each form, it shall be reviewed biennially as a part of the NAVAIR REPORT 3722-1. Whenever interim changes occur, whether extensive or minor, NAVFIG shall be notified as soon as possible. Extensive changes, e.g., when you add several new obstacles or make several coordinate changes, a revised form shall be submitted. All changes must be identified on a cover letter or may be highlighted on the revised form. Minor changes may be made by telephone, but must be followed by letter or revised form.	
<u>ACCURACY</u>	
Use the most accurate data available. Minimum standards should not be less than those listed below:	
a.	Distances: (1) The nearest tenth of feet when measured in feet. (2) The nearest tenth of miles when reported in miles. (3) All mileages are nautical miles (6076.1 feet)
b.	Geographical coordinates - to the nearest hundredth of an arc second. Enter in the REMARKS the reference datum used for the calculation.
c.	True/magnetic values - to the nearest tenth of degree.
d.	Elevations are Mean Sea Level (MSL), except also report Above Ground Level (AGL) for obstacles.
<u>OPNAV 3722/10, TERPS AIRFIELD INFORMATION SUMMARY</u>	
1.	GENERAL
A.	AIRPORT: Enter name, i.e., PENSACOLA NAS, CHERRY POINT MCAS.
B.	LOCATION: Enter the name of the associated city and state/country.
C.	OPERATING AGENCY: Enter the mailing address of the assigned unit or detachment.
D.	OWNER: Indicate the actual owner (USN, FAA, foreign country, etc.).
E.	ICAO IDENTIFIER: Enter the four letter designation for airport.
F.	AIRPORT ELEVATION: Enter the elevation of the highest point on the useable airport landing surfaces.
G.	MAGNETIC VARIATION: Enter current magnetic variation at the airport location and the epoch year
H.	AIRPORT REFERENCE POINT: Enter the latitude and longitude for the official ARP.
2.	AIRFIELD INFORMATION
A.	RUNWAY NUMBER: Self-explanatory.
B.	LENGTH: Enter the length of the landing surface. Measure from threshold to threshold.
C.	WIDTH: Enter the width of the runway. Measure from runway lights.
D.	THRESHOLD ELEVATION: Enter MSL elevation at the threshold.
E.	TOUCHDOWN ZONE ELEVATION: Enter MSL elevation of touchdown zone (the highest point within the first 3,000 feet of runway)
F.	RUNWAY GRADIENT: Enter the gradient (percent) of the first 3,000 feet of the runway and indicate the direction of slope, either (+) or (-). Starting at the threshold, an up-sloping runway has a positive slope (+) and a downsloping runway has a negative slope (-).
G.	DISPLACED THRESHOLD: Enter the exact distance displaced from the actual threshold. Include any qualifying statements in the REMARKS section and include the geographical coordinates of the displaced threshold.
H.	RUNWAY TRUE AZIMUTH: Enter the true azimuth of the runway.
I.	RUNWAY THRESHOLD COORDINATES: Enter the latitude and longitude of the point on the centerline at the threshold.
3.	AIRFIELD LIGHTING: Enter the runway number and the appropriate approach lighting code (from TERPS e.g. A1, A2, D, etc) or an "X" for the appropriate runway lighting. At Rwy MRKG, enter NP for non-precision, P for precision, or O for other to describe the type of runway markings available. For nonstandard light systems (other than as described in TERPS), fill in the required information. Use the REMARKS section for any necessary explanations.
4.	REMOTE ALTIMETER: If a remote altimeter is used (not on the airport), give its source and distance.
5.	ILS/PAR/VASI INFORMATION:
A.	RUNWAY NUMBER: Self-explanatory
B.	RUNWAY ELEVATION AT RPI: Enter the crown elevation of the runway for the position abeam the ILS glideslope antenna or at the PAR RPI.
C.	DISTANCE PAR ANTENNA TO RUNWAY CENTERLINE
D.	DISTANCE PAR ANTENNA TO TOUCHDOWN REFLECTOR AND TOUCHDOWN REFLECTOR TO THRESHOLD: Put the PAR antenna to touchdown reflector distance in the PAR block. Put the touchdown reflector to threshold distance in the ILS block.
E.	GLIDESLOPE INTERCEPT ALTITUDE: Enter glideslope intercept altitude (in hundreds of feet)
F.	GLIDESLOPE ANGLE: Enter the angle in degrees and hundredths.
G.	GLIDESLOPE ANTENNA ELEVATION: Enter the MSL elevation at the base of each ILS antenna or the elevation at the mid-point of the PAR elevation antenna.
H.	VASI. Enter required information.

OPNAV 3722/10A (REV. 5-85) FRONT

ATC-F07

Figure M-1. OPNAV 3722/10A (Sheet 1 of 2)

- 6. **COMPUTATIONS:** Indicate whether smooth terrain or rapidly dropping terrain was used when siting was accomplished by the installation engineer.
- 7. **NAVAID INFORMATION**
 - A. **FACILITY:** List all facilities that will be/are used for terminal instrument procedures (includes PAR, ASR, ILS). List ILS as ILS/L for the localizer; ILS/G for the glideslope; and ILS/D for a co-located DME. Also include Marker Beacons, as appropriate. List in the REMARKS section which facilities are restricted, but DO NOT list the restriction.
- NOTE:** When a PAR is sited at more than one location enter the runway it serves in the Facility ID block and the coordinates of each location.
- B. **FACILITY IDENTIFICATION:** Enter the two or three letter identification for the facility. For PAR and ILS enter the runway number.
- C. **ANTENNA ELEVATION:** Enter the MSL elevation at the mid-point of the antenna.
- D. **MAGNETIC SLAVED VARIATION:** Enter the variation set into the antenna of the VOR, TACAN, VORTAC, or ASR. Leave blank for NDB, PAR, DME etc.
- E. **CARTESIAN COORDINATES FROM THRESHOLD:**
 When geographical coordinates can not be obtained, use "X" and "Y" cartesian coordinates. Measure cartesian coordinates from the threshold of the primary instrument runway. When this is not practical, any runway may be used. Use the runway centerline as the "X" axis as shown in the illustration.
- F. **GEOGRAPHICAL COORINATES OF FACILITY:** Enter latitude and longitude of each facility.
- 8. **REMARKS:** Use this section to clarify any information. Key each remark to the appropriate section and block (e.g. 2E, 3N, 5C). If necessary, continue on a separate sheet.
- 9. **Completely fill in this section.**

OPNAV 3722/11, TERPS OBSTACLE SUMMARY

General Guidelines

- a. This form is used to add obstacles not listed or revise / delete those listed on your latest NAVFIG provided TERPS OBSTACLE SUMMARY.
 - b. Consider for listing those obstacles which fall within the minimum sector areas; holding areas; initial, intermediate, final, and missed approach segments; and circling areas for IAP's. Also consider all departure segments.
 - c. List all those obstacles within 8 NM of the ARP regardless of the elevation.
 - d. List only those obstacles between 8 and 30 NM which are greater than 400 feet above the airport elevation.
 - e. List any additional obstacles deemed pertinent.
1. **DATE:** When obstacles are added, deleted, or changed, change the date to reflect the current revision.
 2. **NUMBER:** Leave blank.
 3. **DESCRIPTION;** Enter description (control tower, tree, silo, etc.).
 4. **MSL ELEVATION:** Self-explanatory.
 5. **AGL ELEVATION:** Self-explanatory.
 6. **GEOGRAPHIC COORDINATES:** Use geographical coordinates only if known to be accurate. (Geographical coordinates from engineering surveys are usually best.)
 7. **CARTESIAN COORDINATES:** See instruction for 7E under NAVAID INFORMATION.
 8. Include the total number of pages used at the bottom of each form.

Figure M-1. OPNAV 3722/10A (Sheet 2)

APPENDIX N

Terminal Instrument Procedures Standards Waiver

TERMINAL INSTRUMENT PROCEDURES STANDARDS WAIVER		DATE
1. PROCEDURE IDENTIFICATION		
2. APPLICABLE STANDARD AND WAIVER REQUIRED		
3. REASON FOR WAIVER		
4. EQUIVALENT LEVEL OF SAFETY PROVIDED		
5. SUBMITTED BY		
DATE	TITLE	SIGNATURE
6. INSTRUMENT PROCEDURES REVIEW		
<input type="checkbox"/> APPROVED	REASON:	
<input type="checkbox"/> DISAPPROVED		
DATE	TITLE	SIGNATURE
7. NAVFIG ENDORSEMENT		
<input type="checkbox"/> APPROVED	REASON:	
<input type="checkbox"/> DISAPPROVED		
DATE	TITLE	SIGNATURE
8. CNO ENDORSEMENT		
<input type="checkbox"/> APPROVED	REASON:	
<input type="checkbox"/> DISAPPROVED		
DATE	TITLE	SIGNATURE

OPNAV 3722/16 (5-85)

ATC-F09

Figure N-1. OPNAV 3722/16

APPENDIX O

Precision Approach Landing System Approach Criteria

O.1 GENERAL

PALS/TRN-28 approaches will be based on the latest certification information and the appropriate ILS/PAR chapters of OPNAVINST 3722.16 (TERPs).

O.2 INITIAL, INTERMEDIATE, AND DESCENT GRADIENT AND ALTITUDE SELECTION

Initial, intermediate, and descent gradient and altitude selection will be determined in accordance with the appropriate ILS/PAR paragraphs of TERPs.

O.3 FINAL APPROACH SEGMENT

The final approach area will be as described in the appropriate ILS/PAR paragraphs of TERPs. (EXCEPTION: Final trapezoid width will be based upon the greater of (1) 6° splay on either side of the TRN-28 antenna or (2) the ILS/PAR trapezoid).

O.4 FINAL APPROACH OBSTACLE

Final approach obstacle clearance surfaces shall be as described in the appropriate ILS/PAR paragraphs for the certified glideslope angles.

O.5 TRANSITIONAL SURFACES

Transitional surfaces will be based upon the trapezoid used for the final approach (6° to 20° on either side of centerline if based on the TRN-28 antenna, or the ILS/PAR trapezoid's 5,000-foot transitional surface).

O.6 DECISION HEIGHT (DH)

Decision height will be in accordance with the appropriate ILS/PAR sections of TERPs, based upon the certified glideslope angles. Minima assigned shall be the lowest supported by both certification and TERPs.

O.7 MISSED APPROACH SEGMENT

Missed approach segment will be developed using the appropriate ILS/PAR sections of TERPs. The missed approach surface will be based upon the height of the Zone 1 obstacle clearance surface at [DH](#).

O.8 MISSED APPROACH OBSTACLE CLEARANCE

Missed approach obstacle clearance will be based on the appropriate ILS/PAR sections of TERPs.

APPENDIX P

Selected Air Traffic Control Related Directives

NUMBER	SOURCE	TITLE
EE-003-BA-GYD-010/GEMO	SPAWAR	GEMO Operating and Maintenance Management Guide
AE-TACAN-GYD-000	NAVAIR	Instruction and Procedures for Requesting Flight Certification for TACAN
00-80R-14	NAVAIR	U.S. Navy Firefighting and Rescue NATOPS Manual
00-80T-104	CNO	LSO NATOPS Manual
00-80T-105	CNO	CV NATOPS Manual
00-80T-106	CNO	LHA/LPH/LHD NATOPS Manual
00-80T-112	CNO	NATOPS Instrument Flight Manual
16-1-520	NAVAIR	U.S. Standard Flight Inspection Manual
51-40ABA-7	NAVAIR	Lighting and Marking Systems for Expeditionary Airfields
51-50AAA-2	NAVAIR	General Requirements for Shore-Based Airfield Marking and Lighting
1000.8	BUMED	Disposition of rehabilitated alcohol dependent or abuser air-crew, air traffic controllers, hypobaric chamber inside observers and instructors
1500.76	OPNAV	Navy Training System Requirements, Acquisition, and Management
1710.2	OPNAV	Navy Flying Club Program
2804.1	SPAWAR	Policy and Procedures Concerning BESEPs
3140.54	OPNAV	METOC Needs Submission
3141.2	NAVMETOC	Surface METAR Observations User's Manual
3501.167	OPNAV	Shore Base Readiness Report (BASEREP)
3700.19	OPNAV	Foreign Military Aircraft landing Clearance Procedures
3710.1	NAVAIR	Contractor's Flight Operations
3710.2	OPNAV	Foreign Clearance Procedures for U.S. Naval Aircraft
3710.7	OPNAV	NATOPS General Flight and Operating Instructions; promulgation of
3710.18	OPNAV	Unmanned Free Balloons, Moored Balloons and Kites, Unmanned Rockets, and Derelict Friendly Airborne Objects
3710.31	OPNAV	Operational Procedures for Aircraft Carrying Hazardous Materials
3721.1	SPAWAR	Naval Air Traffic Control, Air Navigation Aids and Landing Systems (NAALS) Program
3721.5	OPNAV	Naval Air Traffic Control and Air Navigational Aid and Landing Systems (NAALS) Program
3721.18	OPNAV	U.S. Interagency Ground Inspection Manual, Air Traffic Control, and Navigational Aid Facilities
3721.20	OPNAV	Military Notices to Airmen (NOTAM)

NAVAIR 00-80T-114

NUMBER	SOURCE	TITLE
3722.16	OPNAV	U.S. Standard for Terminal Instrument Procedures (TERPs)
3722.30	OPNAV	Security Control of Air Traffic and Air Navigation Aids (SCATANA)
3722.33	OPNAV	Federal Aviation Administration Handbook of Special Military Operations 7610.4
3722.35	OPNAV	Baseline Planning Criteria for Naval Air Traffic Control Facility Resources Criteria
3750.6	OPNAV	Naval Aviation Safety Program
3750.16	OPNAV	Participation in a Military Aircraft Safety Investigation
3770.1	SECNAV	Use of Department of the Navy Aviation Facilities by other than U.S. DOD Aircraft
3770.2	SECNAV	Joint Military and Civil Use of Navy and Marine Corps Aviation Installations
3770.2	OPNAV	Airspace Procedures Manual
3770.4	OPNAV	Use of Airspace by U.S. Military Aircraft and Firing Over the High Seas
4610.8	OPNAV	Transportation and Traffic Management
4630.13	OPNAV	Aerial Ports of Embarkation
4700.9	NAVELEX	Fleet Marine Force (FMF) ATC System and Equipment Maintenance and Logistics Support Program Policy and Procedures Concerning
5030.19	DOD	DOD Responsibilities on Federal Aviation and National Air-space System Matters
5090.1	OPNAV	Environmental and Natural Resources Protection Manual
5300.3	MCO	Fleet Marine Force Personnel Assistance Program
5350.4	OPNAV	Substance Abuse Prevention and Control
5400.137	NAVAIR	Designation of the Air Traffic Control and Landing Systems Program (PMA 213)
5604.1	OCEANCOM	Procedures for Requisitioning Material from the Defense Mapping Agency Hydrographic Center (DMAHC)
5720.44	SECNAV	Department of the Navy Public Affairs Regulation
5800.7	JAGINST	Manual of the Judge Advocate General
6120.20	NAVMED-COM	Competence for Duty Examinations, Evaluations of Sobriety, and Other Bodily Views and Intrusions Performed by Medical Personnel
11010.36	OPNAV	Air Installations Compatible Use Zones (AICUZ)
11130.2	OPNAV	Airfield Certificating
13800.11	NAVAIR	Procedures and Responsibilities for Certification and Verification of the Precision Approach and Landing System (PALS)
15560	BUPERS	Navy Military Personnel Manual
AE-CVATC-OPM-000	NAVAIR	CATC Handbook
AE-LHATC-OPM-000	NAVAIR	Amphibious Ships ATC Manual
ANNEX 2	ICAO	Rules of the Air
ANNEX 11	ICAO	Air Traffic Services
DOC-4444/501	ICAO	Rules of the Air and ATC Service

NUMBER	SOURCE	TITLE
	NIMA	National Imagery and Mapping Agency Catalog of Maps, Charts, and Related Products, Part 1, Aerospace Products
FAA Order 7110.10	FAA	Flight Services
FAA Order 7110.65	FAA	Air Traffic Control
FAA Order 7130.3	FAA	Holding Pattern Criteria
FAA Order 7210.3	FAA	Facility Operation and Administration
FAA Order 7350.7	FAA	Location Identifiers
FAA Order 7400.2	FAA	Procedures for Handling Airspace Matters
FAA Order 7400.8	FAA	Special Use Airspace
FAA Order 7400.9	FAA	Airspace Designation and Reporting Points
FAA Order 7610.4	FAA	Special Military Operations
FAA Order 7900.5	FAA	Surface Weather Observing – METAR
FAA Order 7930.2	FAA	Notices to Airmen
FAA Order 8200.1	FAA	U.S. Standard Flight Inspection Manual
FAA Order 8260.19		Flight Procedures and Airspace
FAR Part 1		Definitions and Abbreviations
FAR Part 65		Certification: Airman other than Flight Crewman
FAR Part 67		Medical Standards and Certification
FAR Part 71		Designation of Federal Airways, Controlled Airspace, and Reporting Points
FAR Part 73		Special Use Airspace
FAR Part 75		Establishment of Jet Routes
FAR Part 77		Objects Affecting Navigable Airspace
FAR Part 91		General Operating and Flight Rules
FAR Part 93		Special Air Traffic Rules and Airport Traffic Patterns
FAR Part 95		IFR Altitudes
FAR Part 97		Standard Instrument Approach Procedures
FAR Part 99		Security Control of Air Traffic
FAR Part 101		Moored Balloons, Kites, Unmanned Rockets, and Unmanned Free Balloons
FAR Part 103		Ultralight Vehicles
FAR Part 105		Parachute Jumping
FAR Part 139		Certification and Operations of Airfields
	NAWCAD	BRANDS/RATCF DAIR/DAIR Configuration Control Sub-board Policy and Procedures Manual
JANAP 119	JCS	Joint Voice Callsigns Book
Joint Pub 3-50	JCS	National Search and Rescue Manual Vol. I
Joint Pub 3–50.1	JCS	National Search and Rescue Manual Vol. II
MCWP 3–25.8	MCCDC	Marine Air Traffic Control Detachment Handbook
NWP 1-03.1	NWDC	Operational Reports
NWP 3-04.1	NWDC	Helicopter Operating Procedures for Air Capable Ships
NWP 3-50.1	NWDC	Navy Search and Rescue Manual
MIL–HDBK–1023/1	NAVFAC	Airfield Lighting

NAVAIR 00-80T-114

NUMBER	SOURCE	TITLE
MIL-HDBK-1024/1	NAVFAC	Aviation and Operational Support Facilities
DM-23.2	NAVFAC	Navigational and Traffic Aids
P-80.1	NAVFAC	Airfield Capacity Handbook
P-80.3	NAVFAC	Airfield Safety Clearances
P-970	NAVFAC	Planning in the Noise Environment
P-350.19	MCO	Air Traffic Controller Training and Qualification Requirements
UFC 3-260-02		Pavement Design for Airfields

FLIP Correction Form

DIRECTIONS

1. Fill out the form completely.
2. Be specific about which publication/form you are addressing.
3. Use one Flip Correction Form for each publication/form or procedure (specify the facility and procedure, if applicable) (indicate page and section, if applicable).
4. Be specific in the deletions, additions or corrections you want made (specify the exact text, drawings or other information).
5. You may use extra pages and include diagrams (must be legible).
6. The form shall be signed by the Commanding Officer, Operations Officer, ATC Facility Officer or someone with appropriate "By direction" authority for the Commanding Officer.
7. Send form to the address indicated on the reverse. Email provides a better copy than fax and is quicker than the US Mail. If you fax it, use a fax cover sheet. If you fax or email form, also mail the original.

Figure Q-1. FLIP Correction Form (Sheet 2)

STANDARD INSTRUMENT APPROACH PROCEDURE REQUEST

AIRPORT NAME, CITY, STATE, COUNTRY			ICAO IDENT	APRT. ELEV.	APRT. VAR.
PROCEDURE IDENTIFICATION			NAVAID	TYPE	FREQ/CH
TITLE: DATE RQR:					IDENT
SUPERSEDES: DATE:					ASSN.VAR.
PROCEDURE DESCRIPTION					
IAF:					
DESCRIPTION:			TERMINAL TRANSITION ROUTINGS		
			FROM	TO	MIN. ALT.
IF:					
DESCRIPTION:					
FAF:					
DESCRIPTION:					
FAF ALT:			REMARKS:		
GS (DEG):					
GS INTCP ALT:					
MAP:					
DESCRIPTION:					
RUNWAY INFORMATION:					
GPI: TCH:					
RPI: RWY GRADIENT:					
TDZE: THRE:					
<p>NOTE: Bearings, headings, courses, tracks and radials are magnetic. Procedure altitudes are MINIMUM ALTITUDES, unless otherwise specified. The minimum altitude for initial approach will be MEA, or as indicated above. Distances are in NAUTICAL MILES. Visibility MINIMUMS are in STATUTE MILES. Elevations and altitudes are in FEET MSL.</p> <p>NOTE: Use additional sheets as needed, but only one procedure per form. Complete All Three Sheets.</p>					

Figure Q-2. Standard Instrument Approach Procedure Request (Sheet 1 of 3)

Q-3

ORIGINAL

Figure Q-2. Standard Instrument Approach Procedure Request (Sheet 2)

Draw New Procedure Here Or Paste Marked-Up Copy Of Revised Procedure	HOLDING PATTERNS					
	INITIAL:					
	MISSED APPROACH:					
	MINIMA (OPTIONAL)					
	CATEGORY	A	B	C	D	E
	S-					
	S-					
	CIRCLING					
	NOTE					
NOTE						
SIGNATURES						
ATC FACILITY OFFICER			DATE			
APP CONT FACILITY (IF REQUIRED)			DATE			
ENROUTE FACILITY (IF REQUIRED)			DATE			
OTHER			DATE			
COMMANDING OFFICER			DATE			

DEPARTURE PROCEDURE - TAKEOFF MINIMUMS

Airport Name and ICAO Ident:		City, State and Country:	
DEPARTURE PROCEDURE:			
RWY _____:			
RWY _____:			
TAKEOFF MINIMUMS:			
RWY _____:			
RWY _____:			
TAKEOFF OBSTACLES:			
RWY _____:			
RWY _____:			
DEVELOPED BY		NAVFIG APPROVAL	
Signature and Title:	Date:	Signature and Title:	Date:
Organization and Address:		Effective Date: Amendment No.	
		Email: NAVFLTINFOGRP@HQ.NAVY.MIL	
		Website: http://atc.navy.mil/navfig	
Phone: Email:	Phone: 202-433-3473		
Coordination			
<input type="checkbox"/> FAA/Region <input type="checkbox"/> APP/Center <input type="checkbox"/> Military <input type="checkbox"/> Host Nation			
NOTES: Bearings, headings, courses are magnetic. Distances are in NAUTICAL MILES. Elevations and altitudes are in FEET MSL. Ceilings are measured above airport elevation. Visibility is in STATUTE MILES or RVR. Enter as many runways as necessary. Use additional sheets as needed.			

Figure Q-3. Departure Procedure — Takeoff Minimums

Figure Q-4. Standard Instrument Departure Procedure Request (Sheet 2)

<p>Draw New Procedure Here Or Paste Marked-Up Copy Of Revised Procedure</p>	HOLDING PATTERNS	
	ONE:	
	TWO:	
	THREE:	
	LOST COMMUNICATIONS PROCEDURES:	
	REMARKS:	
	SIGNATURES	
ATC FACILITY OFFICER	DATE	
APP CONT FACILITY (IF REQUIRED)	DATE	
ENROUTE FACILITY (IF REQUIRED)	DATE	
FAA	DATE	
COMMANDING OFFICER	DATE	

Naval Flight Information Group

Application Form

Validation of JEPPESEN Terminal Approach Procedures

Date:

From:

To: Naval Flight Information Group (CNO N785F4)

Email: JOSEPH.MESSINA@NAVY.MIL DSN: 288-3473, C 202-433-3473

Fax: DSN 288-3458, C 202-433-3458

Airport Information

ICAO or other Identifier:
 ___ Military ___ Civilian Airport

Name:
 Location:

Specific Approaches Requested:

- 1.
- 2.
- 3.
- 4.
- 5.

Operational Dates Beginning: _____ Ending: _____
 Required Approval Date: _____

Normal Lead Time: 21 Days (Short notice requests require justification)

Squadron Information

Squadron:	PLAD:
POC:	Rank/Title:
Email:	Fax:
Comm. Phone:	DSN Fax:
DSN Phone:	

Send one form for each airport.
 Response will be via Naval Message.

OPNAV FORM 3722-6 VALIDATION OF JEPPESEN TERMINAL APPROACH PROCEDURES (October, 02)

ATC-F018

Figure Q-5. Validation of JEPPESEN Terminal Approach Procedures

APPENDIX R

Request for Aeronautical Video Maps

REQUEST FOR AERONAUTICAL VIDEO MAPS		Date of Request	Date Required
FROM: COMMANDING OFFICER ATTN:		TO: DEPARTMENT OF THE NAVY HEAD, NAVAL FLIGHT INFORMATION GROUP BLDG 176, ROOM 301 1339 PATTERSON AVENUE, SE WASHINGTON, DC 20374-5088	
<u>OFFICE NUMBER</u> COMM: DSN: EMAIL:	<u>FAX NUMBER</u> COMM: DSN:	<u>OFFICE NUMBER</u> COMM (202) 433-3473/0974 DSN: 288-3473/0974 Email: NAVFIG@NAVY.MIL	<u>FAX NUMBER</u> COMM (202) 433-3458 DSN: 288-3458
<p>1. GENERAL INFORMATION –</p> <p>a. <u>Purpose.</u> To provide information and a format for ordering the GPA-131/FA-8970 Aeronautical Video Maps (a 2.32" x 2.32" film negative), plastic mounts, video map overlays and E-PROMS, etc. for the New Video Map replacement equipment.</p> <p>b. <u>New Maps.</u> Facilities submitting their video map requirements shall use this standard request form for each map requested. Sketches of the desired final product (not necessarily to scale), and special procedural data or information that would not be on file at NIMA/NESEA should be attached or included.</p> <p>c. <u>Revised Maps.</u> Revisions or changes to video maps shall be requested on this form. Requests submitted on this form should contain ALL of the information desired on the map. Revisions shall be highlighted or identified.</p> <p>d. <u>Map Content.</u> The specific data to appear on each video map shall be determined by the requester consistent with operational requirements. The symbols, which NIMA/NESEA use, are standardized. Requested data shall be held to a minimum to avoid scope clutter.</p> <p>e. <u>MAP line thickness and symbol sizes.</u> Video maps are produced with the finest lines possible for the mapper to project; A final width of 2/1000" (.002"). Map symbols and symbol sizes are standardized, however, reduced symbol(s) may be requested. If reduced size symbols are requested, specify in Item 19 of this request which symbol(s) should be reduced, e.g., "Use reduced-size symbols for all DME fixes."</p> <p>f. <u>Alignment T's.</u> Standard alignment T's are provided on each map at the four cardinal magnetic bearings. The video map is produced with Magnetic North at the top. The top of each T is scaled to the nautical mile range of the map. The vertical part of the T is outboard of the nautical mile range. Additional T's will be provided upon request.</p> <p>g. <u>Plastic Mounts.</u> As an option, the video map for FA-8970's may be requested as a "Plastic Mount". NIMA will mount the standard map negative to a clean piece of same sized Plexiglass. Note: Plastic Mounts have proven helpful for some facilities, but not for all. Normally, the map negative is secured by a glass plate sized to fit the mapper.</p> <p>h. <u>Overlays.</u> An overlay is a photographic film positive of the video map, enlarged as necessary to fit the radar scope display. Special alignment T's are provided where the vertical portion of the T is INBOARD of the map's nautical mile range marker. These special T's are standard on all overlays.</p> <p>i. <u>Production Time:</u> NIMA normally requires six weeks to produce a new computer generated (CAVC) video map. NESEA normally requires three weeks to produce a new E-PROM. Revisions may take less time.</p> <p>j. <u>Symbol Priorities.</u> On congested maps where symbols would overlap, a symbol of lesser priority will be broken or interrupted for a symbol of higher priority. The priorities follow the same order used in this request form, e.g., an airway symbol (Item 15) will yield to a fix symbol (Item 9).</p> <p>k. <u>Continuation Pages.</u> Where there is insufficient room on this form to request needed items, attach continuation pages as needed, referenced to the appropriate item number.</p> <p>2. This request is for a _____ new map _____ revised map. If this map is for a revision, the map to be revised is AVC/CAVC/E-PROM _____. If this map replaces another map, may NIMA/NESEA eliminate the replaced map from the files. That map is AVC/CAVC/E-PROM _____.</p>			

ATC-F019

OPNAV FORM 13910/9 (October 02)

PREVIOUS EDITIONS ARE OBSOLETE
 LOCAL REPRODUCTION AUTHORIZED

Figure R-1. Request for Aeronautical Video Maps (Sheet 1 of 4)

3. LOCATION OF RADAR SITE CENTER, NAME, AND ANTENNA VARIATION:
 Site Center Name: _____ Antenna Slave Variation: _____ Coordinates: _____
 Datum: _____
 (Antenna Slave Variation should be confirmed by radar maintenance personnel.)
 Note: The antenna variation is independent of the airport variation values published in FLIP and other variation values used for TERPS purposes. Once the radar unit is setup and flight checked, the variation set in the equipment will not change until radar maintenance personnel perform a realignment.
 Note: Site Center Name - (i.e. NAS Kingsville ASR, MCAS Miramar ASR)

4. MAP SCALE:
 _____ 10NM _____ 20NM _____ 40NM _____ 60NM _____ 100NM _____ 200NM _____ OTHER
 NOTE: Additional mapper units are required for video maps over 60 NM.
 More than one map scale may be requested on this form if the data is the same for all maps, otherwise use separate forms.

5. FINAL PRODUCTS WANTED: _____ (Qty) GPA-131 Negatives Plastic Mounts? _____ Yes _____ No
 Overlays _____ Scope Size _____ E-PROM _____

6. PRIMARY AIRPORTS – List Name, Rwy ID, Bearing (Label bearings as True or Magnetic as appropriate), Length of Extended centerline (NM) and mileage T's if required.

7. SECONDARY AIRPORTS - List name and indicate whether portrayal should be by distinctive runway pattern or by symbol. If a symbol is wanted, specify the true bearing for the symbol alignment.

NAME	PATTERN	SYMBOL	TRUE BRNG	(NAWCAD USE ONLY)

8. NAVIGATION AIDS - List ident and type (VOR, VORTAC, etc.). Coordinates are not required for Navaids published in FLIP.

NAME/IDENT	TYPE

9. REPORTING POINTS/FIXES - Provide name and location by either coordinates or bearing/distance. For bearing/distance locations, specify TRUE or MAGNETIC, as appropriate. e.g., "086.5 Mag/15NM from NAME VORTAC."

NAME/IDENT	TYPE	LOCATION (Either coordinates or bearing/distance)

ARC210-F020

Figure R-1. Request for Aeronautical Video Maps (Sheet 2)

<p>18. TOPOGRAPHIC/HYDROGRAPHIC FEATURES - Name the features desired (rivers, shorelines, terrain, etc.) and indicate limits to be shown. For shorelines, indicate the amount of detail desired, e.g., "Show coastline highly generalized with no islands except Grande Island. Rivers - show only the Big Muddy River and depict as a single line.</p>	
<p>19. GEOREF (GEOGRAPHIC REFERENCE GRIDS) - If GEOREFs are required, specify whether they should be on a separate map or if they should be combined with other data on this form:</p> <p>_____ Not Required _____ Required, combine with other data _____ Not Required, provide as a separate map</p>	
<p>20. SPECIAL INSTRUCTIONS -</p>	
<p>TYPED NAME AND GRADE OF ATCF OFFICER</p>	<p>SIGNATURE</p>

Figure R-1. Request for Aeronautical Video Maps (Sheet 4)

APPENDIX S

Sample Format for Controller/ Technician of the Year Award

From: Originator
To: Type Commander
Subj: VICE ADMIRAL ROBERT B. PIRIE NAVAL AIR TRAFFIC CONTROLLER/VICE ADMIRAL
WILLIAM P. LAWRENCE NAVAL AIR TRAFFIC CONTROL TECHNICIAN OF THE YEAR
AWARD

Ref: (a) NAVAIR 00-80T-114
Encl: (1) Professional History
(2) Biography
(3) Personal Award Recommendation (OPNAV 1650/3)

1. Per reference (a), AC2 (AW) Ima Controller/SGT Ima Technician, USN/USMC, is nominated for subject award.
2. Paragraph two (and subsequent paragraphs, if necessary) contains substantiating justification regarding performance during the award period (not to exceed two pages).

Figure S-1. Standard Format for Controller/Technician of the Year

APPENDIX T

Sample Revocation Notification

From: Air Traffic Control Facility Officer

To:

Subj: Recommendation to Revoke ATCS Certification

Ref: (a) NAVAIR 00-80T-114

1. Per reference (a), a recommendation is being submitted via the chain of command to the Chief of Naval Operations (N785F) (USN)/Commandant of the Marine Corps (APC 5) (USMC) to revoke your ATCS Certificate. This recommendation is based upon (state one of the reasons/considerations from [paragraph 4.6.4.2](#)).
2. Accordingly, you are afforded three (3) working days to submit a statement concerning this recommendation or to decline in writing this opportunity.
3. Any statement you make must be constructed in temperate language and shall be confined to pertinent facts. Opinion shall not be expressed nor the motives of others impugned. Neither shall counter charges be made.
4. These procedures are administrative and are not to be construed as a disciplinary action.

signature _____
(ATCFO)

I have been counseled and understand the action being taken. I acknowledge that I have three (3) working days to submit a written statement concerning this action or to decline the opportunity in writing.

signature _____
(controller)/date _____

Figure T-1. Sample Revocation Notification

APPENDIX U

ATCF Training Program

This appendix provides guidance to the training chief/EPDS to develop and maintain a successful ATCF training program.

The ATCF training program consists of three parts:

Part 1 — An ATC Facility Manual that includes information required for position/facility qualification.

Part 2 — LQSs to establish and standardize the minimum knowledge factors and performance factors required for qualification.

Part 3 — Lesson topic guides to provide detailed information on equipment, procedures and information to trainees.

This program is designed to ensure required training elements are not overlooked and to standardize the basic structure to the maximum extent possible.

U.1 PART I — ATCF MANUAL OUTLINE

1. The ATCF manual outline in [paragraph 3.1.6.2](#) is provided as an example of the type of information that should be included in a facility manual and training program. The format closely aligns the manual to other manuals frequently required by air traffic control facilities and is the preferred format.
2. Command missions and operational requirements are greatly varied. Such requirements along with other factors such as weather, location, airfield facilities and ATC equipment available vary the knowledge and qualification standards required by air traffic controllers. These factors do not allow facilities to share a standard Navy wide facility manual. All facility manuals will differ in a number of areas if they are to meet the facilities' needs. Therefore a facility manual should be

developed for individual facilities following this basic outline and format when possible.

U.2 PART 2 — LOCAL QUALIFICATION STANDARDS

1. LQSs establish and standardize professional knowledge and performance factors. Developed by local subject matter experts, they are used to set the minimum required level of qualification for controllers.
2. A LQS shall be developed for each operating and supervisory position in the facility.
3. Approving authority for position qualification is the appropriate branch chief. Approving authority for branch supervisor designations is the ATCFO. The commanding officer is the approving authority for facility watch supervisor designation.
4. [Figure U-1](#) is an example of a LQS for one position qualification at a facility.

U.3 PART 3 — LESSON TOPIC GUIDES

Lesson topic guides are organized outlines of single topics and used as a blueprint of what is to be accomplished in the lesson. It is complete in detail and includes:

1. The objectives.
2. Main teaching points.
3. References.
4. Training aids.
5. Methods.
6. Procedures.
7. Supplemental information as needed.

NAVAIR 00-80T-114

Organized outlines ensure instructors address every portion of a subject ensuring standardization in the classroom/knowledge portion of a facility training program. These outlines will be developed by local subject matter experts and made available to watch teams.

Because of the unique requirements of each facility the number of lesson topic guides will vary. The ATFCO will determine requirements for each facility.

Figure U-2 is an example of one lesson topic guide that covers a specific topic.

Local Qualification Standards		
LOCAL CONTROL		
NAME: _____	RATE: _____	SSN: _____
Date Commenced: _____	Date Completed: _____	
Circle One: Initial or Subsequent	TTH: PTH:	
REQUIRED READING		
1. Ground Control LQS Required Reading Items a, b, d, e, f, g, h		
2. FAAO 7110.65, Chapters 1,2, 3, 7, 9, 10, and Pilot/Controller Glossary		
3. Aeronautical Information Manual, Chapters 2,3, 4, and 7		
4. NASINST 3730.3, Aircraft Antihijacking Procedures		
5. NASINST 5530.1, Bomb Threats		
6. Waiver to Taxi Aircraft into Position and Hold		
7. Letters of Agreement		
a. Air National Guard/NAS		
b. TRACON/NAS		
8. Appropriate FLIP products		
TRAINING PREREQUISITES		
	Int	Date
1. Ground Control/Flight Data Qualification	_____	_____
2. Complete Preposition Local Control Test	_____	_____
DETAILED KNOWLEDGE FACTORS		
1. Equipment (Equipment Manual, NAVAIR-00-80T-114 ATC Facility Manual)		
a. VISCOM		
b. BRANDS		
2. Communications/Coordination Procedures (NAVAIR-00-80T-114 ATC Manual, FAAO 7110.65, NAS Air Ops Manual, Letters of Agreement)		
a. Tower Supervisor		
(1) Emergencies/Hot Brakes/Abnormalities	_____	_____
(2) Helicopter operations	_____	_____
(3) FOD Reports	_____	_____
(4) FCLPs	_____	_____
(5) Hold/Call for Release	_____	_____

Figure U-1. Local Qualification Standards (Sheet 1 of 5)

	Int	Date
b. Ground Control (NAVAIR 00-80T-114 ATC Manual)		
(1) Vehicle Movement On/Across Runways	_____	_____
(2) Parking Intentions for transient aircraft	_____	_____
(3) Emergencies	_____	_____
(4) Arresting Gear Status	_____	_____
c. Departure Control (NAVAIR 00-80T-114 ATC Manual, FAAO 7110.65, NASINST 3722.1)		
(1) Standard Departure	_____	_____
(2) Requests for Unrestricted Climbs	_____	_____
(3) Hold/Call for Release	_____	_____
(4) Aircraft Requesting IFR Handling	_____	_____
d. Approach Control (FAAO 7110.65, NASINST 3722.1)		
(1) Aircraft requesting IFR Handling	_____	_____
(2) IFR Approach Termination	_____	_____
e. Radar Final Control (FAAO 7110.65, NASINST 3722.1)		
(1) Traffic and Sequencing Information	_____	_____
(2) Wave-off/Low Approach Restrictions	_____	_____
(3) Arresting Gear Out-of-Battery	_____	_____
(4) Clearance for the Option	_____	_____
3. Local Area and Airspace (OPNAVINST 3770.2, FAAO 7400.2, NASINST 3722.1)		
a. Class "D" Airspace	_____	_____
b. Local Airports	_____	_____
c. Approach Control Airspace	_____	_____
d. Departure Control Airspace	_____	_____
e. Special Use Airspace	_____	_____
f. VFR Reporting Points	_____	_____
4. Traffic Patterns (NASINST 3722.1)		
a. Tower		
(1) Initials	_____	_____
(2) Initial Altitudes	_____	_____
(3) Break Altitudes	_____	_____
(4) Pattern Altitudes	_____	_____
(5) Pattern Directions	_____	_____
b. Radar (NASINST 3722.1)		
(1) Pattern Altitudes	_____	_____
(2) Pattern Direction	_____	_____
(3) Pattern Climbouts	_____	_____
(4) Missed Approach Procedures	_____	_____

Figure U-1. Local Qualification Standards (Sheet 2)

	Int	Date
5. Traffic Management (FAAO 7110.65, ATC Facility Manual, Letters of Agreement)		
a. Types of Approaches		
(1) Option Approach	_____	_____
(2) Roll and Go	_____	_____
(3) Touch and Go	_____	_____
(4) Stop and Go	_____	_____
(5) Altitude Restricted Low Approach	_____	_____
b. Simultaneous Opposite Direction Operations (FAAO 7110.65)		
c. Runway Separation (NASINST 3722.1, FAAO 7110.65, Letters of Agreement)		
(1) FAAO 7110.65	_____	_____
(2) Reduced Runway Separation	_____	_____
(3) Air National Guard	_____	_____
(4) Air Force	_____	_____
(5) PPLAs	_____	_____
d. VFR Departure Separation (FAAO 7110.65)	_____	_____
e. VFR Arrival Separation (FAAO 7110.65)	_____	_____
f. IFR Departure Versus VFR Departure Separation (FAAO 7110.65)	_____	_____
g. IFR Departure Versus IFR Arrival Separation (FAAO 7110.65)	_____	_____
h. Traffic Advisories and Information (FAAO 7110.65)		
i. Wake Turbulence Application (FAAO 7110.65)	_____	_____
6. Departure Procedures (FAAO 7110.65, NASINST 3722.1)		
a. Automatic Releases	_____	_____
b. "Radar Trail" Departures	_____	_____
c. Join Departures	_____	_____
7. Arrivals Procedures (FAAO 7110.65, NASINST 3722.1)		
a. Overhead	_____	_____
b. Straight-in Approaches	_____	_____
c. Visual Approaches	_____	_____
d. Practice Precautionary Approaches	_____	_____
e. Heavy/Large Aircraft Landings	_____	_____
f. Approaches to a Closed Runway	_____	_____
g. Aircraft With Ordnance	_____	_____
(1) Hung Ordnance	_____	_____
(2) Unexpended Ordnance	_____	_____

Figure U-1. Local Qualification Standards (Sheet 3)

	Int	Date
8. Field Carrier Landing Practice (NASINST 3722.1)	_____	_____
a. VFR FCLPs		
(1) Responsibility	_____	_____
(2) Number of Aircraft	_____	_____
(3) Standby Alert	_____	_____
(4) Delta Pattern	_____	_____
(5) Pattern and Break Altitude	_____	_____
(6) Lighting Requirements	_____	_____
(7) Define	_____	_____
(a) Signal Delta	_____	_____
(b) Signal Charlie	_____	_____
9. Special VFR (SVFR) (FAAO 7110.65, NASINST 3722.1)		
a. Helicopter SVFR		
(1) Coordination	_____	_____
(2) Coded Routes	_____	_____
10. Noise Abatement (NASINST 3722.1)		
a. Minimum Altitudes		
(1) Over Cities of Podunk and Bump	_____	_____
(2) Over Base Administration	_____	_____
(3) Over Base Housing	_____	_____
b. Quiet Hours		
(1) Procedures	_____	_____
(2) Notification	_____	_____
(3) Responsibilities	_____	_____
11. Runway Use Program (NASINST 3722.1)		
a. Aircraft Characteristics (Aircraft NATOPS)		
(1) Locally Based Aircraft	_____	_____
(2) Transient Aircraft	_____	_____
12. Weather Effects (NASINST 3722.1)		
a. Pattern Restrictions	_____	_____
b. Braking Action Advisories	_____	_____
c. Wind Shears	_____	_____
13. Emergencies (FAAO 7110.65, NASINST 3722.1)		
a. Controller Responsibilities	_____	_____
b. Types of Emergencies	_____	_____

Figure U-1. Local Qualification Standards (Sheet 4)

	Int	Date
14. Special Airfield Operations (NASINST 3722.1)		
a. Banner Tows	_____	_____
b. Crop Dusters	_____	_____
c. Night Vision Goggles Operations	_____	_____
(1) Runway Lights	_____	_____
(2) Requirements	_____	_____
(3) Coordination	_____	_____
15. Special Aircraft Handling (NASINST 3722.1, FAAO 7110.65)		
a. Search and Rescue	_____	_____
b. Flight Inspections	_____	_____
c. MEDEVAC/AIREVAC	_____	_____
DETAILED PERFORMANCE FACTORS		
1. Watch Routine (ATC Facility Manual)		
a. Receive Verbal/Written Pass down	_____	_____
b. Verify Equipment Status	_____	_____
2. Complete written test on items covered by LQS		
3. Draw the following		
a. SIDS	_____	_____
b. STARS	_____	_____
c. TACAN Approaches	_____	_____
d. VOR Approaches	_____	_____
e. Class "D" Airspace	_____	_____
4. Label the following diagrams		
a. Jet Routes (60NM Radius)	_____	_____
b. Victor Routes (60NM Radius)	_____	_____
5. Demonstrate ability to satisfactorily work local control position	_____	_____
I have evaluated the above trainee and certify that all required training and performance factors have been met and trainee has demonstrated the ability to perform all duties of the position.		
Recommended by: _____	FWS _____	Date _____
Approved/Disapproved: _____	Tower Chief _____	Date _____
Recorded: _____	Training Chief _____	Date _____

Figure U-1. Local Qualification Standards (Sheet 5)

RADAR FINAL CONTROL

Lesson Topic Guide RAD-A1

Date: FEB 00

A. Title: Reference Documents

B. Purpose: To familiarize the trainee with the required information in various documents.

C. Objective: Upon completion of lesson, trainee will be able to locate specific final control information in reference documents.

D. Time: 2 Hours

E. References: Radar Final Control Job Qualification Requirements

F. Training Aids:

1. FAA Order 7110.65 (series) Chapter 5
 - a. Section 1 General Procedures
 - b. Section 3 Radar Identification Procedures
 - c. Section 10 Radar Approaches (Terminal)
 - d. Section 12 PAR Approaches (Terminal)
2. NAVAIR 00-80T-114 NATOPS ATC Manual
 - a. [Chapter 3](#), Section 3.2
 - b. [Chapter 7](#)
3. Pass Down Log
4. Read and initial Board
5. Watch Relief Checklist
6. FPN-63 Radar Service Instruction Manual

G. Information Sheets: None

H. Instructor Procedure:

1. Preparation:
 - a. Ensure that all reference documents are available.
2. Introduction
 - a. State the lesson objective.
3. Presentation:
 - a. Locate, identify and specifically explain the required information for final control in each reference document.
 - b. Give examples of when this information would be important to know and locate.

I. Trainee Application:

- a. Upon completion of this lesson, the trainee should be able to:
 - (1) Locate reference document information identified in the Radar Final Control LQS.
 - (2) Understand and explain the information required for Radar Final Control.

J. Testing:

1. Administer oral test when complete with this lesson.

Figure U-2. Radar Final Control

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