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1 JUN 2002

TECHNICAL MANUAL

**NAVAL AIR SYSTEMS COMMAND
TECHNICAL MANUAL PROGRAM**

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NATEC ELECTRONIC MANUAL

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INTRODUCTION

NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM

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NAVAIR Manual Deficiency Reporting Programs	WP 014 00
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1. PURPOSE.

a. This manual describes the Naval Air Systems Command (NAVAIR) Technical Manual Program and provides direction on how documentation is managed and used in support of fleet operations, maintenance, and training.

b. This manual provides procedures for operating a central or dispersed technical publications library. These procedures are mandatory for all Naval aviation units as directed in OPNAVINST 4790.2.

2. GENERAL INFORMATION.

a. Technical manuals are defined as publications and other forms of documentation containing a description of weapons systems, weapons, components, and equipment with instructions for their use and maintenance.

b. These instructions shall include, but not be limited to:

- (1) Description
- (2) Principles of operation
- (3) Preparation for use, storage, and shipment
- (4) Installation
- (5) Operation
- (6) Testing and troubleshooting
- (7) Organizational level maintenance
- (8) Intermediate level maintenance
- (9) Depot level maintenance
- (10) Illustrated Parts Breakdown.

3. TECHNICAL MANUAL PROGRAM.

a. NAVAIR Instruction 5600.20 promulgates technical manual policy and assigns responsibility for the implementation and management of the NAVAIR Technical Manual Program. It establishes the NAVAIR numbered technical manual as the only official medium for disseminating technical information for the operation and maintenance of Naval aeronautical weapon systems, associated weapons, and equipment.

b. NAVAIR Instruction 5600.20 also defines management functions and responsibilities covering budgeting, funding, documentation requirements, specifications, procurement, production, distribution, and update. Numerous other instructions within the 5600 series elaborate on, or define, special policy elements of the technical manual program and are supplements of, or subordinate to, NAVAIR Instruction 5600.20.

4. USE OF THE TECHNICAL MANUAL.

a. Technical manuals are essential in achieving system and equipment effectiveness and readiness. Like the specialized equipment procured for logistic support, the technical manual is a maintenance tool.

b. An acceptable technical manual is one that can be employed with ease and confidence and is a document that is usable in the training, operation, and maintenance environment. It will simply and accurately define the equipment and describe the operation, maintenance concept, and configuration of the item under test or repair.

c. It must be recognized that not every task or maintenance procedure must, or will, be described in the manual. Standard shop practice, basic technical knowledge, task complexity, and safety considerations are governing criteria for determining new manual requirements and/or change or revision requirements to existing manuals. When local user activity controversy arises concerning these areas, Type Commanders must render a decision concerning use or application.

d. When new instructions or procedures are required, they will be incorporated into the technical manuals. Users can contribute to manual change through the utilization of the Technical Publications Deficiency Report (TPDR) system ([WP 014 00](#)).

e. For NATOPS flight and tactical manuals, OPNAV Form 3710/6, NATOPS/Tactical Change Recommendation shall be used ([WP 014 00](#))

5. TECHNICAL MANUAL REQUIREMENTS RESPONSIBILITY.

a. The Naval Air Systems Command, Assistant Commander for Logistics and Fleet Support, is responsible for procurement and maintenance of documentation. Under his/her direction, the Commanding Officer, Naval Air Technical Data Engineering Service Command (NATEC) is charged with the responsibility of providing overall management control of the NAVAIR Technical Manual Program.

b. The NATEC has been established as the NAVAIR requiring activity for publications and, as such, is designated as the central management agency for all NAVAIR technical manuals.

c. Major NAVAIR activities and separate operating agencies are charged with assisting cognizant personnel in determining NAVAIR technical manual requirements. Once established, requirements can be altered only by NATEC.

6. AUTHORIZED ISSUING COMMANDS.

a. Technical manuals issued within the Naval establishment for aircraft and related systems operation and maintenance are issued under the direction of the Commander, Naval Air Systems Command.

b. Technical manuals concerned with flight personnel training and air operations are issued by the authority of the Chief of Naval Operations and under the direction of the Commander, Naval Air Systems Command.

7. USE OF OTHER NAVY/ARMY/AIR FORCE PUBLICATIONS IN THE NAVAIR SYSTEM.

a. In addition to the documents prepared and published by NAVAIR, the Technical Manual Program uses various technical manuals and publications prepared by other Naval Systems Commands, the U.S. Army, and the U.S. Air Force under policies defined in OPNAVINST 5600.22.

b. In most cases, joint use technical manuals will be issued a publication number by each using service. The top number is the service having cognizance of the manual, i.e., Navy, Air Force, Army ([see Figure 1](#)).

c. NAVAIR 00-25-566 contains a listing of manuals jointly used by the Navy, Army, and the Air Force. Activities requiring an initial issue or automatic distribution of the NAVAIR 00-25-566 must comply with the procedural instructions identified in [WP 012 00](#).

d. Joint use Air Force and Army technical manuals should be requisitioned in accordance with the instructions identified in [WP 012 00](#). Other NAVAIR publications should be requisitioned by following the procedural instructions appearing in [WP 004 00](#).

8. COMMENTS AND RECOMMENDATIONS.

a. This manual has been prepared under the cognizance of the NATEC, Code 3.3F. Comments and recommendations by user personnel are appreciated.

b. Technical Publications Deficiency Reports (TPDRs) against this manual should be electronically filled out using the Technical Publications Library (TPL) program and may be submitted via email to tpdr@navair.navy.mil. TPDRs may also be entered directly into the database on the NATEC website at www.natec.navy.mil. Log onto the website and select Technical Manual Application System (TMAPS) and then select Technical Publication Deficiency Reports to add a new TPDR or to view existing ones. The TPDR form, OPNAV 4790/66 (Rev. 5/88), may be used to report deficiencies in this manual when electronic means are not available.

c. Submit electronically filled out TPDR to NATEC via email to tpdr@navair.navy.mil.

d. Submit manually filled out OPNAV 4790/66 directly to :

Commanding Officer
NAVAIRTECHDATAENGSERVCOM
Code 3.3A78 (TPDR)
P.O. BOX 357031
San Diego, CA 92135-7031

**NAVAIR 01-1A-509
T.O. 1-1-691
TM 1-1500-344-23**

**TECHNICAL MANUAL
AIRCRAFT WEAPONS SYSTEM
CLEANING AND CORROSION
CONTROL**

This publication supersedes NAVAIR 01-1A-509, dated 1 July 1988; Change 1, Dated 1 June 1990; IRAC 16, dated 20 August 1991; IRAC 17 dated 16 September 1991; IRAC 18m dated 25 September 1991; IRAC 19, dated 7 October 1991; T.O. 1-1-691m dated 1 July 1988; Air Force Supplements F, dated 7 January 1991; G, dated 1 March 1991; H, dated 15 September 1991 and TM 55-1500-344-23 Dated 1 July 1988.

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NAVAL AIR SYSTEMS COMMAND
AND UNDER THE AUTHORITY OF THE
SECRETARY OF THE AIR FORCE
AND THE
SECRETARY OF THE ARMY

1 JANUARY 1992

Figure 1. Sample Joint Technical Manual

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CATEGORIES OF NAVAIR TECHNICAL MANUALS

NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM

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USN Aircraft Weight and Balance Control Manual.....	NAVAIR 01-1B-50
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Record of Applicable Technical Directives

None

1. **GENERAL.** This WP contains descriptive information concerning the many elements of naval aviation that are covered by technical manuals. It is intended to make the user aware of the many and diverse categories of manuals required to properly support the operation and maintenance of naval aircraft and equipment.

2. **TYPES OF TECHNICAL MANUALS.** Technical manuals are divided into two major types, operational and maintenance. These manuals are the basic source of information for definition of operating instructions, tactical applications, and the maintenance and upkeep of hardware. They are also the main source of support for a training program.

a. **OPERATIONAL MANUALS** are publications and other forms of documentation that contain a description of weapon systems with instructions for their effective use. These manuals, i.e., Naval Air Training and Operating Procedures (NATOPS), tactical manuals, weapons loading, etc., contain informative descriptions of the weapon system, systems integration, operating instructions, operational application, safety and emergency procedures and other pertinent data exclusive of maintenance procedures.

b. **MAINTENANCE MANUALS** are documents containing a description of the weapon system from a viewpoint of upkeep and repair. These manuals incorporate maintenance procedure information such as operation, troubleshooting, testing, assembly, disassembly, repair, and supply support in the form of an illustrated parts breakdown.

3. **CATEGORIES OF NAVAIR TECHNICAL MANUALS.** NAVAIR technical manuals are grouped in a variety of categories predicated on the type of equipment used and the peculiarities of the maintenance requirement. The following paragraphs identify and briefly explain each of the more frequently seen categories (See figure 1).

a. **TECHNICAL MANUALS FOR RESEARCH AND DEVELOPMENT (R&D)** shall be no more complete or extensive in coverage than essential to support operation and on site maintenance during the life of the test program. Documentation required in support of R&D, which could be applicable to the NAVAIR technical manual system, will be procured in a format that may be readily expanded into formal publications in accordance with appropriate specification requirements.

b. **TECHNICAL MANUALS DEVELOPED FOR OPERATIONAL EVALUATION (OPEVAL) OR TECHNICAL EVALUATION (TECHEVAL)** are prepared to control specifications and shall be complete and adequate for their intended use. They shall reflect the applicable maintenance concept. Depth of coverage is controlled by the selected levels of maintenance. Manuals will appear in the topic-oriented, sectionalized conventional format, the Work Package (WP) format which aligns data functionally by task, or the Interactive Electronic Technical Manual (IETM) format as required by the Technical Manual Contract Requirement (TMCR). Such manuals are marked for use for the OPEVAL or TECHEVAL.

c. **GENERAL SERIES MANUALS** include information of interest to a major portion of the aviation community. Contained therein are technical manual indexes, Standard Aircraft Characteristics Manuals, and other miscellaneous technical publications.

d. **AVIATION TRAINING LITERATURE** is issued by the authority of the DCNO (AIR). Included are various air safety manuals and general aviation manuals prepared on subject material related to military skills, ratings, or operational maintenance procedures.

e. **PRIMARY WEAPON SYSTEMS TECHNICAL MANUALS** are a combination of operation and maintenance documents which specifically apply to major weapons systems such as aircraft, missiles, and unmanned drones or targets.

(1) **Operational Manuals** cover peculiar weapon system requirements for pilot training and flight instructions, aircraft tactics, including operational requirements related to computer initiated functions and actions, weapons loading, and in selected cases, cargo handling.

(a) NATOPS FLIGHT MANUALS contain information related to weapon system operation, emergency procedures and installed system integration, and operation. The intent and purpose of these manuals is the enhancement of operational safety through standardization of ground and flight procedures. The manuals are issued by the direction of NAVAIR under a Chief of Naval Operations (CNO) letter of promulgation, which stipulates that the

procedures contained therein are mandatory. The requisitioning and automatic distribution of NATOPS flight manuals are functions of the central technical publications librarian (CTPL). Management of the NATOPS flight manuals normally falls under the control of the NATOPS Officer.

(b) PILOT'S POCKET CHECKLISTS/FLIGHT CREW CHECKLISTS are an abbreviated extension to NATOPS data released in a special "knee pad" checklist format. They contain performance and reference data and emergency, normal, and special procedures. They are step-by-step abbreviations of the amplified NATOPS procedures prepared for direct cockpit application.

(c) FUNCTIONAL CHECK FLIGHT CHECKLISTS are required to determine whether the airframe, power plant, accessories, and other items of equipment are functioning in accordance with predetermined standards while subjected to the intended operating environment. Such flights are conducted when it is not possible to determine proper operation by ground checks, i.e., aerodynamic reaction, air loading, or signal propagation.

(d) TACTICAL MANUALS supplement the flight manual. Described therein is information on tactics, weaponry, and air combat maneuvering with procedures and techniques to be used that are based on tactical situations and mission assignments. These documents are also under CNO cognizance, and as a result thereof, are integrated into the Naval Warfare Publication (NWP) program.

(e) AIRBORNE WEAPONS/STORES LOADING MANUALS promulgate information required to convert aircraft armament systems to respond to various mission assignments, perform functional checkout of aircraft weapons control and release systems, and describe the loading/unloading of airborne weapons or stores.

1 The manual explains standard loading criteria and procedures predicated on tactical doctrine.

2 These documents are also released under a letter of promulgation specifying that the procedures stipulated are mandatory.

(f) WEAPONS LOADING CHECKLISTS are abbreviated step-by-step procedures taken from the amplified procedures displayed in the weapon/stores loading manuals. These are normally used for training as well as for direct loading/unloading support.

(g) CARGO LOADING MANUALS have been prepared for selected cargo-type aircraft. They contain procedures for loading, securing, and unloading of cargo. As far as possible, all typical loads (ground equipment, troops, engines, etc.) and other assigned transport missions are covered and illustrated. Displayed information covers the description of the aircraft and its cargo features, the preparation of the aircraft for loading, general instructions for cargo loading/unloading, load security, and loading of specialized cargo. Most cargo loading documentation is subject to controls identical to NATOPS.

(2) Maintenance Manuals contain instructions for the effective use and support of weapon systems or equipment. Instructions covering troubleshooting, fault detection, installation, removal, repair, and illustrated parts breakdown are provided.

(a) GENERAL ENGINEERING SERIES MANUALS cover standard aviation maintenance practices, which apply to all aircraft rather than to a particular type, model, or series. These documents serve as useful training tools and preclude duplication of standard practices in other manuals. In the event that there is a conflict between the manual for a specific system and the procedures contained in the general engineering series manual, the latest dated issue of either the maintenance manual or general engineering series manual shall take precedence.

(b) TECHNICAL DOCUMENTATION LIST is prepared similar to an index but structured with a view to assisting maintenance personnel in the selection of appropriate manuals required for maintenance support. All manuals applicable to a weapon system are listed. The listings are presented in three basic formats:

1 Numerically by assigned technical manual number.

2 By system, subsystem, and component part number or type designator to technical manual number.

3 By support equipment part number or type designator to technical manual number.

(c) MAINTENANCE INSTRUCTION MANUALS (MIMs) provide both general and specific instructions required for maintenance at organizational, intermediate, or depot levels of maintenance on aircraft, weapons systems, equipment, components, and support equipment.

(d) WIRING MANUALS are comprised of wiring data/diagram, wiring list, wiring repair, wiring connector repair, and functional flow diagram documentation. Wiring data/diagram publications describe functions and makeup of each power control/signal as interfaced with mechanical systems and in composite wiring information for all systems, subsystems, and equipment as installed in an aircraft weapon system. Wire lists are computer generated tabular listings used as reference data to cross reference wire number to junction point list and junction point to wire number list. A wire repair manual furnishes temporary and permanent repair data for every wire used in an aircraft weapon system. The wire connector repair document comprehensively supplies all maintenance information requirements for disassembly, repair, and assembly of each specific wiring connector. Functional flow diagram publications are maintenance support documents, used in conjunction with troubleshooting procedures to provide point-to-point closed loop wiring of the aircraft weapon system and its systems and subsystems.

(e) GENERAL AIRCRAFT INFORMATION MANUAL can be subdivided into Plane Captain's Manual, Ground Handling Manual, and General Information and Servicing Manual. Contained therein is a general description of the aircraft which shows dimensions, aircraft stations, access openings, engine operation, ground or carrier handling/servicing, hazardous areas, and emergency procedures.

(f) WORK UNIT CODE MANUALS are used as a maintenance aid and recording guide in conjunction with the Maintenance Data Systems. It identifies assigned system-related equipment codes pertaining to various servicing and maintenance functions. These codes are used to report and record maintenance information for adoption into an automated database.

(g) WEIGHT AND BALANCE DATA MANUALS (NAVAIR 01-1B-40) are used jointly with the U.S. Air Force. They provide a standard system for recording field weight and balance of certain aircraft. The initial development of forms, charts, and records contained in the manual are prepared by the original manufacturer prior to delivery of the aircraft to the Navy. The document remains with the aircraft during its entire service life and provides a means of maintaining a continuous, current record of the aircraft's basic weight, balance, and loading data. The records are maintained by the aircraft reporting custodian and overhaul activities and must be brought up to date prior to any transfer of aircraft. NAVAIR 01-1B-50, USN Aircraft Weight and Balance Control Manual, provides requirements, procedures, and responsibilities for weight and balance control of Navy aircraft.

(h) CREW STATION/IN-FLIGHT MAINTENANCE MANUALS were specifically designed for large, high-density avionics aircraft employing sophisticated computer-controlled, integrated weapon systems. They are an aid in maintaining mission capability and assist in accomplishment of rapid fault detection and possible corrective action while the aircraft is still airborne.

(i) AIRBORNE MISSILES, GUIDED WEAPONS AND TARGET AND DRONE MANUALS are prepared to the same general specifications as aircraft manuals. However, they are tailored to their specific functional application. Information covers basic description, theory and troubleshooting, checkout, assembly, disassembly, maintenance, servicing, and handling.

(j) AIRBORNE MISSILE WEAPONS ASSEMBLY CHECKLISTS provide an abbreviated, unclassified, procedural reference, which can be used as a guide for step-by-step assembly of missiles or weapons.

(k) STRUCTURAL REPAIR MANUALS contain specialized repair information required by maintenance personnel to determine the extent of aircraft structural damage and instructions for performing a

permanent or one time flight repair.

(l) ILLUSTRATED PARTS BREAKDOWN (IPB) MANUALS contain a listing of weapon systems/component parts keyed to line art illustrations. The IPB serves a dual function to assist both maintenance and supply. Material is illustrated by exploded view, listed in the order of top-down breakdown and referenced to material availability through Source, Maintenance, and Recoverability (SM&R) code listings. The IPB is prepared as a part of the Work Package (WP), but also may be an associated document to the related maintenance manual or incorporated in the basic manual as a separate WP. It is used to identify, requisition, issue, and provide information on storing parts required for maintenance support.

(m) POWER PLANTS MANUALS. Power plants are referred to as reciprocating engines, jet propulsion/turboshaft engines, rocket type jet engines, and Auxiliary Power Units (APUs). Organizational (installed) maintenance is covered in the power plants volume of the Maintenance Instruction Manual prepared by the aircraft manufacturer. However, uninstalled intermediate and depot information is defined in specialized engine documentation prepared by the engine manufacturer. Content coverage extends from intermediate servicing and repair to Complete Engine Repair (CER) to overhaul, all with an IPB. In some cases, CER is supported by a deck of Complete Engine Repair Requirements Cards (CERRCs).

(n) PLANNED MAINTENANCE SYSTEM (PMS) documentation is a series of publications that portray selected maintenance requirements and inspections. These publications provide the basis for planning, scheduling, and actual performance of scheduled maintenance requirements. The requirements are scheduled with intervals based on the predominant failure mode, such as calendar time, flight/operation hours, or numbers of cycles/events. Some of the more important applications are:

1 TURNAROUND CHECKLISTS have been prepared to support inspection of exterior and interior aircraft surfaces in an abbreviated walk-around order. The requirements cover those items necessary to determine obvious defects that may have occurred during each flight, i.e., pre-operational, post-operational.

2 DAILY/SPECIAL/PRESERVATION/CONDITIONAL/AIRCRAFT SERVICE PERIOD ADJUSTMENT (ASPA) MANUALS cover the minimum daily inspection requirements, as well as servicing, special inspections, and, if applicable, conditional inspections. Special inspections are defined as those that are performed on a prescribed number of days, flight hours, operating hours, or cycles. After thorough cleaning has been accomplished, preservation inspections are made of all areas of the aircraft for evidence of corrosion or other deterioration in order to permit accurate assessment of the preservation process at the end of the preservation period. Conditional inspections are unscheduled inspections that must be accomplished as the result of an overstressed or overlimit condition, i.e., excessive "G" forces, hard landings, overspeed or overtemp engines, etc. ASPA evaluations are conditional maintenance actions which are depot level evaluations of aircraft general material condition.

3 PHASE MAINTENANCE REQUIREMENTS CARDS divide the total scheduled maintenance requirements into small packages (phases) of approximately the same work content, which are accomplished sequentially at specific intervals.

4 PERIODIC MAINTENANCE INFORMATION CARDS (PMIC) identify all scheduled or forced removal items and their replacement intervals. They also contain a record of applicable technical directives, a maintenance requirements index (by system), and a conditional inspection listing.

(o) AIRBORNE WEAPONS ASSEMBLY MANUALS provide organizational and intermediate maintenance activities with detailed information for weapons uncanning/recanning and inspection, component unpackaging/repackaging and inspection, and weapons assembly and inspection criteria for assembled weapons.

(p) CROSS SERVICING SCHEDULES/GUIDES contain information required by NATO activities for spares and servicing of U. S. Navy and Marine Corps aircraft without the use of special types of equipment.

(3) Aeronautical Component and Equipment Manuals cover all types of aircraft accessories and related equipment. Some of the most common are accessory, instrument, armament/ordnance, electronics/avionics, tools, test equipment, and support equipment such as test and shop equipment and ground handling equipment.

(a) COMPONENT AND EQUIPMENT MANUALS can be prepared as intermediate or depot documents, or a combination thereof. Occasionally these manuals will include general or specialized organizational data not included in the weapon system series. However, documentation policy prefers that organizational data appear in the prime weapon system document whenever practical or feasible. The selection of content coverage and how it is volumized is determined by equipment design complexity, data volume, and the maintenance plan or engineering analysis.

(b) CHALLENGE/REPLY CHECKLISTS have been developed as a check of safety items and are applied to ejection seat maintenance.

f. SPECIAL APPLICATION TECHNICAL MANUAL SERIES.

(1) **Aircraft Hardware and Rubber Materials** publications provide descriptive and maintenance information on maintenance consumables such as aircraft wheels and tires.

(2) **Airfield Lighting Manuals** provide information and instructions covering the installation, adjustment, operation, maintenance, and IPB of airfield lighting facilities for night operation requirements at temporary or advanced air bases. Instructions are provided for use of the equipment in combat, non-combat, or training areas.

(3) **Instructional Equipment and Training Aids** provide information for use and maintenance of instructional equipment and training aids. Also provided are trainer work unit code manuals. The data provided in these manuals include equipment intent, purpose, functional operation, maintenance, and the intended results.

(4) **Photographic Manuals** provide all necessary information required to operate and maintain photographic equipment. They provide instructions for film processing, storage of equipment, and specialized photography (aerial, periscope, unusual climatic conditions, etc.). Photo reproduction, projection, laboratory, and interpretation equipment are also provided. Service and overhaul of equipment is provided when essential and authorized for operational activities.

(5) **Aviation Life Support Systems (ALSS) Compact Disks/Manuals** provide survival information and instructions for operation and maintenance of all personal survival equipment. These manuals include instructions for ejection seats, parachutes, survival equipment, portable oxygen equipment, and anti-G exposure suits. Information is provided for each item, including description, special tools, preparation for use, storage or shipment, operating instructions, inspection, maintenance, lubrication, troubleshooting, and an IPB, as applicable.

(6) **Standard Preservation and Packaging Information Manuals** provide instructions for the initial preservation treatment, procedures for maintaining preservation, and procedures for de-preserving aircraft, uninstalled aircraft engines, and dangerous materials. They also contain instructions for long term, extended shipment, short-time (flyaway), and water or fire-fighting chemical damage types of preservation. Included in these manuals are required material and equipment and individual detailed preservation procedures for each component.

(7) **Meteorology Manuals** provide general information on meteorology and instructions regarding the operation, maintenance, overhaul, and IPBs for various meteorology equipment. They include special procedures to be used when aircraft are operating in extreme climatic conditions. This series of manuals covers text and reference materials, climatological information, directive material, techniques and procedures and meteorological instruments.

(8) **Ships Installation Manuals** cover operation, maintenance (including troubleshooting preventative maintenance, lubrication, etc.), and overhaul with an IPB for aircraft launching and recovery equipment such as catapult, arresting gear, catapult deck gear, and accessories. Special instructions are included in this manual for inspection, operation, service, adjustment, maintenance, and emergency maintenance of accessories and items of special equipment installed with the main equipment. All safety precautions to be observed during operation to prevent improper use of equipment and injury to operating or overhaul personnel are also provided. These safety precautions protect both the pilots of aircraft and deck personnel involved with the operation of the equipment.

(9) **Air Traffic Control Manuals** provide information for operation and maintenance of

shipboard/shore-based air traffic control systems and equipment and precision air landing systems.

(10) Aircraft Battle Damage Repair (ABDR) Manuals are additional manuals provided for use under wartime conditions for those model, type, and series designated by the Naval Air Systems Command (AIR-4111). They contain data designed to enhance the capability and capacity of Navy/Marine Corps operational units to accomplish rapid repair of battle damaged aircraft that will increase aircraft availability, sortie generation, and continued capacity to fight in wartime, and, in the long term, increase the capability of the technicians to accomplish any repair in the aircraft. It must be stressed that the ABDR manual will only be used when authorized by the theatre commander.

4. OTHER TYPES OF TECHNICAL MANUALS, PUBLICATIONS, AND DOCUMENTS.

a. DEPARTMENT OF DEFENSE PUBLICATIONS. Navy technical manuals, because of multiple application, are used jointly between other elements of the Navy (i.e. NAVSEA and SPAWAR) and other services (i.e. U.S. ARMY and U.S. AIRFORCE). These documents will normally carry the identification number of each using service. They will be under the management control of the primary executive service, which can be easily identified because its manual number will be the top number on the title page of the manual. However, to simplify research, they will be indexed in the NAVSUP P2003 by their NAVAIR number.

b. AUTOMATED TYPE TECHNICAL MANUALS do not follow normal documentation practices and standards. They can appear on tape, film or compact discs. Most of these items are used in conjunction with programmed automatic or semiautomatic test equipment. They are used to operate or monitor the operation of the equipment.

c. COMMERCIAL MANUALS, MANUFACTURER'S SERVICE BULLETINS, MAINTENANCE DIGESTS, AND OTHER PERIODICALS prepared by weapons system and equipment manufacturers are normally not authorized nor approved for distribution to Naval personnel. An exception to this is when a weapon system, sub-system, or support equipment is received from a weapon system and/or equipment manufacturer with only the manufacturers/commercial manual available.

5. NUMBER DESIGNATIONS FOR MAJOR CATEGORIES OF NAVAIR MANUALS.

a. NAVAIR technical manuals are grouped into major categories. To assist in the understanding of manual number assignments, representative examples of number prefixes are listed in [figure 2](#). Both the NAVAIR numbers and comparable TMINS number are shown where available. NAVAIR numbered manuals will not be reassigned TMINS numbers. TMINS numbered manuals will not be reassigned NAVAIR numbers.

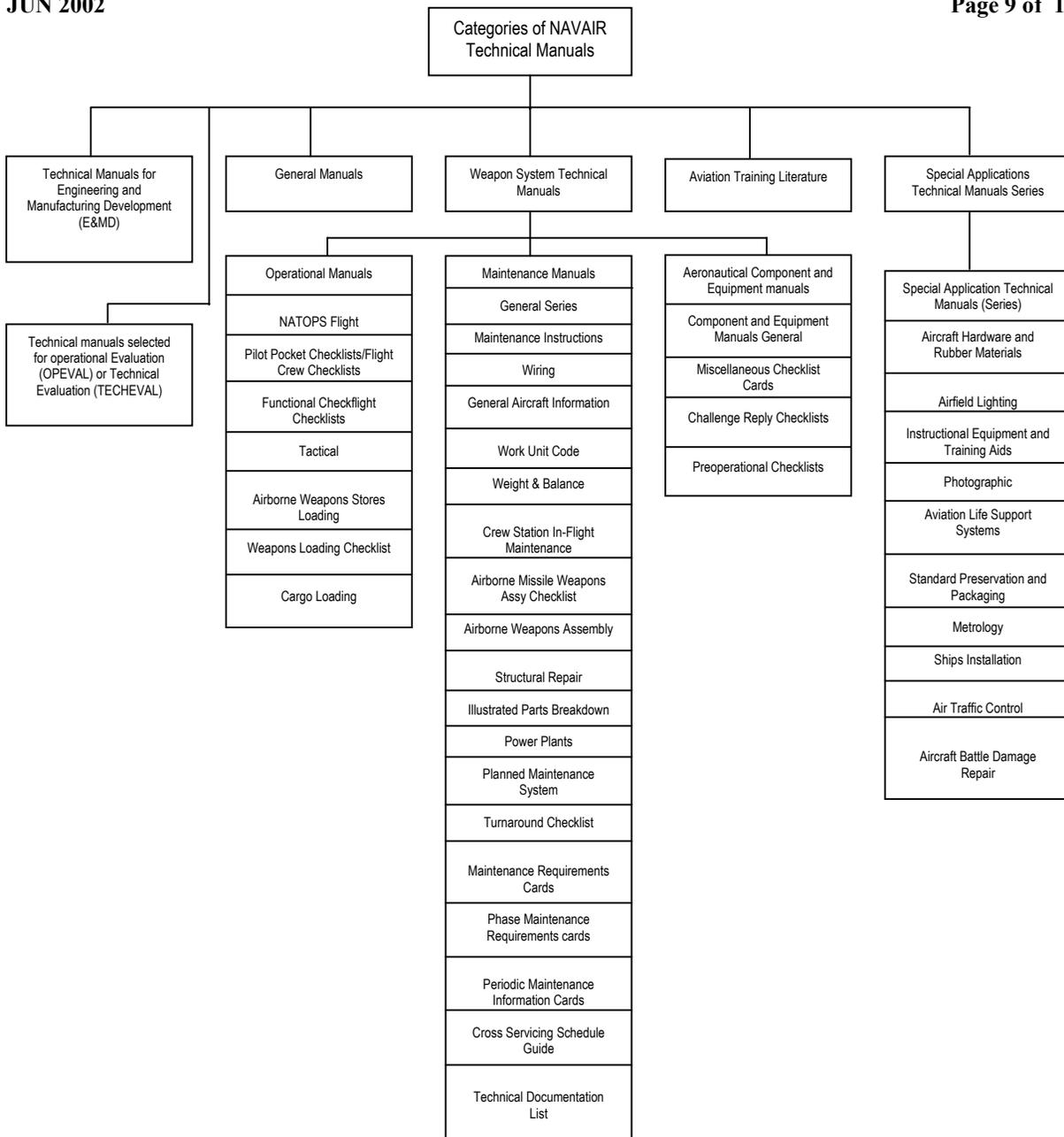


Figure 1. Categories of NAVAIR Technical Manuals

NAVAIR NUMBER	SUBJECT	TMINS NUMBER
A. 00 SERIES – GENERAL		
00-25	Management and Procedures Manuals	
00-75	Air Safety	
00-80	DCNO (AIR) Aviation Training Literature	
00-85	Protective Packaging and Preservation (See also 15 Series)	
00-100	Evaluation Program of Aviation Shore Facilities	
00-110	Standard Aircraft Characteristics	
00-130	Joint Munitions Manuals	
Naval Aeronautical Publications Index		
00-500A	Equipment Applicability List	
01-700	Airborne Weapons/Stores, Manuals/Checklists	
B. 01 Series – Aircraft, Missiles, Targets and Drones		
01-AGM84	Boeing – AGM-84A Harpoon Missile	
01-AIM54	Hughes Aircraft – AIM-54A Phoenix Missile	
01-ARGM84	Boeing – RGM-84A Harpoon Missile	
01-AV8	Boeing – AV-8B Harrier.....	A1-AV8
01-CH47	Boeing-Vertol – CH-47C Chinook	
01-C9B	Boeing – C-9B Skytrain II	
01-E2	Grumman E-2 Hawkeye	
01-F14	Grumman – F-14 Tomcat	
	Boeing – F-18 Hornet	A1-F18
01-H53	Sikorsky – H-53 Sea Stallion.....	A1-H53
	Sikorsky – H-60 Sea Hawk.....	A1-H60
01-MQM	Northrop – MQM-74C Chukar II Missile Target	
01-S3	Lockheed – S-3 Viking	
01-T34	Beech – T-34 Mentor	
01-VH3	Sikorsky – VH-3D Sea King	
01-1A	General Engineering Series	
01-5	General Dynamics	
01-15	Naval Air Warfare Center, Aircraft Division, Indianapolis	
01-30	Northrop	
01-40	Boeing – T-45	A1-T45
01-45	Vought Aerospace Corporation	
01-50	Raytheon	
01-60	Rockwell International Corporation	
01-75	Lockheed	
01-80	Naval Air Warfare Center, Weapons Division, China Lake	
01-85	Grumman	
01-90	Beech	

Figure 2. Number Designations of Major Categories of NAVAIR Manuals (Sheet 1 of 6)

NAVAIR NUMBER	SUBJECT	TMINS NUMBER
01-100	Ryan	
01-110	Bell	
01-115	Fairchild	
01-140	Piper	
01-230	Sikorsky	
01-245	McDonnell Douglas	
01-250	Boeing-Vertol	
01-260	Kaman	
01-265	Raytheon	
C. 01-600 SERIES – NATO AIRCRAFT CROSS SERVICING SCHEDULES		
01-600	American-British-Canadian-French	
01-610	Canada	
01-620	France	
01-660	United Kingdom	
D. 01-700 SERIES – SPECIAL CHECKLISTS		
E. 02 SERIES – POWER PLANTS		
02-1	Aircraft Engines – General	A1-700
02A	Reciprocating Engines	A1-710
02A-10	Pratt and Whitney	
02A-35	Wright	
02A-40	Teledyne	
02B	Jet Propulsion Engine	A1-720
02B-5	Detroit Diesel, Allison Division	
02B-10	Pratt and Whitney	
02B-15	Lycoming	
02B-20	Pratt and Whitney Aircraft of Canada, Limited	
02B-25A	Garrett Turbine Engine Company	
02B-30	Williams Research	
02B-35	Wright	
02B-40	Teledyne	
02B-70	Rolls Royce	
02B-105	General Electric	A1-F404
		A1-T700
02B-110	Westinghouse	
03-1	General	A1-400
F. 03 SERIES-ACCESSORIES		
03-5	Electrical Equipment	A1-210
03-10	Fuel Systems	A1-470
03-15	Oil Systems	A1-750
03-20	Propellers and Accessories Equipment	A1-800
03-25	Wheels, Brakes, Struts, and Related Equipment	A1-420
03-30	Air and Hydraulic Equipment	A1-440
03-35	Ice Eliminating Equipment	A1-450
03-40	Control Units	A1-650
03-45	Fire Extinguishers and Related Equipment	A1-610

Figure 2. Number Designations of Major Categories of NAVAIR Manuals (Sheet 2 of 6)

NAVAIR NUMBER	SUBJECT	TMINS NUMBER
03-50	Oxygen Equipment	A1-460
03-55	Carbon Dioxide Fire Extinguisher Inflation	A1-600
03-60	Purging Equipment	A1-620
03-65	Pickup Equipment	A1-400
03-70	Heaters and Related Equipment	A1-640
03-75	Temperature Control Systems and Related Equipment	A1-650
03-80	Cabin Pressurizing Equipment	A1-460
03-85	Afterburners and Related Equipment	A1-790
03-90	Loading Equipment	A1-480
03-95	Helicopter Rotor and Related Equipment	A1-810
03-100	In-flight Refueling Equipment	A1-470
03-105	Turbine Starters	A1-725
03-110	Jet Engine Fuel Systems and Related Equipment	A1-760
03-600-XX-6-1	Accessories Series Maintenance Requirement Cards (Pre-operational Checklists)	A1-640XX-MRC
03-600-XX-6-2	Accessories Series Maintenance Requirement Cards (Periodic Maintenance Requirement Manual)	A1-640XX-MRC
G. 04 SERIES – AIRCRAFT HARDWARE AND RUBBER MATERIAL		
H. 05 SERIES – INSTRUMENTS		
05-1	General	AN-000
05-5	Tachometers	AN-524
05-10	Airspeed Indicators	AN-120
05-15	Aircraft Compasses	AN-310
05-20	Flight Instruments	AN-100
05-25	Drift Meters	AN-800
05-30	Altimeters	AN-110
05-35	Navigation Equipment	AN-400
05-40	Thermometers	AN-512
05-45	Automatic Pilots, Stabilization Systems and Related Equipment	AN-300
05-50	Pilot-Static and Power Venturi Tubes	AN-860
05-55	Self-Synchronous Instruments	AN-370
05-60	Electric Circuit instruments	AN-700
05-65	Fuel Flow Meters and Content Gages	AN-610
05-70	Pressure, Systems, Gages, Indicators and Transmitters	AN-560
05-75	Engine Gage Units	AN-511
05-80	Suction Gages	AN-900
05-85	Ignition and Engine Analyzers	AG-501
05-90	Signal Assemblies	AN-500
05-95	Test Equipment	AG-500
05-105	Test Equipment	AG-600
I. 06 SERIES – FUELS, LUBRICANTS AND GASES		
J. 07 SERIES – DOPES, AND PAINTS (See also 15 Series)		
		AG-365

Figure 2. Number Designations of Major Categories of NAVAIR Manuals (Sheet 3 of 6)

NAVAIR NUMBER	SUBJECT/TMINS	NUMBER
K. 08 SERIES – ELECTRONICS, AIRFIELD LIGHTING AND RELATED ACCESSORIES (See also 16 and 19 Series)		
08-5	Radio, Radar	
08-10	Transmitter, Receiver	
08-20	Airfield Lighting Equipment	
08-25	Instruments	
08-35	Joint Nomenclature Radio Components	
08-45	Commercial British and Navy Radio Equipment	
L. 09 SERIES – INSTRUCTIONAL EQUIPMENT AND TRAINING AIDS (See also 01 and 28 Series)		
M. 10 SERIES – PHOTOGRAPHY		
10-1	General	AP-000
10-10	Camera Equipment	AP-100
10-20	Projection Equipment	AP-300
10-25	Photo Lab Equipment	AP-200
10-30	Interpretation Equipment	AP-410
10-35	Photographic Keys	AP-400
10-50	Photo Test Equipment	AP-270
N. 11 SERIES – AVIATION ARMAMENT/ORDNANCE AND ACCESSORIES		
11-1	General	AW-000
11-5	Bombs, Depth Charges and Accessories	AW-382
11-10	Gun Mounts and Gun Accessories	AW-380
11-15	Pyrotechnics and Accessories	AW-052
11-30	Dispensers	AW-390
11-45	Gun Turrets, Components and Accessories	AW-300
11-55	Tow Targets and Accessories	AW-141
11-60	Automatic Flight Control Equipment	AW-235
11-70	Armament control Systems, Components and Accessories	AW-240
11-75	Missiles and Related Accessories	AW-800
11-80	Mines, Mine Sweepers and Accessories	AW-550
11-85	Rockets and Accessories	AW-040
11-95	Guns, Gunpods and Accessories	AW-380
11-100	Cartridge Actuating Devices	
11-100	Aircraft Boresights	
11-120	Ship Weapons Installation	
11-140	Pre-Loaded Weapons Uninstalled Suspension Equipment	
11-265	Production Line Maintenance	AW-240XX-MMI
11-600	Aviation Armament Series Maintenance Requirement Cards	AW-800XX-MRC
11N	Armament, Nuclear	AW-080

Figure 2. Number Designations of Major Categories of NAVAIR Manuals (Sheet 4 of 6)

NAVAIR NUMBER	SUBJECT	TMINS NUMBER
O. 13 SERIES – PARACHUTE AND PERSONAL SURVIVAL EQUIPMENT		AS-000
P. 15 SERIES – STANDARD PRESERVATION AND PACKAGING INSTRUCTIONS (See also 00-85 Series)		
15-01	Aircraft and Airframes	A1-F18XX-PPI
15-02	Aircraft Engines	A1-F40XX-PP1
15-03	Accessories	A1-650XX-PPI
15-05	Instruments	A1-524XX-PPI
15-16	Electronics	A1-450XX-PPI
Q. 16 SERIES – ELECTRONICS (See also 08 Series)		
16-1	General	AE-000
16-5	Radio, Radar	
16-30	Joint Nomenclature (Electronic Test Equipment)	
16-35	Joint Nomenclature (Electronic Test Components)	
16-40	Signal Corps – Nomenclature Radio Equipment	
16-45	Commercial British and Navy Electronic Test Equipment	
16-50	Automatic and Semi-Automatic Checkout Equipment	AE-190 AE-398
16-60	Air Traffic Control Systems and Equipment	
16-65	Air Traffic Control Components	
16-70	Air Traffic Control Commercial and Vendor Manuals	
16-75	Test Tapes	
16-80	Test Set Cards/Overlays and Punched Cards	AE-190XX-TSC
16-300	Certification Procedures (Security Equipment)	AE-180XX-ECI
16-600-XX-6-1	Electronic Series Maintenance Requirement Cards (Pre-operational Checklists)	AE-170XX-MRC
16-600-XX-6-2	Electronics Series Maintenance Requirements Cards (Periodic Maintenance Requirements Manual)	AE-170XX-MRC
R. 17 SERIES – MACHINERY, TOOLS AND TEST EQUIPMENT		
17-1	Shop and Warehouse Machinery	AG-200
17-5	Shop and Warehouse Machinery, Powered Tools and Equipment	
17-10	Shop and Warehouse Machinery, Non-powered Tools and Equipment	
17-15	Lab and Shop Test and Inspection Equipment (See also 05-95 Series)	AG-600
17-20	Instrument Calibration Procedures	
17-25	Measure System Operation Procedures	
17-35	Miscellaneous Calibration and Metrology Requirement Lists	
17-50	Instrument Calibration Procedures	
17-75	Testers and Test Card Sets	
17-600-XX-6-1	Support Equipment Maintenance Requirement Cards (Pre-operational Checklist)	AG-200XX-MRC
17-600-XX-6-2	Support Equipment Maintenance Requirement Cards (Periodic Maintenance Requirement Manual)	AG-200XX-MRC
S. 19 SERIES – GROUND SERVICING AND MOBILE EQUIPMENT (See also 08-20 Series)		
19-1	General	AG-000
19-5	Oxygen Equipment	AG-100
19-10	Airfield Lighting Equipment	AG-260
19-15	Platform and Scaffolds	AG-220
19-20	Portable Shop Equipment	AG-200
19-25	Fire Truck, Miscellaneous Trucks and Trailers	AG-310

Figure 2. Number Designations of Major Categories of NAVAIR Manuals (Sheet 5 of 6)

NAVAIR NUMBER	SUBJECT	TMINS NUMBER
19-30	Field Starters (Mobile).....	AG-320
19-35	Air Compressor (Other than Power Plant)	AG-210
19-40	Tractors and Aircraft Towing	AG-305
19-45	Mobile Electric Power Plants	AG-320
19-50	Generator for other than Power Plant	AG-110
19-60	Portable Heaters and Coolers.....	AG-160
19-70	Airplane Hydraulic Jacks.....	AG-250
19-75	Generators Skid or Trailer Mounted (Gas/Nitrogen)	AG-750
19-80	Motorized Material Handling Equipment	AG-300
19-95	Transporting and Locating Equipment Configuration	AG-800
19-100	Handling Equipment.....	AG-810
19-105	Gas Turbine compressors and/or Power Units and Enclosures	AG-850
19-110A	Blower-Gasoline Driven	AG-900
19-600-XX-6-1	Support Equipment Maintenance Requirement Cards (Pre-operational Checklist)	AG-850XX-MRC
19-600-XX-6-2	Support Equipment Maintenance Requirement Cards (Periodic Maintenance Requirement Manual).....	AG-850XX-MRC
T. 28 SERIES – INSTRUCTIONAL EQUIPMENT, TRAINING AIDS AND SONOBUOYS		A8-300
(See also 09 Series)		
U. 50 SERIES – METEOROLOGY DCNO (AIR) (See also 16 Series).....		AM-000
50-1	Text and Reference Material, Climatological Information	AM-005
	Directive Material, General Information Techniques and Procedures	
50-30	Meteorological and Aerological Weather Equipment.....	AM-400
V. 51 SERIES – SHIP INSTALLATIONS		
51-5	Arresting and Barrier Gear	AD-100
51-15	Catapults	
51-25	Catapult Support Gear	AD-200
51-35	Homing Devices and Beacons	AE-175
51-40	Landing/Lighting Systems	AD-600
51-50	Visual Landing Aids	AD-400
51-60	Pilot-LSO Landing Aids, Auxiliary Landing Fields and Maps	
51-70	Jet Blast Deflectors	

Figure 2. Number Designations of Major Categories of NAVAIR Manuals (Sheet 6 of 6)

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**NAVAIR RELATED DOCUMENTATION CONTROLLED BY OTHER
NAVY ELEMENTS**

NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM

Reference Material

NAVAIR Manual Deficiency Reporting Programs	WP 014 00
Technical Publication Requisitioning Procedures	WP 017 00
Metrology and Calibration Program	NAVAIR 17-35MTL-1
Joint Service Index of Specialized Technical Handbooks	61JTTCG/ME-1-2
Consolidated Subject Index	OPNAVNOTE 5215
DOD Directive System Quarterly Index	DODINST 5025.1-1
Naval Aviation Maintenance Program (NAMP)	OPNAVINST 4790.2
Naval Aviation Maintenance Program (NAMP)	www.nalda.navy.mil/4790
Aircraft Launch and Recovery Equipment Maintenance Program (ALREMP)	OPNAVINST 4790.15
Naval Ordnance Maintenance Management Program (NOMMP) http://neds.nebt.daps.mil	OPNAVINST 8000.16

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Record of Applicable Technical Directives

None

1. METROLOGY AND CALIBRATION PROGRAM.

a. NAVAIR 17-35MTL-1 is the authoritative reference document containing data applicable to calibration of Navy test and monitoring systems and standards.

b. Detailed information of available publications concerning the Metrology and Calibration standards is contained in the introduction section of NAVAIR 17-35MTL-1.

c. The NAVAIR 17-35MTL-1 is revised and distributed as follows:

(1) Monthly in microfiche format for NAVAIR activities only.

(2) April and October in either hard copy or microfiche format for all other activities.

d. Request for automatic distribution of the NAVAIR 17-35MTL-1 is limited to U.S. Government agencies. All requests for initial issue or copies of MTL-1 shall be sent to:

Measurement Science Directorate
Attn: MS-52H
Naval Warfare Assessment Division
P.O. Box 5000
Corona, CA 91718-5000
DSN: 933-5277
COM: (909) 273-5277

e. Navy contractors should forward their requests via their cognizant government inspection or contracts administration office

f. Cat I and II technical publications deficiency reports (TPDRs, [WP 014 00](#)) for NAVAIR 17-35 series publications shall be submitted to the above address:

g. Originals and copies of CAT I and CAT II TPDRs for NAVAIR 17-35 series publications shall not be submitted to the Naval Air Technical Data Engineering Services Command (NATEC).

h. A valid CAT I and CAT II TPDR shall not be used to make a pen and ink change to a NAVAIR 17-35 series publication under any circumstances. Physical alteration of the technical content in NAVAIR 17-35 series publications is not permitted. Pen and ink changes to the technical content of NAVAIR 17-35 series publications are not authorized.

2. NAVAIR INSTRUMENT CALIBRATION PROCEDURE (ICP) MICROFICHE PROGRAM.

a. All NAVAIR ICPs are contained within the NAVAIR 17-20 series publications.

b. NAVAIR 17-20 series publications have been converted to microfiche for NAVAIR activities under the NAVAIR ICP Microfiche Program.

c. Automatic distribution of ICP microfiche is provided to the Naval Aviation community overseas and CONUS shore activities deployed ships and other Navy subscriber commands.

d. Additionally, automatic distribution of the NAVAIR 17-20 series publications on microfiche shall be requested from the MEASOPCONCEN, San Diego, CA. Two complete sets of ICP microfiche will be supplied to the Aircraft Intermediate Maintenance Department (AIMD) CTPL: One for the CTPL and one for the AIMD/Precision Measuring Equipment (PME) dispersed library. However, retention of a master ICP library at the AIMD CTPL could be optional for some sites and any requests for a change in distribution quantities should be forwarded in writing to:

Director

Attn: NAVAIR (ICP) Microfiche Program
MEASOPCONCEN San Diego
Box 357064, Bldg., 317, Suite 201
San Diego, CA 92135-7064
DSN: 735-1948
Com: (619) 545-1948
FAX DSN: 735-4530
FAX Com: 619-545-4530

All other libraries and subscribers will receive one or more complete sets of ICP microfiche.

e. NAVAIR ICP/LCP Nomenclature Index: Automatic monthly distribution of the "Nomenclature Index" will be to the NAVAIR Procedure Development Centers (PDC) only as follows:

NADEP Cherry Point
NADEP Jacksonville
NADEP North Island
NAWC AD Patuxent River

The nomenclature index provides an alpha-file control showing the most current Nomenclature for equipment, cross-referenced to ICP/LCP Numbers, Model/Part Numbers, Effective Basic Date, Latest Change Date, or the addition of a new procedure.

f. The only entry in the NATEC Technical Publications Library (TPL) program required of NAVAIR activities will be for the METRL-1 Microfiche which can be obtained from:

Measurement Science Directorate
Attn: MS-52H
Naval Warfare Assessment Division
P.O. Box 5000
Corona, CA 91718-5000
DSN: 933-5277
COM: (909) 273-5277

g. Unclassified microfiche copies of all procedures and those, which have undergone revision or change, will be forwarded monthly or at more frequent intervals.

h. One-time requisitioning for unclassified NAVAIR 17-20 series publications may be requisitioned from the address shown in d. above.

i. Classified NAVAIR 17-20 series publications will continue to be published on paper. All requirements for classified ICPs shall be submitted in writing to the address shown in f. above. A copy of the requirement shall be forwarded via the appropriate TYCOM/ACC and to the MEASOPCONCEN San Diego as follows:

Commander Naval Air Force
United States Pacific Fleet (N422B1W)
Box 357051
Naval Air Station, North Island
San Diego, CA 92136

Commander
Naval Air Force
United States Atlantic Fleet (N422B29)
Naval Air Station
Norfolk, VA 23511

Chief of Naval Air Training

Attn: Code 5123
Naval Air Station
Corpus Christi, TX 78419

Commander
Naval Air Reserve Force
Attn: Code 5749T
4400 Dauphine Street
New Orleans, LA 70146-5200

Information copy to:
Director
Attn: NAVAIR MICROFICHE PROGRAM
MEASOPCONCEN San Diego
Box 357064, Bldg., 317, Suite 201
San Diego, CA 92135-7064
DSN: 735-1948
COM: (619) 545-1948
FAX DSN: 735-4530
FAX COM: 619-545-4530

j. Automatic distribution of NAVAIR 17-20 series publications on paper to all other activities not in the NAVAIR ICP Microfiche Program shall be requested from:

Measurement Science Directorate
Attn: MS-52H
Naval Warfare Assessment Division
P.O. Box 5000
Corona, CA 91718-5000
DSN: 933-5277
COM: (909) 273-5277

k. Additional information on the NAVAIR ICP Microfiche Program shall be directed to:

Director
Attn: NAVAIR (ICP) Microfiche Program
MEASOPCONCEN San Diego
Box 357064, Bldg. 317, Suite 201
San Diego, CA 92135-7064
DSN: 735-1948
COM: (619) 545-1948

l. CAT I and II technical publications deficiency reports (TPDRs, [WP 014 00](#)) for NAVAIR 17-20 series publications shall be submitted to:

Measurement Science Directorate
Attn: MS-52H
Naval Warfare Assessment Division
P.O. Box 5000
Corona, CA 91718-5000
DSN: 933-5277
COM: (909) 273-5277

Originals and copies of CAT I and II TPDRs for NAVAIR 17-20 and 17-50 series publications shall not be submitted to NATEC.

m. A valid CAT I and CAT II TPDR shall not be used to make a pen and ink change to a NAVAIR 17-20

series publication under any circumstances. Physical alteration of the technical content in NAVAIR 17-20 series publications is not permitted. Pen and ink changes to the technical content of NAVAIR 17-20 series publications are not authorized.

3. NAVAL AVIATION MAINTENANCE PROGRAM (NAMP), OPNAVINST 4790.2.

a. The NAMP provides an integrated system for performing aeronautical equipment maintenance and all related support functions. It provides policy guidance, technical direction, management and administration of all programs affecting activities responsible for the operation and maintenance of naval aircraft. The NAMP is available at the Website, <https://www.nalda.navy.mil/4790/>.

b. If replacement copies of this instruction are required with no attendant change in automatic distribution, copies may be obtained by submitting a letter, with justification, to:

COMMANDER
NAVAL AIR SYSTEMS COMMAND
ATTN: AIR-3.6.1.3, BLDG 447
47060 MCLEOD ROAD UNIT 8
PATUXENT RIVER, MD 20670-1626
DSN 342-7909 EXTENSION 222
COMMERCIAL (301) 342-7909 EXTENSION 222
FAX: DSN 342-7741
COMMERCIAL (301) 342-7741

c. AUTOMATIC DISTRIBUTION.

(1) To receive revisions and changes to this instruction, a unit must be established on the automatic distribution list maintained by the Chief of Naval Operations.

(2) To become established on this list or to change distribution requirements, submit a letter, with justification to:

COMMANDER
NAVAL AIR SYSTEMS COMMAND
ATTN: AIR-3.6.1.3, BLDG 447
47060 MCLEOD ROAD UNIT 8
PATUXENT RIVER, MD 20670-1626
DSN 342-7909 EXTENSION 222
COMMERCIAL (301) 342-7909 EXTENSION 222
FAX: DSN 342-7741
COMMERCIAL (301) 342-7741

4. NAVAL ORDNANCE MAINTENANCE MANAGEMENT PROGRAM (NOMMP), OPNAVINST 8000.16.

a. The NOMMP provides an integrated system for performing airborne weapons maintenance and all related support functions. It provides policy guidance, technical direction, management, and administration of all programs affecting activities responsible for airborne weapons maintenance including associated materials weapons and equipment. The NOMMP is available at <http://neds.nebt.daps.mil/directives/dirindex.html>.

b. If replacement copies of the instruction are required with no attendant change in automatic distribution, copies may be obtained by submitting a letter, with justification, to:

COMMANDER
NAVAL AIR WEAPONS CENTER
WEAPONS DIVISION
CODE 361100E

POINT MUGU, CA 93042-5001
DSN 893-6323/6500
COMMERCIAL (805) 484-6323/6500
FAX DSN: 893-6344
FAX COM: (805) 484-6344

c. AUTOMATIC DISTRIBUTION.

(1) To receive revisions and changes to this instruction, a unit must be established on the automatic distribution list maintained by the Naval Air Warfare Center Weapons Division (NAVAIRWARCENWPNDIV) for the Chief of Naval Operations.

(2) To become established on this list or to change distribution requirements, submit a letter, with justification to the address shown above.

5. AIRCRAFT LAUNCH AND RECOVERY EQUIPMENT MAINTENANCE PROGRAM (ALREMP), OPNAVINST 4790.15.

a. The ALREMP provides an integrated system for performing maintenance and related support functions on ships installed aircraft launching and recovery systems and associated peripheral support systems and equipment. It provides policy guidance, technical direction, management, and administration of all programs affecting activities responsible for aircraft launch and recovery equipment maintenance including associated materials and equipment.

b. If replacement copies of this instruction are required with no attendant change in automatic distribution, copies may be obtained by submitting a requisition in MILSTRIP format to NAVICP Philadelphia or by submitting a letter to:

NAVAL AIR SYSTEMS COMMAND
ATTN: CODE PMA 251F2
47123 BUSE ROAD
BLDG 2272 SUITE 348
PATUXENT RIVER MD 20670-1547
DSN: 757-6997
COM: (301) 757-6997
FAX COM: (301) 757-6800

c. AUTOMATIC DISTRIBUTION.

(1) To receive revisions and changes to this instruction, a unit must be established on the automatic distribution list maintained by the Chief of Naval Operations.

(2) To become established on this list or to change distribution requirements, submit a letter, with justification to the above address.

6. DEPARTMENT OF DEFENSE (DOD) ISSUANCES.

a. DOD Issuances are defined as DOD Directives, DOD Instructions, and DOD Publications made available to all the organizational entities within the Department of Defense, and the public.

b. The DOD Issuances are published on the website (<http://web7.whs.osd.mil>). They can be downloaded as PDF files to your computer or read on-line.

c. DOD issuances are written in such a way to preclude requirements for the publication of implementing documents by the DOD activities. When it is necessary to establish specific parameters for action or to prescribe procedures to ensure that the guidance being promulgated is fully understood and carried out, a DOD Instruction or DOD Publication should be issued rather than requiring the DOD activities to issue separate implementing documents.

d. Notices are also published on the website <http://web7.whs.osd.mil>.

e. The EFFECTIVE DATE is the last paragraph before the signature. If any other implementing directives are required by Navy activities it will be stipulated at this point. Those that do not require additional direction will be stated as: "This Directive is effective immediately."

f. Further information on the DOD Directives System can be found in DoD Directive 5025.1.

g. The DOD Directives System Annual Index is issued on the website <http://web7.whs.osd.mil>.

7. DEPARTMENT OF THE NAVY DIRECTIVES.

a. Department of the Navy Directives are Navy instructions issued by Headquarters Organizations. These documents were cataloged in OPNAVNOTE 5215, Consolidated Subject Index (WP 017 00).

b. OPNAVNOTE 5215 has been cancelled. The unclassified OPNAV and SECNAV directives are available from the website, NAVY DIRECTIVES, Navy Electronics Directives System, <http://neds.nebt.daps.mil>. The directives are also available on a set of five CD-ROMs. See WP 017 00 for information on obtaining a copy.

c. Department Directives are available from various websites shown as links on the NAVY DIRECTIVES website..

e. Effective OPNAV and SECNAV Notices are included in the NAVY DIRECTIVES catalog on the website.

8. DEPARTMENT DIRECTIVES FOR THE CHIEF OF NAVAL EDUCATION AND TRAINING AND FOR THE DIRECTOR, OFFICE OF NAVAL INTELLIGENCE.

a. These directives are not stocked at NAVICP Philadelphia. Requests for these directives should be submitted to the originator by letter at:

CHIEF OF NAVAL EDUCATION AND TRAINING
250 DALLAS ROAD
PENSACOLA, FL 32508-5220

DIRECTOR
OFFICE OF NAVAL INTELLIGENCE
4251 SUITLAND ROAD
WASHINGTON, DC 20395-5720

9. SPECIAL WEAPONS ORDNANCE PUBLICATIONS.

a. Naval activities requiring Special Weapons Ordnance Publications (SWOPs) will submit their requirements via letter to the appropriate type commander to:

DIRECTOR
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD DIVISION DETACHMENT McALESTER
CODE 472G
567 ARMY AMMUNITION PLANT ROAD F
McALESTER, OK 74501-5190
DSN 956-6503
COMMERCIAL (918) 420-2503
FAX COM: (918) 420-6619

10. NAVAL SAFETY CENTER PUBLICATIONS.

- a. These publications may be obtained by submitting a letter request to:

COMMANDER
NAVAL SAFETY CENTER
375 A STREET
NORFOLK, VA 23511-4399
DSN 564-4354
COMMERCIAL (804) 444-4354
FAX COM: (757) 444-7205

11. JOINT TECHNICAL COORDINATING GROUP FOR MUNITIONS EFFECTIVENESS (JTTCG/ME) is responsible for the Joint Munitions Effectiveness Manuals (JMEM).

- a. JMEM are the NAVAIR 00-130AS series publications.
- b. Activities having a requirement for distribution or one-time requirements of the above publications must obtain a Technical Handbook Distribution Code.
- c. **JOINT SERVICE INDEX OF SPECIALIZED TECHNICAL HANDBOOKS, 61JTTCG/ME-1-2**, is the official document for determining status, security classification and ordering procedures for JTTCG/ME publications.
- d. Additional information may be obtained from the publication manager at:

JOINT TECHNICAL COORDINATING GROUP
FOR MUNITIONS EFFECTIVENESS
OKLAHOMA CITY ALC/TILUB
7851 ARNOLD ST SUITE 204
TINKER AFB, OK 73145-9160
DSN 336-5468/2707
COMMERCIAL (405) 763-5468/2707
FAX COM: (405) 763-5013

12. NAVAIR 10-35 SERIES (PHOTO INTERPRETATION KEYS) PUBLICATIONS.

- a. These publications have a controlled distribution. A letter or message requesting specific issue and automatic distribution must be addressed to:

Commanding Officer
Naval Intelligence Support Center, Code 72
4301 Suitland Road
Washington DC 20390
DSN 293-1625
Commercial (202) 763-1625

13. OTHER NAVAIR TECHNICAL MANUALS.

- a. Requests to be included on automatic distribution lists or for information pertaining to other service technical manuals not under the cognizance of NAVAIRSYSCOM should be made by letter to the applicable address below.

- (1) NAVAIR 50-1B Series through 50-1P Series

Commanding Officer
Naval Oceanography Systems Command
Federal Building
Asheville, NC 28801-2696

Commercial (704) 252-7868

(2) NAVAIR 11-1-116A (TWO 10-AA-ORD-020) and NAVAIR 11-1-116B (TWO 10-AA-ORD-030)

Commanding Officer
Navy Ships Parts Control Center
5450 Carlisle Pike
Code 852
P.O. Box 2020
Mechanicsburg, PA 17055-0788

14. OTHER NAVY TECHNICAL MANUALS.

a. Requests to be included on automatic distribution lists or for information pertaining to other Navy technical manuals not under the cognizance of NAVAIRSYSCOM should be made by letter to:

CNO	Chief of Naval Operations Code OP-09B23 Room 5E577 Pentagon Bldg. Washington, DC 20350-2000
NAVSEA NAVORD	Commanding Officer Port Hueneme Division NSWC 4363 Missile Way Naval Sea Data Support Activity Port Hueneme, CA 93043-4307
NAVSUP	Commander Naval Supply Systems Command Code SUP 083 Naval Supply Systems Command Headquarters Washington, DC 20376
SPAWAR	Commander Space and Naval Warfare Systems Command 53560 Hull St San Diego CA 92152-5001
NAVFAC	Commander Naval Facilities Engineering Command Code 09M13 200 Stoval Street Alexandria, VA 22332
NAVEDTRA	Commanding Officer Naval Education and Training Program Development Center 6490 Saufley Field Rd Code 3102 Pensacola, FL 32509-5000
BUPERS	Chief of Naval Personnel Bureau of Naval Personnel ATTN: PERS-2N\ 5720 Integrity Drive Millington TN 38055-0000
MARCORPS	Commandant of the Marine Corps

Headquarters, U.S. Marine Corps
Federal Bldg. 2
Room 1203 Navy Annex
Washington, DC 20380-0001

NAVSUP
PUB 600

Commanding Officer
Naval Supply Systems Command
5450 Carlisle Pike
Mechanicsburg, PA 17055-0791
DSN: 430-1268
Commercial: (717) 605-1268
Fax Comm: (717) 605-3314

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Disposal Technology Division
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2008 Stump Neck Road
Indian Head, MD 20640-5070
DSN: 354-6879
Commercial: (301) 744-6879
Fax DSN: 354-6945
Fax Comm: (301) 744-6945

STYLE AND FORMAT OF NAVAIR TECHNICAL MANUALS

NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM

Reference Material

None

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Record of Applicable Technical Directives

None

1. TECHNICAL MANUAL STYLES.

a. MILITARY SPECIFICATION MANUALS.

(1) Are prepared to specific requirements in support of defined maintenance concepts, predetermined maintenance level coverage, and are accompanied by an Illustrated Parts Breakdown (IPB) that reflects Navy provisioning actions for spares and spare parts.

(2) Are specifically tailored to represent the intended Navy use for training, operation, upkeep, and repair support as applied to weapon system availability and fleet readiness.

(3) Are prepared in either conventional or work package concept style and format.

(4) Conventional style and format manuals are arranged in topic sectionalized fashion by chapters containing sections. Work package concept style and format manuals are arranged sequentially by functions and tasks within a function as stand alone maintenance units containing all data required for specific task performance.

b. COMMERCIAL MANUALS.

(1) Are considered for procurement only when available for commercial off-the-shelf equipment. Must precisely reflect configurations of the equipment and the data must be compatible with Navy maintenance plans. Are established with provisions for copyright releases and authority for maintaining commercial manuals throughout the expected life cycles of the equipment. Should not have any restrictions against reproduction and distribution for government use.

(2) Prior to acquisition, are evaluated for NAVAIR/user acceptability to determine if they are candidates for procurement, whether in their present forms or subject to modifications.

(3) When accepted, are assigned a NAVAIR number to facilitate indexing, filing, stocking, and distribution requirements.

2. CONVENTIONAL MANUAL ARRANGEMENT.

a. The conventional topic-sectionalized technical manual format is still being used for NAVAIR technical publications. These sections include the following:

- Chapter 1 - Introduction
- Chapter 2 - Description
- Chapter 3 - Principles of Operation
- Chapter 4 - Troubleshooting
- Chapter 5 - Disassembly/Assembly
- Chapter 6 - Cleaning, Inspection, and Repair
- Chapter 7 - Alignment/Adjustment
- Chapter 8 - Illustrated Parts Breakdown

b. In the conventional manual format, the manual is sectionalized and each section normally addresses one phase of maintenance related to the end item of equipment such as: Operation, Principles of Operation, Testing, Troubleshooting, etc.

c. An IPB may be contained as a section in the manual or may be developed as a separate manual.

3. WORK PACKAGE MANUAL ARRANGEMENT.

a. To foster improvements in technical information, greater emphasis has been placed on data accessibility, adequacy, accuracy, and overall documentation usability.

b. The maintenance demands of higher technology systems resulted in a technical manual concept defined as a functionally assembled document, arranged in the general order of workflow, and grouped into small units covering individual tasks. These are called Work Packages (WPs).

c. WP functional elements include system/equipment description and principles of operation, testing and troubleshooting, system maintenance, wiring data/schematics and diagrams, and an IPB. Each of these elements is further broken down systematically into smaller units as required by system complexity, integration, and Logistic Support Analysis (LSA).

d. WPs within the manual are defined as self-supporting units of information containing all data required for a technician to perform a specific task.

e. WPs are based upon an LSA, or approved maintenance plans, and reflect defined repair concept requirements as contained in the integrated logistic support plan.

f. **ORGANIZATIONAL MAINTENANCE MANUALS** are planned on a weapon system basis covering on-aircraft troubleshooting, equipment installation, and removal.

g. **INTERMEDIATE AND DEPOT MAINTENANCE MANUALS** are focused on off-aircraft maintenance by shop or workcenter and narrowed to fault isolation, repair of end assemblies, and selected shop repairable modules or units.

h. WORK PACKAGE NUMBERING.

(1) The individual WP is assigned a number that appears in the upper right hand corner of every page.

(2) The WPs are numbered in their order of arrangement within the manual.

(3) The WP number is a five digit number arranged in blocks of three and two digits respectively, i.e., 001 00.

(a) The first three digits are assigned on the initial issue of the manual. Starting with 001, the numbers could progress in numerical sequence through 999.

(b) Except for WP 001, the last two digits are used when a change (or revision) to the manual is issued adding a new WP whose technical content logically places the WP between two existing WPs. When this occurs, the new WP is numbered XXX 01. Example: WPs issued to be inserted between existing WPs 008 00, 009 00, and 010 00, would be numbered 008 01 and 009 01 respectively.

(c) The only exceptions in the use of the last two digits is the assignment of WP 001 01 to the Numerical Index of Part Numbers and WP 001 02 to the Numerical Index of Reference Designations. In special circumstances, a contractor may request an exception to the military specification from the Naval Air Technical Data and Engineering Services Command (NATEC), for the use of the last two digits.

4. WORK PACKAGE MANUAL FORMAT.

a. Margin information, i.e. technical manual number, WP number, change designation, and page number, have been repositioned at the top left and right of the page. This was accomplished to enhance usability and readability.

b. Because of the capability to reproduce WPs separately, each package has been developed with its own

title page. The title block identifies the function/task by title, level of maintenance, and serial number effectivity.

c. One of the first elements of information provided is a listing of reference material required in the WP.

d. Also included is an alphabetical index of titled paragraphs in the WP and an applicable technical directive listing.

e. Strategically located early in the text of most WPs is a listing of support equipment and consumable materials required to perform the task. A typical WP title page is illustrated in [figure 1](#).

f. CONTENT FORMAT.

(1) Content depends on the specific task to be performed, the authorized depth of information required, and the sequence of performance.

(2) The WP concept permits the preparing activity to tailor the document to fit the specific maintenance demands of the unit under repair.

(3) Organizational Maintenance Data.

(a) Organizational data is system oriented.

(b) Organizational system maintenance will normally cover removal, installation, alignment, and adjustment in task order.

(c) Descriptive information and principles of operation data are packaged in the order of operational signal flow or mechanical operating sequence by component.

(d) Testing and troubleshooting are assembled by functional block logic and by action sequence with consideration being given to mode selection and failure probability. Where possible, specific points of entry to the text must be identified to preclude the necessity of running a complete end-to-end test after each corrective action.

(e) IPBs should be prepared as a part of the maintenance WP but may be a separate WP.

(4) Intermediate/Depot Maintenance Data.

(a) Intermediate/depot level documents are simpler to use because the arrangement and assembly of WPs is based on component, rather than system breakdown.

(b) Intermediate/depot level WPs are assembled in a pyramid fashion based on standard top-down breakdown of the component, or by the tasks necessary to remove/install a particular component.

(c) Where the volume of data permits, end item description, principles of operation, and troubleshooting can appear as a series of introductory WPs preceding the maintenance data.

(d) The first maintenance package would cover the removal/installation and IPB of components from the end item and other pertinent related information.

(e) Tasks would then follow through the disassembly/assembly of the removed components.

(f) IPB data is contained in the intermediate/depot WP, providing maximum information to support a total WP concept.

g. INFORMATION ACCESSIBILITY.

(1) Logical assembly through work packaging and highly visible numbering and paragraph titling help tremendously but; the major emphasis must be placed on indexing.

(2) Within the technical manual itself an Alphabetical Index appears as WP 001 00. This index replaces the standard Table of Contents in conventional manuals as a locator for the desired WP number.

(3) The second level of indexing appears on the title page of each individual WP ([figure 1](#)). Each titled paragraph is listed in alphabetical order and level of subordination.

AT-828CA-MIB-070

1 July 1991

004 00

Page 1 of 24

**INTERMEDIATE MAINTENANCE
TESTING AND TROUBLESHOOTING
DISC DRIVE ASSEMBLY
PART NO. A31U13142-1**

Reference Material

Master Test Program Set Index (MTPSI)
General Shop Practice Requirements for the Repair,
Maintenance, and Test of Electronic Equipment

MTPSI AN/USM-467

T.O. 00-25-234

Alphabetical Index

<u>Subject</u>	<u>Page No</u>
Introduction	1
Testing and Troubleshooting	I

Record of Applicable Technical Directives

None

1. INTRODUCTION.

2. This work package (WP) contains testing and troubleshooting for the Disc Drive Assembly (disc drive) Part No. A31U13142-1.

3. TESTING AND TROUBLESHOOTING.

4. Testing and Troubleshooting of cables will be done by performing continuity checks.

5. Table I is provided as a troubleshooting aid which lists the response of the disc drive to certain conditions as evidenced by the appearance of the four drive fault light emitting diodes (LEDs) on control PCA-A4, the indicators on the operator control panel and the drive mechanism. Two of the drive fault LEDs are colored red, one is green

and one is yellow. By color coding the operation of the LEDs, a number of drive faults can be indicated. These faults and the LEDs illuminated, are detailed in table 1.

7. Table 2 is provided as a troubleshooting aid which defines the signal mnemonics and abbreviations used in the diagrams and lists the source of the signals.

8. Table 3 is provided as a troubleshooting aid in which motherboard wiring connections are contained in the PCA-A7 wiring list.

9. Schematic diagrams are provided at the end of this package as troubleshooting aids.

Figure 1. Typical WP Title Page including Alphabetical Index

NATEC FLEET LIAISON DIVISION

NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM

Reference Material

None

Alphabetical Index

<u>Title</u>	<u>Page No</u>
NATEC Fleet Liaison Division (Code3.3F)	2
Technical Publications Specialist (TPS)	2

Record of Applicable Technical Directives

None

1. NAVAL AIR TECHNICAL DATA AND ENGINEERING SERVICE COMAND (NATEC) FLEET LIAISON DIVISION (CODE 3.3F).

a. The Fleet Liaison Division interfaces with fleet user activities to resolve issues associated with the use of all technical data products produced by NATEC. The duties of the Fleet Liaison Division are as follows:

(1) Review and analyze automatic distribution problems, such as incorrect quantities and non-receipt of required publications.

(2) Resolve inventory control issues with NAVICP Philadelphia and incorrectly packaged, missing, and delayed technical publications, which are points of concern with the Defense Automated Printing Services (DAPS) offices.

(3) Investigate and analyze operational problems and recommend appropriate revisions to applicable procedures.

(4) Serve as NATEC liaison to fleet user activities to determine most appropriate method of fleet support pertaining to the issue and release of initial outfitting requirements and automatic distribution.

(5) Assist in the coordinating and controlling effort to provide identification and availability status information in response to special requests for technical data associated with the Individual Material Readiness List (IMRL) as issued by Type Commanders in support of new and/or renovated aircraft.

(6) Conduct studies of special problems in technical publication distribution.

(7) Charged with the management of the Technical Publications Deficiency Report (TPDR) program.

(8) Charged with the management of the Interim Rapid Action Change (IRAC) program.

b. The Fleet Liaison Division may be contacted at the following address or by calling the appropriate telephone number.

NATEC FLEET LIAISON DIVISION
Attn: Code 3.3F
P. O. Box 357031
San Diego, CA 92135-7031
Message address: NATEC SAN DIEGO CA//3.3A//
NATEC SAN DIEGO CA//3.3//
DSN 735-2357
Commercial (619) 545-2357
Fax DSN 735-2343
Fax commercial (619) 545-2343

c. TECHNICAL PUBLICATIONS SPECIALISTS (TPS).

(1) While technical manual assistance may be obtained from all NATEC Fleet Liaison personnel, Fleet Liaison Division Technical Publications Specialists (TPS) are pre-positioned at Naval Air Stations throughout the country. Their primary function is to respond to the user community on technical manual/library questions and problems.

(2) Some highlights of the services available to the user activities from the TPSs are as follows:

(a) Provide feedback to NATEC Headquarters on technical publication problems encountered at fleet activities.

(b) Provide information on improvements to the NAVAIR Technical Documentation

Program.

(c) Assist user activities in resolving problems encountered in any phase of technical documentation.

(d) Provide technical guidance and assistance in the establishment and maintenance of a central and /or a dispersed technical library ashore or afloat.

(e) Provide assistance in the use, operation, and maintenance of equipment and/or software.

(f) Assist user activities in distribution, initial outfitting, and automatic distribution problems.

(3) TPSs may be contacted at the following addresses or by calling the appropriate telephone numbers. In the event the TPS servicing your area cannot be contacted, you are encouraged to contact one of the other TPSs for assistance.

NATEC DET Whidbey Island Codes 3.3FA & 3.3F7
1155 West Lexington Street
NAS Whidbey Island
Oak Harbor, WA 98278-2800
Message address: NATEC DET NAS WHIDBEY ISLAND WA //3.3//
DSN: 820-2253
Commercial (360) 257-2253
Fax DSN 820-1494
Fax commercial (360) 257-1494

NATEC QA DIVLANT CODE 3.3F1
1683 Pocahontas Street Suite 300
Norfolk, VA 23511-2999
Message address: NATEC QA DIVLANT NAS NORFOLK VA //3.3//
DSN: 564-6369/5867
Commercial (757) 444-6369/5867
Fax DSN 565-2817
Fax Commercial (757) 445-2817

NATEC DET JACKSONVILLE CODE 3.3F2
NATEC DET JACKSONVILLE
ATTN: TECH PUBS SPECIALIST
P. O. BOX 53
NAS JACKSONVILLE, FL 32212-0053
Message address: NATEC DET JACKSONVILLE FL //3.3//
DSN: 942-1322
Commercial (904) 772-1322
Fax DSN 942-3373
Fax Commercial (904) 542-3373

NATEC DIVPAC CODE 3.3F3
Bldg. 90, P. O. Box 357031
San Diego, CA 92135-7031
Message address: NATEC SAN DIEGO CA//3.3A//
DSN: 735-2422
Commercial (619) 545-2422
Fax DSN 735-1883
Fax Commercial (619) 545-1883

NATEC DET LEMORE CODE 3.3F5
NATEC DET LEMOORE
Attn: Fleet Liaison Code 3.3F5
Bldg. 270 Reeves Blvd Hgr 3 MOD D
NAS Lemoore, CA 93245-5001
Message address: NATEC DET LEMORE CA //3.3//
DSN: 949-2138
Commercial (559) 998-3138
Fax DSN 949-2138
Fax Commercial (559) 998-2138

NATEC DET NEW ORLEANS 3.3F9
NATEC DET NEW ORLEANS
ATTN: TECH PUBS SPECIALIST
NAS/JRB
New Orleans, LA 70143-5012
DSN: 678-3154/5
Commercial (504) 678-3154/5
Fax DSN 678-3892
Fax Commercial (504) 678-3892

(4) TPS technical assistance may be obtained directly or by request to:

Commanding Officer
NAVAIRTECHDATAENGSERCOM
Attn: Code 3.3F
Bldg. 90, P. O. Box 357031 I
San Diego, CA 92135-7031
Message address: NATEC SAN DIEGO CA//3.3A//
DSN: 735-2357
Commercial (619) 545-2357
Fax DSN 735-2343
Fax Commercial (619) 545-2343

NOTE

To contact any of the TPS personnel via email:
(See current version of the TPL program or send email to tps@navair.navy.mil to address all TPSs)

TECHNICAL PUBLICATION UPDATE METHODS

NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM

Reference Material

Naval Air Training and Operating Procedures Standardization (NATOPS) Program..... OPNAVINST 3710.7
Manuals, Technical; General Requirements; Preparation of MIL-M-38784
Technical Manuals Work Package Style, Format of..... MIL-M-81927
General Specs for preparation of manuals, technical: RAPID ACTION CHANGES..... MIL-DTL-81748 ■

Alphabetical Index

<u>Title</u>	<u>Page No</u>
Change to a Conventional Manual	4
Change to a Work Package (WP) Manual	5
General	2
Interim Rapid Action Changes (IRAC)	2
General	2
IRAC Incorporation in the Technical Manual	2
NAVAIR Technical Manual Notices.....	7
Revision of a NAVAIR Technical Manual	7

Record of Applicable Technical Directives

None

1. GENERAL.

a. Technical documentation usability is defined as how effectively the presented information describes the system or equipment configuration and required maintenance data.

b. In general, hardware configurations and maintenance concepts are fluid. These changes are usually the results of efforts to improve either mission or maintenance capabilities. Therefore, it is mandatory that the Naval Air Systems Command maintain an effective, update method to ensure that technical publications keep pace with hardware configuration.

c. Technical manuals are updated through the issue of Interim Rapid Action Changes or Revisions.

d. For revisions and changes to Naval Air Training and Operating Procedures Standardization (NATOPS) program publications, refer to OPNAVINST 3710.7.

2. INTERIM RAPID ACTION CHANGES (IRAC).

a. **GENERAL.** IRACs are developed to expedite the issuance of technical information which relates to safety of personnel/flight, aircraft grounding, mission capability/fleet readiness, equipment damage, and/or environmental impact restrictions. IRACs will be of the following types:

(1) **Type A – IRACs** issued by Naval activities/Contract Administrative Offices (CAO) as Naval Messages. This is an actual depiction of a Naval Message IRAC. ([figure 1](#))

(2) **Type B – IRACs** issued by Naval activities/CAOs as hard copy shall be preceded by a Naval message informing the mailing date of the Type B IRAC letter number and its date. Hard copy shall be used to issue IRACs containing information in the form of illustrations, schematics, wiring diagrams and other forms, which cannot be issued as messages. A soft copy shall be sent to NATEC via Email to address irac@navair.navy.mil.

b. **IRAC INCORPORATION INTO THE TECHNICAL MANUAL** ([WP 020 00](#)).

c. The determination to issue an IRAC shall be made by the commercial or government cognizant technical manual preparing activity in coordination with the NATEC Logistics Element Manager (LEM). The incorporation of the IRAC into the technical publication shall be accomplished during the next scheduled formal update. Issuance of an IRAC should be accomplished within 30 days of the date the requirement is determined and should be distributed by the most expeditious method possible.

d. One or more of the following conditions must exist for an IRAC to be issued:

- (1) Hazards to safety of personnel
- (2) Impairment of safety of flight
- (3) Aircraft Grounding
- (4) Impact of mission capability and or fleet readiness
- (5) Equipment damage
- (6) Environmental impact restrictions

e. The following conditions are not legitimate reasons for an IRAC to be issued and such will be rejected:

- (1) Format changes
- (2) Grammatical changes (unless safety, equipment damage, flight limitation, etc., are involved)

- (3) Typographical errors
- (4) Production methods
- (5) General non- procedural information

(6) Naval Air Training and Operation Procedures Standardization (NATOPS) flight and tactical manuals are excluded from the IRAC program.

f. Cancelled IRAC numbers will NOT be reused. Any re-issue of the original corrected IRAC shall be done with a new number. Only official numbered IRACs can be incorporated into a technical manual. Any correspondence sent out that does not provide a new number for a cancelled IRAC and or re-issue is not authorized.

g. IRACs shall be prepared in a clear and concise manner to be as customer friendly in its meaning as possible. Security classification other than unclassified must be identified. Classified IRACs will not be issued to an unclassified technical manual. Grammar and spelling shall be checked via both automation and in visual proof reading. Any schematics that are included will be accurate and match with the explanation of the procedures and or processes referred to in the IRAC. Type B IRACs shall contain a title block with **INTERIM RAPID ACTION CHANGE** in bold capital letters and encapsulated by a border.

h. The IRAC date is the Date Time Group (DTG) of the message or the date of the hard copy.

i. IRAC issuing activity identification information:

(1) Type A IRAC – Message shall contain (DTG), activity point of contact's code, name, phone number, and Email address.

(2) Type B – Shall be assigned a date and shall include in the "From line" the activity point of contact's code, name, phone number, address, facsimile number, and Email address.

j. IRAC Action Addressees Information:

(1) Type A – Naval Air Systems Command (NAVAIR) Address Indicator Group (AIG) number One Hundred and Sixty Five (165) and any supplemental AIG number for the specific equipment involved and any additional applicable addressees as required. AIG 165's purpose is to consolidate the Naval message addresses of all activities requiring interim technical directives into a singular AIG.

(2) Type B – Identify the source of the distribution mailing labels. Example: "SH-60B Automatic Distribution Lists for A1-H60BB-560-200".

(3) Types A & B – Addressees via Internet access. In addition to delivery of the IRACs by message traffic and/or hard copy, posting IRAC information via the NATEC website www.natec.navy.mil is also possible. Submit a copy of such via Email to irac@navair.navy.mil. Those users with Internet access can then either view and/or download directly from the NATEC Internet website.

(4) **SPECIAL NOTE** - If your entire customer population for a specific weapons system is completely Internet accessible please inform irac@navair.navy.mil. The IRAC team within the NATEC organization will then work with NATEC technology group and you to utilize only the Internet as your IRAC delivery mechanism.

k. The main purpose of an IRAC is to ensure that the same correct technical information and its related requirements are communicated to those that require the information. The following details must be included in the IRAC:

- (1) A notice that pen and ink changes are never authorized.

(2) The exact location and description of the change explained in detail.

(3) The priority, condition, and purpose of the change accurately detailed.

(4) Pertinent information depicted in an easy to understand format.

(5) Appropriate security markings in accordance with the latest Department of Defense (DOD) standards.

l. All IRACs will be validated prior to release.

m. All outstanding IRACs should be against the latest formal change or revision to the manual. If this is not the case a TPDR should be issued against the manual.

3. CHANGE TO A CONVENTIONAL MANUAL (MANUALS PREPARED TO MIL-M-38784).

a. Manuals that are prepared in accordance with MIL-STD-38784 in the non-work package format are referred to as conventional manuals.

b. A routine manual change is the official release of new or corrected pages to a part or portion of an existing document.

c. A change consists of replacement pages for that area of the manual affected by the change. This approach provides both an economical and expedient method of issuing new or corrected material to the user.

d. Upon issue of the change, it is necessary for the recipient to remove the superseded pages and insert the new pages.

(1) When a change is issued, existing page numbers, paragraph numbers, figure numbers, and table numbers are not changed.

(2) Supplemental numbers are assigned to new pages, paragraphs, figures, and tables.

(3) Except when a number is added at the end of a sequence (in which case the next consecutive number is used), paragraphs, illustrations, and tables are numbered by adding an alphabetical suffix (i.e. A, B, C) to the preceding paragraph, illustration, table, or page. The same applies to added pages except that such pages shall not be added between a right-hand and left-hand page. When new material is to be added to a right-hand page any overrun shall be carried to the left-hand page and the overrun from this shall be placed on an added page. Therefore, such added pages shall always be assigned even numbers such as 2A, 2B, 4A, 4B, etc.

(4) Each page containing changed or added material bears the word "Change . . .," placed at the bottom of the page in the same corner and on the same line with the page number.

(5) For foldout pages, the change number is placed in the lower-outer corner of the page beneath the figure title.

(6) This change number requirement is applicable to all added pages, including those placed at the end of a manual.

(7) Change Symbology.

(a) Except as stated below, text and table changes, including new material on added pages, are identified by a vertical line or change symbol in the outer margin for double-columned material and margin opposite binding edge for single-columned material which extends the entire length of the material affected.

(b) Pages with emergency markings (black diagonal lines around three edges) are an exception and may have the vertical line or change symbols placed along the inner margins.

(c) Previous change symbols on a page are deleted when a page is subsequently changed.

(d) Symbols show current changes only. The vertical line change symbol shall be 3/32 inch in width. It may be 3/64 inch for pages showing emergency markings, if the symbol is not placed at the inner margin. When a change symbol, such as a number sign "#", plus mark "+", black circle, black square, the letter "C", "R", or "X" is issued, its meaning is explained in the introductory portion of the manual.

(e) Change symbols will not be used for:

1 Introductory material.

2 Indexes and tabular data where the change cannot be identified.

3 Blank space resulting from the deletion of text, an illustration, part of an illustration, or a table.

4 Correction of minor inaccuracies, such as spelling, punctuation, relocation of material, renumbering of paragraphs, etc., unless such correction changes the meaning of instructive information and procedures.

5 Replacement or addition of a complete part, chapter, or section.

(f) With the exception of diagrams and schematics, illustrations, line drawings, and photographic changes are normally identified by a miniature pointing hand. The hand points to the general area of change information.

(g) Shading and screening are used for diagrams and schematics to highlight the area containing the changed information.

(h) Extensively changed presentations are indicated by a screen border around the affected area.

(i) Other presentation methods of the use of change symbols other than those addressed above must be approved by NATEC and will be reflected on the "A" page and introductory matter of the manual.

4. CHANGE TO A WORK PACKAGE (WP) MANUAL (MANUALS PREPARED TO MIL-M-81927).

a. A WP may be changed when one or more pages have been affected by the current change to the WP manual, or when a WP must have a Rapid Action Change (RAC) issued against it. A changed WP shall consist of a changed WP title page and those pages affected by the change to the WP, including unchanged backup pages, if applicable.

b. When a change is prepared to a WP manual or volume, the change may consist of one or more added or changed WPs. When required, WPs may be deleted from the manual during a change cycle. Since WPs are assigned permanent numbers, deleted WP numbers shall not be reassigned to add WPs. The numerical index of effective work packages/pages shall account for all added, changed, or deleted WPs affected by the change, as well as previous changes to the manual, if applicable. If one or more individual WPs have been changed, the change shall be listed on the "A" page.

c. The first change following the basic issue to the manual shall be numbered "Change 1". Subsequent changes issued shall be numbered consecutively.

d. The change number and date shall be placed below the publication number on all pages affected by the change. If a page has been previously changed, the previous change number and date shall be removed and replaced by the current change number and date.

e. A changed WP shall incorporate changed or added material and delete material no longer applicable to the subject of the WP. Paragraphs, illustrations, tables, pages, and index numbers on illustrations added between existing ones shall be assigned the preceding number plus consecutive capital letter suffixes. Added pages shall always be assigned even numbers such as 2A, 2B, 4A, 4B, etc. in order to maintain continuity when printing. Suffix letters I and O shall not be used. Other than the addition of suffix letters, existing identification numbers and suffixes shall not be renumbered.

f. The change number and date shall be the same on a changed WP title page as the manual change number and date. The change number and date shall be placed in the upper left corner, below the publication number.

g. Added or deleted material in a changed WP shall be prepared as follows:

(1) Except when a number is added at the end of a sequence (in which case the next consecutive number is used), paragraphs, illustrations, and tables are numbered by adding an alphabetical suffix (i.e. A, B, C) to the preceding paragraph, illustration, table, or page. The same applies to added pages except that such pages shall not be added between a right-hand and left-hand page. When new material is to be added to a right-hand page any overrun shall be carried to the left-hand page and the overrun from this shall be placed on an added page. Therefore, such added pages shall always be assigned even numbers such as 2A, 2B, 4A, 4B, etc.

(2) Added material shall be placed in proper sequential order within the WP. If this causes an overrun, the material that will not fit on the existing page shall be placed on an added page. If blank space is available on either the preceding or following page of the one affected, this space may be used for overrun material; however, correct sequential order of material must be maintained.

(3) Deleted paragraphs, procedural steps, or callouts following index numbers on illustrations shall be indicated by placing the word "Deleted" after the affected item; for example, "r. Deleted." Or "2. Deleted."

(4) Deleted pages shall be accounted for by placement of a note at the bottom of the preceding page or at the top of the succeeding page; for example, "Page 7 Deleted." The note shall be placed within the required image area (with marginal copy).

h. Changes to text, tables, and illustrations including new material on added pages shall be indicated by change symbols. All existing change symbols shall be eliminated from pages affected by the current change. After removal of previous change symbols, new change symbols shall be inserted, highlighting material changed or added during the change to the WP.

i. Change Symbology.

(1) The text and tabular data affected by the change to a manual is indicated by the letter "R" or a change bar in the left margin for left column changed material and in the right margin for right column changed material (double-column format manuals) or in the right margin for single-column format manuals.

(2) Change symbols for illustrations are in accordance with the following:

(a) IPB illustrations do not require change symbols.

(b) On line drawings (other than diagrams), a miniature pointing hand is used to highlight the area containing the changed information.

(c) When several changes are made at once in the same area of an illustration, a change bar may be used to indicate a general area.

(d) A vertical line next to changed text and callouts on illustrations is used in lieu of a pointing hand.

(e) A change bar may also be used on a graph to indicate a change.

(f) When an illustration has been extensively changed, a change bar is placed across the top of the reproduction area (full page illustrations) or in the left or right margin as applicable (partial page illustrations).

(g) On diagrams, bordering or pointing hands are used to indicate the area containing the changed or added information.

(h) Extensively changed or added areas are indicated by a change bar around the affected presentation, or a change bar across the top of the image area affected.

(i) Other presentation methods of the use of change symbols other than those addressed above must be approved by NATEC and will be reflected on the "A" page and introductory matter of the manual.

5. REVISION OF A NAVAIR TECHNICAL MANUAL. (Conventional format [figure 2](#) and Work Package format [figure 3](#)).

a. A revision is a second or subsequent edition of a manual that supersedes the previous edition. A revision constitutes a complete reissue of a manual with all updated information incorporated.

b. Identification of a revision is made by a supersedure notice on the title page and a new issue date.

6. NAVAIR TECHNICAL MANUAL NOTICES. ([figure 4](#))

a. The NAVAIR TECHNICAL MANUAL (TM) NOTICE is the method for correcting minor errors in NAVAIR technical publications that do not require the issuance of a formal change.

b. It shall apply only to unclassified TMs, including periodic maintenance requirements manuals issued as cards, and checklists. Issuance of the NAVAIR TM NOTICE is limited to omissions/corrections of title and "A" pages, and replacement of missing pages and dates. Replacement text pages shall be issued only to correct typographical errors or to replace illegible copy. Replacement pages shall be prepared in the same style and format and shall not exceed five pages.

c. NAVAIR TM NOTICES shall not be used to correct and/or change the technical content of NAVAIR manuals.

d. The NAVAIR TM NOTICE shall contain the publication number, a date which is one day later than the basic date of the manual, card(s), or checklist to be corrected and include a clear, concise reason for the NOTICE. The identifier, NOTICE, shall be in boldface type and placed on the four corners.

e. NAVAIR TM NOTICES are not listed on "A" pages of NAVAIR technical manuals.

f. NAVAIR TM NOTICE sheets shall be retained directly behind the title page ([WP 020 00](#)).

R13228/
ROUTINE

* UNCLASSIFIED *

RTTUZYOW RHFJSGG3279 1671413-0000-RUEBAGB RUEBAGF.

ZNR UUUUU

RUADANW T CG FIRST MAW

RUCBLFA T CG FMFLANT

RUCKFCO T CG SECOND MAW

RUCLNOQ T CG FOURTH MAW

RUEBBOB T CG THIRD MAW

RUHGFIP T CUMCARGO FIVE

RUHGNQN T USS INDEPENDENCE/COMCARAAIRWING FIVE/HELANTISUBRON TWELVE

RUHQHS T USS BLUE RIDGE

RUHPEXU T USS CORONADO

RHUQHQC T CG FMFPAC

RUWFABW T COMHELWINGRES

RUWFABX T HELSUPPRON ELEVEN

R 151413Z JUN 94 ZYB

FM NAVAVNDEPOT PENSACOLA FL//351///

TO AIG ONE SIX FIVE

AIG TWO FIVE FIVE

AIG FOUR TWO TWO

INFO FULSNAA/COMNAVAIRSYSCOM WASHINGTON DC//41023//5115//

RUEDBMK/NAVAIRWARCENACDIV WARMINSTER PA//23//

RULSACR/NAVAVNMAINTOFF PATUXENT RIVER MD//462//

BT

UNCLAS //N04790//

SUBJ: H3 INTERIM RAPID ACTION CHANGE NO. 3 TO NA 01-230HLH-2-3.4

DATED 1 NOV 89 WITH RAPID ACTION CHANGE 2 DATED 19 AUG 91

1. RESPONSIBLE CODE: NAVAVNDEPOT PENSACOLA FL, CODE 31100,

J. WILLARD, DSN 922-3359, COM (904) 452-3359.

2. PURPOSE OF CHANGE: CORRECT CURRENT MAINTENANCE PROCEDURES PERTAINING

TO TAIL WHEEL AXLE SEAL, P/N: 262HD124, TO PREVENT POSSIBLE CATASTROPHIC

FAILURE OF TAIL WHEEL ASSEMBLY.

3. DETAILED INSTRUCTIONS:

A. PEN AND INK CHANGES TO THE TECHNICAL CONTENT OF A MANUAL ARE NOT AUTHORIZED.

THE FOLLOWING TECHNICAL CONTENT CHANGE INFORMATION APPLIES TO THE FOLLOWING

REFERENCED PAGES AND PARAGRAPHS OF THE SUBJECT MANUAL UNTIL THE FORMAL CHANGE

IS RELEASED.

PAGE 02 RHFJSGG3279 UNCLAS

DELIVER TO:

TOR: 1/0002A JUN 94

* UNCLASSIFIED *

Figure 1. Actual Interim Rapid Action Change
(Sheet 1 of 2)

R13228/
ROUTINE

* UNCLASSIFIED *

B. WP 023 00, PAGE 5: WILL BE CHANGED AS FOLLOWS:

1. "NOTE" PRIOR TO STEP 2 PARAGRAPH C WILL BE DELETED

2. "WARNING" WILL BE INSERTED PRIOR TO STEP 2 PARAGRAPH B, TO READ AS FOLLOWS:
"SEAL LIP MUST FACE OUTBOARD TO ENSURE FULL ENGAGEMENT WITH THE OUTSIDE
DIAMETER SURFACE OF THE S6125-50515 AXLE SPACER. PROPERLY INSTALLED, SEAL WILL
PREVENT INGRESS OF WATER AND FOREIGN MATERIAL INTO WHEEL BEARINGS AND CAVITY
AREA."

4. VALIDATED BY: NADEP PENSACOLA

5. RELATED INSTRUCTIONS:

A. MAINTAIN THIS IRAC DIRECTLY BEHIND THE TITLE PAGE, AND ANNOTATE THE MARGIN OF
PAGES IMPACTED, IN PENCIL, WITH IRAC NUMBER.

B. DO NOT REMOVE THIS IRAC UNTIL RECEIPT OF FORMAL CHANGE.

C. NAVAVNDEPOT PENSACOLA WILL FORMALIZE THIS IRAC NO LATER THAN AUGUST 94.

BT

#3279

TOR: 1/0002Z JUN 94

* UNCLASSIFIED *

Figure 1. Actual Interim Rapid Action Change
(Sheet 2 of 2)

NAVAIR 01-75PAA-2-26

**TECHNICAL MANUAL
MAINTENANCE INSTRUCTIONS
ORGANIZATIONAL
INTEGRATED
ARMAMENT AND ORDNANCE
STATION**

**NAVY MODELS
P-3A AND P-3B
AIRCRAFT**

This manual supersedes NAVAIR 01-75PAA-2-26, dated 1 June 1980, Change 6, dated 1 May 1987.

DISTRIBUTION STATEMENT C: Distribution authorized to U.S. Government agencies and their contractors to protect publications required for official use or for administrative or operational purposes determined on 1 July 1991. Other requests for this document shall be referred to the Commanding Officer, Naval Air Technical Services Facility, 700 Robbins Avenue, Philadelphia, PA 19111-5097.

DESTRUCTION NOTICE: For unclassified, limited documents, destroy by any method that will prevent disclosure of contents or reconstruction of the document.

Published by direction of Commander, Naval Air Systems Command

1 JULY 1991

Figure 2. Revision of Conventional Manual

NAVAIR 16-35C12056-1
1 September 1992

TECHNICAL MANUAL

**MAINTENANCE INSTRUCTIONS
WITH
ILLUSTRATED PARTS BREAKDOWN**

INTERMEDIATE AND DEPOT

**DOME CONTROL
C-12056/AQS-13F
PART NUMBER 8013940
AND 8030040**

This Publication Supersedes NAVAIR 16-35C12056-1 Dated 1 June 1990
With Change 1 dated 1 May 1991

DISTRIBUTION STATEMENT C. Distribution authorized to U.S. Government agencies and their contractors to protect publications required for official use or for operational purposes only, determined on 1 June 1990. Other requests for this document shall be referred to Commanding Officer, Naval Air Technical Services Facility, 700 Robbins Avenue, Philadelphia, PA 19111-5097.

DESTRUCTION NOTICE - For unclassified, limited documents, destroy by any method that will prevent disclosure of contents or reconstruction of the document.

Published by direction of Commander,
Naval Air Systems Command

Figure 3. Revision of Work Package (WP) Manual

NOTICE

NOTICE

NAVAIR 01-75PAA-3-1

12 NOVEMBER 1991

NAVAIR 01-75PAA-3-1, Rapid Action Change 9, dated 11 November 1991, has errors on the "A" Page, due to printer error. Remove and discard previously provided "A" page and replace with attached "A" page.

Place this page behind title page after incorporation.

NOTICE

NOTICE

Figure 4. NAVAIR TM NOTICE

UNCLASSIFIED

ADMINISTRATIVE MESSAGE

ROUTINE

PR (Date Time Group)

FM (Issuing Activity, Code)

TO AIG ONE SIX FIVE

(Any other supplemental AIGs for the specific equipment as required)

INFO (as required)

UNCLASS //N05600//

MSGID/GENADMIN//

SUBJ/INTERIM RAPID ACTION CHANGE NUMBER TO TECHNICAL MANUAL (NAVAIR number and title OF (date of issue) WITH (Change number and date as applicable)//

REF/(as required)//

NARR/(as required)//

POC/(Name, title, activity name, code, DSN and commercial phone numbers, facsimile number, email address)//

REMARKS/1. RESPONSIBLE CODE: (Activity and office code)

2. PURPOSE OF CHANGE:(Specifically define condition for message release as covered in 3.2 and purpose of change. Example, TO CORRECT/PREVENT

3. DETAILED INFORMATION: PEN AND INK CHANGES TO THE TECHNICAL CONTENT OF MANUALS IS NOT AUTHORIZED. THE FOLLOWING TECHNICAL CONTENT CHANGE INFORMATION APPLIES TO THE FOLLOWING REFERENCED PAGES AND PARAGRAPHS OF THE SUBJECT MANUAL UNTIL THE FORMAL CHANGE IS RELEASED: (Identify exact location and describe the change in detail. Example ON WORK PACKAGE 005-00, PAGE 6, DELETE STEPS 4 AND 5 IN THEIR ENTIRETY.)

4. VALIDATED BY: (Name, activity, code, and telephone number as applicable)

5. RELATED INSTRUCTIONS:

A. FOR PAPER COPY – MAINTAIN THIS IRAC WITH THE APPLICABLE MANUAL BY PLACING OR ATTACHING IT DIRECTLY BEHIND THE TITLE PAGE. MARK THE SPECIFIC CHANGE AREA IN THE MARGIN OF EACH PAGE AFFECTED, IN PENCIL, WITH A VERTICAL LINE AND THE IRAC NUMBER OF THE MESSAGE. THIS IRAC SHALL NOT BE REMOVED UNTIL RECEIPT OF THE FORMAL CHANGE PAGES.

B. FOR IRACS AFFECTING MANUALS ON CD-ROM – AFFIX AN ADHESIVE LABEL TO THE CD-ROM CASE ANNOTATED WITH THE APPLICABLE PUBLICATION NUMBER AND IRAC NUMBER. THE LABEL SHOULD BE POSITIONED TO ALLOW FOR ADDITIONAL UPDATES AS THEY OCCUR. MAINTAIN THE IRAC ON FILE UNTIL RECEIPT OF THE SUPERSEDING CD-ROM.

C. (Preparing activity, code and target date for formally updating the applicable manual. Example: SUBJECT IRAC SHALL BE INCORPORATED INTO APPLICABLE MANUAL NO LATER THAN 12 MONTHS AFTER IRAC ISSUED DATE BY (Activity, code)

(Date/ Time/Group)

(Issuing Activity)

UNCLASSIFIED

Figure 5. IRAC message format

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**SUPPLEMENTING TECHNICAL MANUALS, SECURITY
AND CLASSIFICATION REQUIREMENTS**

NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM

Reference Material

NATEC Fleet Liaison Division	WP 006 00
NAVAIR Manual Deficiency Reporting Programs	WP 014 00
Contract Security Classification Specification	DD Form 254
Department of the Navy Information Security Program Regulation	SECNAVINST 5510.36
Department of the Navy Security Classification Guides	OPNAVINST 5513.1
Military Specification Technical Manuals General Style and Format Requirements.....	MIL-M-38784

Alphabetical Index

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Identifying Security Classification of Technical Manuals	3
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Safeguarding Classified Technical Manuals	3
Security Classification Changes	4
Supplements	2
Classified Supplements	2
Commercial Manual Supplements	2
Supplements to DOD Technical Manuals	2

Record of Applicable Technical Directives

None

1. SUPPLEMENTS.

a. A supplement is a subsidiary document that complements information in a manual.

b. It is prepared as specified in the basic contract or order and conforms in style and format to the requirements of the specifications used to prepare the basic manual.

c. CLASSIFIED SUPPLEMENTS.

(1) When classified information comprises 10 percent or less of the manual's contents and is concentrated in one area of the manual, the information is normally prepared as a classified supplement to the manual.

(2) Such action permits the basic manual to be issued at a lower classification or as an unclassified manual.

(3) The title pages of both the basic manual and the supplement contain a cross-reference note to each other.

(4) In the conventional numbering system, a classified supplement (either confidential or secret) is generally identified by a suffix letter, A, to the last numerical digit of the publication number. On the other hand, Technical Manual Identification Numbering System (TMINS) uses a "C" for confidential and an "S" for secret (WP 010 00).

d. SUPPLEMENTS TO DOD TECHNICAL MANUALS.

(1) Occasionally, elements of DOD make joint use of weapon systems or equipment. Under these circumstances the documents supporting the equipment are established for joint use. However, these manuals are normally prepared to the specifications and support concept of the executive or procuring service.

(2) The Navy, because of its unique shipboard operational environment, must employ maintenance concepts and support criteria peculiar to its shipboard requirements. As a result, its selection of maintenance actions, support equipment, and spare parts differ greatly from that of other services.

(3) To support unique Navy shipboard requirements, NAVAIR procures either a separate manual or a supplement to an existing manual.

(4) A supplement carries the same title and manual number as the basic document, plus one or more alphabetic or numeric suffixes and the word "supplement" printed at the top of the title page.

(5) The title pages of the basic and the supplement shall contain a cross-reference to each other.

e. COMMERCIAL MANUAL SUPPLEMENTS.

(1) When a commercial manual has been approved, but requires additional data to make it completely adequate, a supplement will be prepared.

(2) A supplement is prepared to provide additional instructions, definition of maintenance concept, illustrations, and parts list data including SM&R codes.

(3) A supplement shall be prepared in accordance with the technical manual general style and format requirements of military specification MIL-M-38784.

2. APPENDICES.

a. An appendix is used to include material in a manual that is not a part of the normal sequence of the manual, such as tables, charts, etc. Such added material becomes an integral part of the affected manual.

b. When required, appendices follow the last section of a manual. Each appendix is identified with a capital letter, i.e., "Appendix A".

c. Pages, paragraphs, illustrations, and tables for appendices are numbered in Arabic numerals, preceded by the capital letters of the appendix, i.e., A-10 is the tenth page or paragraph in Appendix A; figure B-10 is the tenth illustration in Appendix B; table C-10 is the tenth table in Appendix C.

d. Appendices will not appear in work package manuals.

3. SECURITY AND CLASSIFICATION REQUIREMENTS.

a. GENERAL.

(1) Department of the Navy Information Security Program Regulation SECNAVINST 5510.36 provides all Department of the Navy activities and personnel with regulations and guidance for classifying and safeguarding classified information.

(2) For Weapon System/Equipment/Component technical manuals, the applicable Navy security classification guidance (OPNAVINST 5513.1) and/or the Contract Security Classification Specification (DD Form 254) are the authority for classifying technical manuals. OPNAVINST 5513.1 and DD Form 254 are reviewed every 2 years and maintained current through coordination with NAVAIR Security (AIR-07T).

b. SAFEGUARDING CLASSIFIED TECHNICAL MANUALS.

(1) Storage, disposal, and handling of all classified technical manuals must conform to SECNAVINST 5510.36 regulations.

(2) The NAVAIR technical manuals described in this publication are prepared in accordance with classification categories for unclassified, confidential, secret, or top secret security requirements.

(3) Classified technical manuals are appropriately marked and identified and must be safeguarded in accordance with SECNAVINST 5510.36 regulations.

(4) SECNAVINST 5510.36 regulations also establish the basic policy that no person shall be granted access to classified information that is subject to investigation under the provisions of this regulation unless it is clearly consistent with the interests of national security.

c. IDENTIFYING SECURITY CLASSIFICATION OF TECHNICAL MANUALS.

(1) The security classification of each technical manual can be determined by viewing the technical data for that manual on the NATEC website at www.natec.navy.mil.

d. SECURITY CLASSIFICATION CHANGES.

(1) Changes in classification of technical manuals will be processed as rapidly as possible after such action is approved.

(2) These methods are used to accomplish technical manual classification change actions:

(a) Letter correspondence authorizing downgrading actions.

(b) Change or cancellation notices printed on title pages of technical manuals received.

(c) Electronic messages authorizing immediate classification actions.

(3) Receipt of change notices through these methods constitutes authority for all holders of

classified technical manuals to mark copies in accordance with the announced changes.

e. PROCESSING INSTRUCTIONS FOR THE DECLASSIFICATION OF TECHNICAL MANUALS.

(1) Users shall inform the cognizant Naval Air Technical Data and Engineering Service Command (NATEC) Logistics Element Manager (LEM) before taking local action to declassify technical manuals.

(2) The NATEC LEM will request the NAVAIR Security Office (AIR-07T) and/or the appropriate command to confirm the classification.

(3) Accordingly, the cognizant NATEC LEM will advise the user of the proper classification.

f. REPORTING UNSATISFACTORY SECURITY CLASSIFICATION OF TECHNICAL MANUALS.

(1) If any using activity has reason to believe that security considerations fail to fully support the classification assigned to a specific manual, or the assigned classification is no longer applicable (downgrading required), the using activity should bring this issue to the attention of the activity's Security Officer.

(2) The using activity should then submit a Technical Publications Deficiency Report (TPDR), in accordance with the requirements described in [WP 014 00](#).

g. QUESTIONS CONCERNING CLASSIFICATION OR SECURITY OF TECHNICAL MANUALS.

(1) Questions concerning classification or security of technical manuals shall be referred to the SECNAVINST 5510.36 regulations and the using activity's Security Officer for additional guidance.

(2) Questions concerning classification or security technical manuals can also be referred to:

Commanding Officer,
NAVAIRTECHDATAENGSERVCOM
Attn: Security Manager
P. O. Box 357031
San Diego, CA 92035-7031
Commercial (619) 545-2360
DSN 735-2360

NAVAL AERONAUTICAL PUBLICATIONS INDEX

NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM

Reference Material

NAVAIR Manual Deficiency Reporting Programs	WP 014 00
Technical Publications Requisitioning Procedures	WP 017 00
NATEC Technical Publications Library Program	WP 024 00
Equipment Applicability List	NAVAIR 00-500A
Airborne Weapons/Stores Publication Index	NAVAIR 01-700
Naval Logistics Library	NAVSUP PUB 600

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NAVAIR 01-700, Airborne Weapons/Stores Manuals/Checklists Publication Index	3
Naval Aeronautical Publications Index	2
NAVSUP P2003, Navy Stock List of Publications, Forms, and Directives	2

Record of Applicable Technical Directives

None

1. **NAVAL AERONAUTICAL PUBLICATIONS INDEX.** The Naval Aeronautical Publications Index (NAPI) consists of four distinct parts as follows:

a. The NAVSUP P2003 which is available at www.nll.navsup.navy.mil.

b. NAVAIR 00-500A, Equipment Applicability List is no longer available in paper. It is available on the NATEC internet website at www.natec.navy.mil.

c. Technical Directives Listings. Listings of technical directives previously available as the NAVAIR 00-500C series and NAVAIR 00-500SE are now available on the NALDA internet website at www.nalda.navy.mil under their Technical Directive Status Accounting (TDSA) section.

d. NAVAIR 01-700, Airborne Weapons/Stores Publication Index.

2. **NAVSUP P2003, NAVY STOCK LIST OF PUBLICATIONS, FORMS, AND DIRECTIVES.**

a. This is an index for all Navy technical manuals, forms, NAVAIR technical directives, and Navy departmental directives as stocked at the Defense Distribution Depot Susquehanna Pennsylvania, Mechanicsburg, PA (DDDSP).

b. This index is maintained based on information inputs provided by the individual systems commands.

c. It identifies what items are stocked and available for issue at DDDSP. This index should not be used to determine if a NAVAIR publication has been cancelled. Research to identify status of NAVAIR technical documentation should be directed to NATEC Research/Customer Services at helpdesk@navair.navy.mil.

d. NAVSUP P2003 is available on the NAVSUP website at www.nll.navsup.navy.mil.

3. **NAVAIR 00-500A, EQUIPMENT APPLICABILITY LIST.**

a. This index contains a detailed cross-reference of NAVAIR cognizant aircraft components and equipment to their associated publications.

b. This listing is arranged alphanumerically and sequenced by model, type, or part number.

c. The NAVAIR 00-500A is available on the NATEC Web Page www.natec.navy.mil.

d. This index will no longer be issued on microfiche or CD-ROM.

e. Errors identified in this index should be reported via the TPDR Program ([WP 014 00](#)).

4. **TECHNICAL DIRECTIVES STATUS ACCOUNTING (TDSA) LIST.**

a. The NAVAIR 00-500SE and NAVAIR 00-500C series manuals will no longer be issued. Technical directives listings are available via the NALDA website at www.nalda.navy.mil.

b. Technical Directives are controlled by two different types of codes, TD Code and abbreviation. The following is a listing of the Technical Directives in TD Code sequence. The listing is found in NA 00-25-100, titles Naval Air Systems Command Technical Directives System.

TD Code	Type of Directive	Abbreviation
01	Power Plant Bulletin	PPB
02	Power Plant Change	PPC
03	Quick Engine Change	QEC
04	Quick Engine Bulletin	QEB
05	Training Equipment Change	TEC

06	Training Equipment Bulletin	TEB
07	Reusable Container Change	RCC
08	Reusable Container Bulletin	RCB
40	Commodity Software Change	CSC
41	Commodity Software Bulletin	CSB
50	Airframe Change	AFC
51	Dynamic Component Change	DCC
52	Dynamic Component Bulletin	DCB
54	Avionics Change	AVC
55	Avionics Bulletin	AVB
56	Aviation Armament Change	AAC
57	Aviation Armament Bulletin	AAB
58	Accessory Bulletin	AYB
61	Accessory Change	AYC
62	Support Equipment Change	SEC
63	Support Equipment Bulletin	SEB
64	Propeller Change	PRC
65	Propeller Bulletin	PRB
66	Aircrew System Change	ACC
67	Aircrew System Bulletin	ACB
68	Photographic Change	PHC
69	Photographic Bulletin	PHB
73	Meteorological Equipment Change	MEC
74	Airframe Bulletin	AFB
75	Airborne Weapon Change	AWC
76	Airborne Weapon Bulletin	AWB
77	Target Control System Change	TCC
78	Target Control System Bulletin	TCB
79	Meteorological Equipment Bulletin	MEB
83	Ship-installed and Expeditionary Airfield Launch, Recovery, and Visual Landing Aid Equipment Change	LRC
84	Ship-installed and Expeditionary Airfield Launch, Recovery, and Visual Landing Aid Equipment Change	LRC
87	Mission Software Change	MSC
88	Mission Software Bulletin	MSB
91	Naval Air Maintenance Trainer Change	NTC
92	Naval Air Maintenance Trainer Bulletin	NTB
93	Airborne Software Change	ASC
94	Airborne Software Bulletin	ASB
95	Support Software Change	SSC
96	Support Software Bulletin	SSB
97	Naval Air Maintenance Trainer Support Software Change	TSC
98	Naval Air Maintenance Trainer Support Software Bulletin	TSB
99	Age Exploration Bulletin	AEB
--	Service Life Bulletin	SLB

5. NAVAIR 01-700 AIRBORNE WEAPONS/STORES MANUALS/CHECKLISTS PUBLICATION INDEX.

a. This index is designed to provide using activities with a guide to ensure that all existing changes/revisions have been incorporated in aircraft conventional weapon loading, release and control, AWSE, and weapon assembly/disassembly checklists and manuals on hand and that these publications are the most recent available.

b. The Naval Air Warfare Center Weapons Division, Code 331000D/PST 32080, China Lake, CA serves as an information clearing house for U.S. Navy activities on airborne weapons, stores, and related items. Questions, concerns, suggestions, comments, or data can be resolved by calling the Ordnance Technical Hotline at DSN 437-4478 or commercial (760) 939-4478.

c. This index is issued quarterly in January, April, July and October, by the Naval Air Warfare Center Weapons Division, China Lake, CA. The index is posted on the NATEC website (www.natec.navy.mil) and may be viewed/downloaded as desired.

d. One-time requests for this publication may be obtained from NAVICP Philadelphia through normal MILSTRIP requisitioning procedures ([WP 017 00](#)).

e. Automatic Distribution of this index is available through NAVAIR ADRL Program ([WP 024 00](#)).

f. Errors identified in this index should be submitted via the TPDR Program ([WP 014 00](#)).

TECHNICAL MANUAL NUMBERING SYSTEMS AND STOCK NUMBERING
NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM

Reference Material

Categories of NAVAIR Technical Manuals WP 003 00
Technical Publications Requisitioning Procedures WP 017 00
Stock Number Imprinting of Publications Stocked at the Naval Aviation Inventory Control Point
Forms and Publication Branch (NAVICP) NAVSUPINST 5600.25
Standard Technical Manual Identification Numbering Systems N0000-00-IDX-000/TMINS
Navy Standard Technical Manual Identification Numbering System NAVAIR 4160.1

Alphabetical Index

<u>Title</u>	<u>Page No</u>
Conventional Numbering System	2
General	2
Technical Manual Identification Numbering System (TMINS)	3
Construction	3
Use of Stock Numbers and Bar Codes on NAVAIR Technical Manual	3

Record of Applicable Technical Directives

None

1. GENERAL.

a. Code numbers are assigned to manuals for the purpose of identification. The numerical and alphabetical combination of a NAVAIR technical manual number identifies the basic equipment category, main groups within the category, specific item of equipment, type of usage, type or model designation and specific type of manual.

b. Code numbers are identified as the conventional numbering system and the Technical Manual Identification Numbering System (TMINS).

2. CONVENTIONAL NUMBERING SYSTEM.

a. The NAVAIR manual conventional numbering system consists of a prefix and combination of numbers and letters divided into three parts separated by dashes ([figure 1](#)).

b. Additional numbers may be added to designate multiple volumes of a manual.

c. The manual prefix, i.e., NAVAIR, identifies the command responsible for developing and maintaining the manual ([figure 2](#)).

d. The three parts which make up the remaining portions of the number are as follows:

(1) Part I of the publication number is a two digit number (in some cases, two digits and a letter) that designate the general subject classification or major category of the manual, i.e., 01 for airframes, 02 for power plants, 03 for accessories, etc. (refer to [WP 003 00](#)).

(2) Part II of the publication number consists of numbers and/or numbers and letters that identify either the basic aircraft model, manufacturer of specific aircraft and engine or the specific class, group, or subcategory of the manual, i.e., NAVAIR 01-F14AAA (Grumman), 01-75PAA (Lockheed Aeronautical Systems Company), 02B-10 (Pratt & Whitney) or NAVAIR 03-110 (Jet engine fuel system and related equipment) ([figure 3](#)).

(3) Part III of the publication number may or may not have identifiable numerical significance within the airframe, missile, and power plant series. The number usually identifies a particular type of manual, i.e., NAVAIR 01-XXXX-2 (-2 maintenance), NAVAIR 01-XXXXX-3 (-3 structural repair), NAVAIR 01-XXXXX-4 (-4 IPB), etc., ([figure 4](#)).

(a) Additional numbers may be added to indicate system grouping breakout by volume or subsystem grouping by sub-volume, i.e., NAVAIR 01-XXXX-2-2. The second -2 indicates the second volume of the maintenance series which is usually grouped by system. Periods in a manual number should only be used when a manual is volumized due to its size and requires more than one 3 inch binder to store it in.

(b) If the number assignment is NAVAIR 01-XXXX-2-2.3 (or 01-XXX-2-2-3), the .3 (or -3) indicates a sub-volume or sub-system within a grouping.

(c) This system does not hold true in all cases. In many technical manual number assignments, the suffix numbers are assigned in numerical sequence for identification only and have no significance as to the type of manual.

e. Manuals currently assigned a NAVAIR number will not be renumbered under the Technical Manual Identification Numbering System (TMINS). A dual system, conventional and TMINS will remain in effect indefinitely.

3. TECHNICAL MANUAL IDENTIFICATION NUMBERING SYSTEM (TMINS).

a. The TMINS is a numbering system developed in coordination with other Systems Commands. This change was in response to a Naval Material Command sponsored project for standardizing Technical Manual (TM) numbers and their method of assignment.

b. The numbering system was promulgated by N0000-00-IDX-000/TMINS.

c. The NAVAIR version of the TMINS was implemented by NATEC.

d. The intent of TMINS was to provide a single user oriented numbering and indexing system and to satisfy the requirements of the Naval Material Systems Command for identifying, referencing, and requisitioning TMs and their associated revisions/changes.

e. TMINS assigns each TM a unique identifying alphanumeric number patterned after the 13 digit stock number, i.e., 0000-LP-000-0000. The 13 character TMINS number serves as the TM identification number.

f. In addition to its identification number, TMINS contains a provision for adding a suffix, using a C, for confidential and an S, for secret.

g. TMINS numbers are not to be used for requisitioning purposes. Use stock numbers for requisitioning.

h. CONSTRUCTION.

(1) Most of the following information has been taken from NAVAIR Instruction 4160.1 and is provided herein to acquaint the reader with the basic philosophy of the TMINS system.

(2) TMINS is a 13 character alphanumeric technical manual code number (figure 5). The number is developed using Command, Commodity, Weapon System Designation, Subject Identifiers, Work Unit Codes, and acronyms

i. SAMPLE CODE DEFINITIONS BY DIGIT (figure 6). As an aid to understanding the numbering system, selected codes have been provided. Figure 6 is organized by digit position within the overall TMINS number and then some of the codes one would expect to find.

j. SAMPLE CONVENTIONAL/TMINS MANUAL NUMBER COMPARISONS (figure 7). A listing of TMINS as compared to conventional numbers is provided for information purposes only.

k. SAMPLE TMINS NUMBERS (figure 8). A sampling of TMINS manual numbers is provided for illustrative purposes.

4. USE OF STOCK NUMBERS AND BAR CODES ON NAVAIR TECHNICAL MANUALS.

a. NAVICP Philadelphia manages NAVAIR technical manual warehouse stock as items of supply. Use of stock numbers and bar codes is an integral part of the NAVICP Philadelphia supply operation.

b. By adding the stock number and bar code to the title page of each publication, the item manager at NAVICP Philadelphia can provide positive identification and timely instruction on where the stock should go. Also, issue accuracy is improved since the stock number and bar code can be matched to the issue documents that cite the stock numbers and bar codes.

c. In accordance with NAVSUPINST 5600.25, a stock number and bar code has appeared in the lower left corner on title pages of all NAVAIR technical manuals distributed after 1 August 1986. The stock number should be used on all requisitions for NAVAIR technical manuals as described in WP 017 00.

NAVAIR 02B-105AJB-4

NAVAIR 13-1-6.2.1

NAVAIR 16-30ARM156-2

NAVAIR 11-5-130

NAVAIR 16-45-1991

NAVAIR 01-H1AAB-2-12-2

NAVAIR 11-1-119

NAVAIR 19-5-31

NAVAIR 03-100-501

NAVAIR 01-15MGA-3-2

NAVAIR 17-1-125

NAVAIR 17-35MTL-1

NAVAIR 01-AIM9-2

NAVAIR 00-25-100

Figure 1. Examples of Conventional Numbering System Assignments

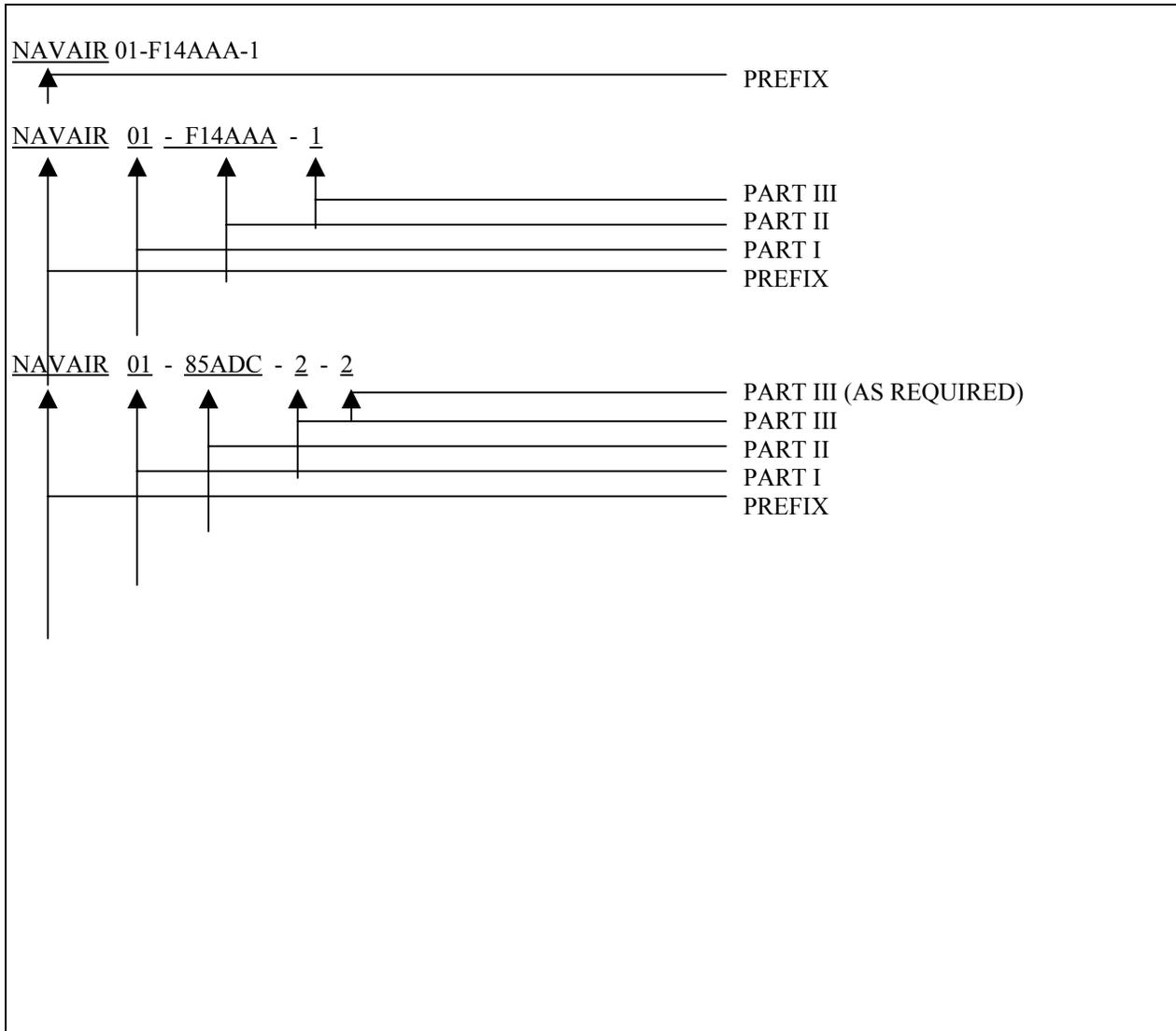


Figure 2. Conventional Number System Prefix and Part I/II/III Breakdown

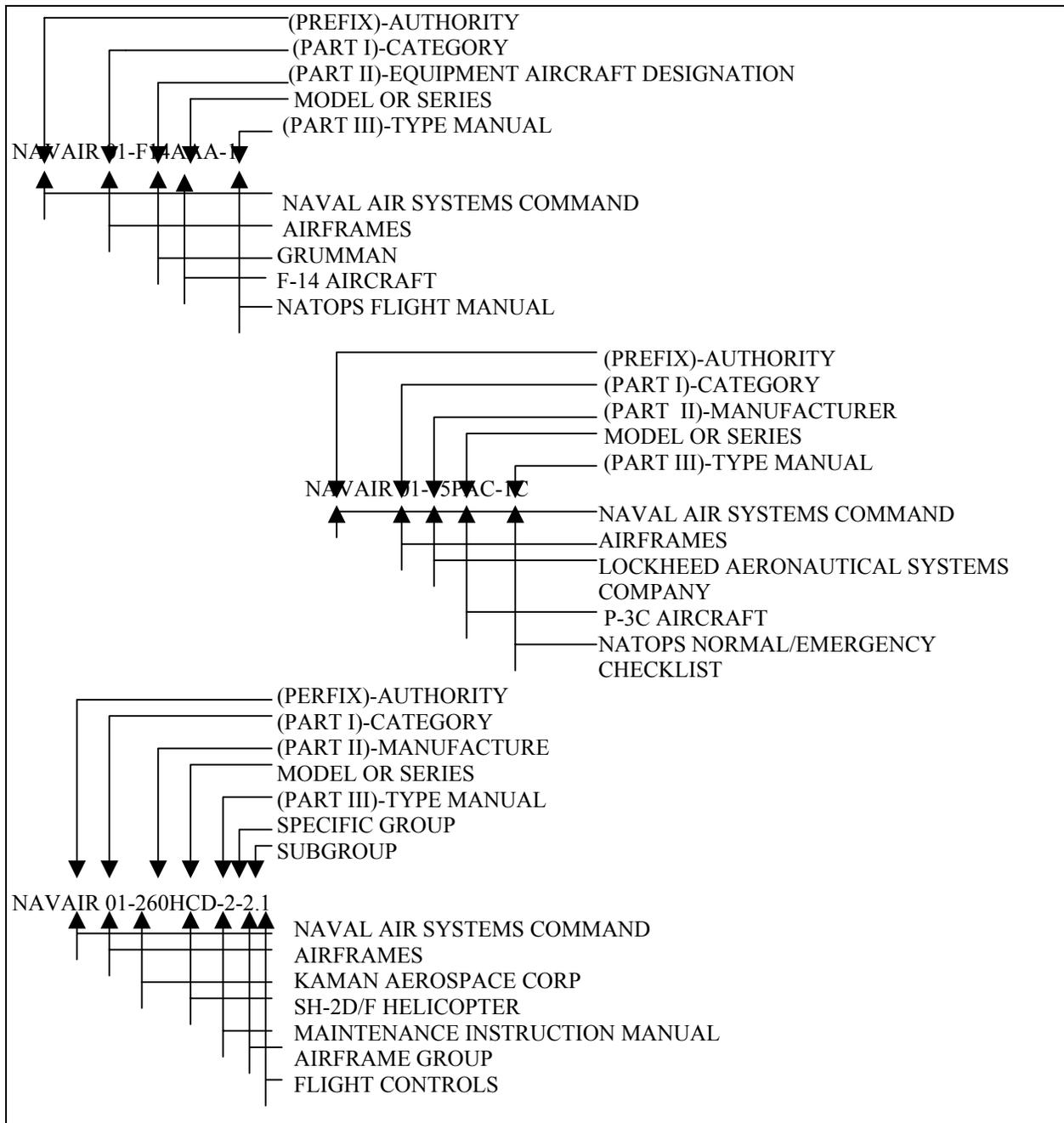


Figure 3. Detailed Description of Conventional Numbering System
 (Sheet 1 of 2)

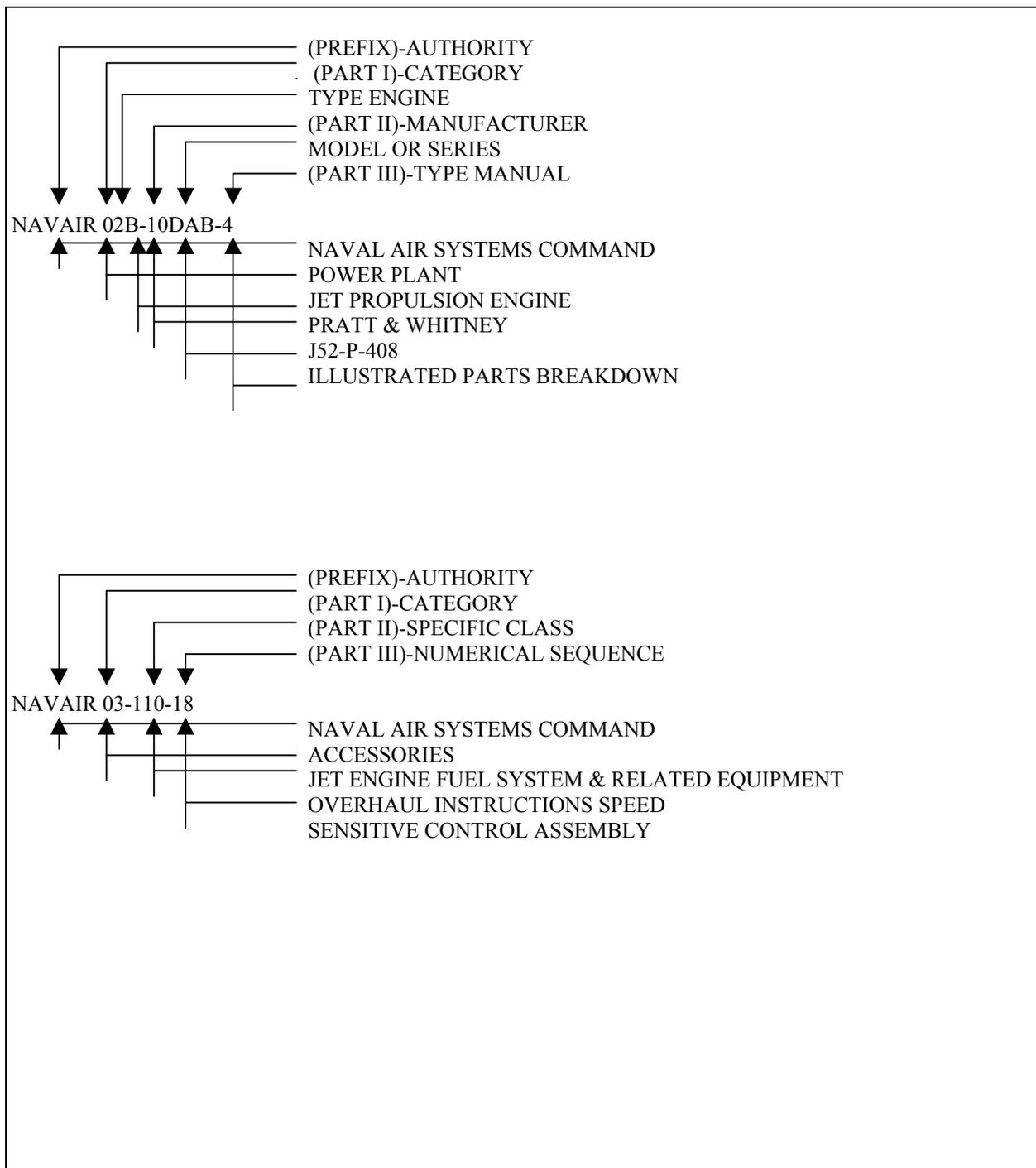


Figure 3. Detailed Description of Conventional Numbering System (Sheet 2 of 2)

NAVAIR 01-XXXXX-0 (Technical Documentation List)
NAVAIR 01-XXXXX-1 (NATOPS Flight Manual)
NAVAIR 01-XXXXX-2 (Maintenance Instruction Manual)
NAVAIR 01-XXXXX-3 (Structural Repair Manual)
NAVAIR 01-XXXXX-4 (Illustrated Parts Breakdown)
NAVAIR 01-XXXXX-6 (Periodic Maintenance Information Cards)
NAVAIR 01-XXXXX-6-1 (Turnaround Checklist)
NAVAIR 01-XXXXX-6-2 (Daily/Servicing Maintenance Requirements Cards)
NAVAIR 01-XXXXX-6-3 (Special/Preservation/Conditional/ ASPA Maintenance Requirements Cards)
NAVAIR 01-XXXXX-6-4 (Phased Maintenance Requirements Cards)
NAVAIR 01-XXXXX-8 (Work Unit Code Manual)
NAVAIR 01-XXXXX-12 (Crew Station/In-Flight Maintenance Manual)
NAVAIR 01-XXXXX-75 (Airborne Weapons/Stores Loading Manual)

Figure 4. Types of Part III of Conventional Numbering System Technical Manuals

D I G I T	1	2	3-5	6-7	8-10	11	-	12	13	14
	COGNIZANT COMMAND	AIRCRAFT AVIATION	EQUIPMENT AIRCRAFT DESIGNATION	SUBJECT SERIAL	TYPE MANUAL	TECHNICAL MANUAL VOLUME WITHIN A SERIES	VOLUME WITHIN A VOLUME	NON-SIGNIFICANT CODE, ALWAYS ZERO (0)	SUFFIX CLASSIFICATION INDICATOR	
I D E N T I F I E S										
S A M P L E	A	1	F18	AA	SRM	3	1	0	C	

Figure 5. TMINS Construction

<u>DIGIT</u>	<u>CODE</u>	<u>DEFINITION</u>
1	A	Naval Air Systems Command
	M	Naval Material Command
	E	Space and Naval Warfare Systems Command (formerly Naval Electronic Systems Command)
	S	Naval Sea Systems Command
2	D	Deck/Hangar Equipment
	E	Electrical/Electronic Equipment
	I	Aviation/Aircraft
	G	Support Equipment
	M	Meteorological Equipment
	N	Instruments
	P	Photographic
S	Safety/Survival	
3-5	F18	Aircraft Designation (F18, S3, F14, etc.)
		or
	200	Equipment Code (200-Catapults, etc.)
		or
	172	Equipment Code (172-TACAN, etc.)
6-7		Subject serial to differentiate items of a given category but different configuration
8-10	GAI	General Aircraft Information
	SRM	Structural Repair Manual
	TIM	Testing and Troubleshooting Manual
11-12	00	Volume I
	01	Volume II
	02	Volume III
		or
	01	Volume I
	02	Volume II
03	Volume III	
13	0	Non-significant code, Always zero (0)
14	C	Confidential
	S	Secret
	T	Top Secret

Figure 6. Sample TMINS Code Definitions by Digit

<u>CONVENTIONAL TM NUMBER</u>	<u>TMINS NUMBER</u>
<u>01 SERIES (AIRCRAFT)</u>	
01-AV8B	A1-AV8-TAC-000 (tactical)
01-F18	A1-F18-NFM-000 (NATOPS)
01-H53	A1-H53-MRC-100 (MRC)
01-H60	A1-H60-WSI-000 (Weapon System Information)
<u>02 SERIES (ENGINES)</u>	
02-1	A1-700
02A	A1-710
02B	A1-720
02B-105	A1-T700/A1-F404
<u>03 SERIES (ACCESSORIES)</u>	
03-1 General	A1-400
03-5 Electrical Equipment	A1-210
03-10 Fuel System	A1-470
03-15 Oil Systems	A1-750
03-20 Propellers and Accessories Equipment	A1-800
03-25 Wheels, Brakes, Struts, and Related Equipment	A1-420
03-30 Air and Hydraulic Equipment	A1-440
03-35 Ice Eliminating Equipment	A1-450
03-40 Control Units	A1-650
03-45 Fire Extinguishers and Related Equipment	A1-610
03-50 Oxygen Equipment	A1-460
03-55 Carbon Dioxide Fire Extinguisher Inflation	A1-600
03-60 Purging Equipment	A1-620
03-65 Pickup Equipment	A1-400
03-70 Heaters and Related Equipment	A1-640
03-75 Temperature Control Systems and Related Equipment	A1-650
03-80 Cabin Pressurizing Equipment	A1-460
03-85 Afterburners and Related Equipment	A1-790
03-90 Loading Equipment	A1-480
03-95 Helicopter Rotor and Related Equipment	A1-810
03-100 In-flight Refueling Equipment	A1-470
03-105 Turbine Starters	A1-725
03-110 Jet Engine Fuel Systems and Related Equipment	A1-760
03-600 Accessories Series Maintenance Requirements Cards (Preoperational Checklist)	A1-640XX-MRC-XX-6-1
03-600 Accessories Series Maintenance Requirements Cards (Periodic Maintenance Requirements Manual)	A1-640XX-MRC-XX-6-2

**Figure 7. Sample Conventional/TMINS Number Comparisons
(Sheet 1 of 4)**

<u>CONVENTIONAL TM NUMBER</u>	<u>TMINS NUMBER</u>
<u>05 SERIES (INSTRUMENTS)</u>	
05-01 General	AN-000
05-5 Tachometers	AN-524
05-10 Airspeed Indicators	AN-120
05-15 Aircraft Compasses	AN-410
05-20 Flight Instruments	AN-100
05-25 Drift Meters	AN-800
05-30 Altimeters	AN-110
05-35 Navigation Equipment	AN-400
05-40 Thermometers	AN-512
05-45 Automatic Pilots, Stabilization Systems, and Related Equipment	AN-300
05-50 Pitot-static and Power Venturi Tubes	AN-680
05-55 Self-synchronous Instruments	AN-370
05-60 Electric Circuit Instruments	AN-700
05-65 Fuel Flow Meters and Content Gages	AN-610
05-70 Pressure, Systems, Gages, Indicators, and Transmitters	AN-560
05-75 Engine Gage Units	AN-511
05-80 Suction Gages	AN-900
05-85 Ignition and Engine Analyzers	AG-501
05-90 Signal Assemblies	AN-500
05-95 Test Equipment	AG-500
05-105 Test Equipment	AG-600
<u>06 SERIES (FUELS, LUBRICANTS, AND GASES)</u>	
	AG-340
	AG-330
<u>07 SERIES (DOPES AND PAINTS [also see 15 Series])</u>	AG-365
<u>10 SERIES (PHOTOGRAPHY)</u>	
10-1 General	AP-000
10-10 Camera Equipment	AP-100
10-20 Projection Equipment	AP-300
10-25 Photo Lab Equipment	AP-200
10-30 Interpretation Equipment	AP-410
10-35 Photographic Keys	AP-400
10-50 Photo Test Equipment	AP-270
<u>11 SERIES (AVIATION ARMAMENT/ORDNANCE AND ACCESSORIES)</u>	
11-1 General	AW-000
11-5 Bombs, Depth Charges, and Accessories	AW-382
11-10 Gun Mounts and Gun Accessories	AW-380
11-15 Pyrotechnics and Accessories	AW-052
11-30 Dispensers	AW-390

**Figure 7. Sample Conventional/TMINS Number Comparisons
(Sheet 2 of 4)**

<u>CONVENTIONAL TM NUMBER</u>	<u>TMINS NUMBER</u>
11-45 Gun Turrets, Components, and Accessories	AW-300
11-55 Tow Targets and Accessories	AW-141
11-60 Automatic Flight Control Equipment	AW-235
11-70 Armament Control Systems, Components, and Accessories	AW-240
11-75 Missiles and Related Accessories	AW-800
11-80 Mines, Mine Sweeping, and Accessories	AW-550
11-85 Rockets and Accessories	AW-040
11-95 Guns, Gunpods, and Accessories	AW-380
11-265 Production Line Maintenance	AW-240-MMI
11-600 Aviation Armament Series Maintenance Requirements Cards	AW-800-MRC
11N Armament, Nuclear	AW-080
13 SERIES (PARACHUTE AND PERSONAL SURVIVAL EQUIPMENT)	AS-000
15 SERIES (STANDARD PRESERATION AND PACKAGING INSTRUCTIONS)	
15-01 Aircraft and Airframes	A1-F18-PPI
15-02 Aircraft Engines	A1-F40-PPI
15-03 Accessories	A1-650-PPI
15-05 Instruments	AN-524-PPI
15-16 Electronics	AE-450-PPI
16 SERIES (ELECTRONICS)	
16-1 General	AE-000
16-50 Test Equipment Automatic and Semi-automatic Electronic Checkout Equipment	AE-190/AE-398
16-80 Test Set Cards/Overlays and Punched Cards	AE-190-TSC
16-300 Certification Procedures (Security Equipment)	AE-180-ECI
16-600 Electronics Series Maintenance Requirements Cards (Preoperational Checklist)	AE-170XX-MRC
16-600 Electronics Series Maintenance Requirements Cards (Periodic Maintenance Requirements Manual)	AE-170XX-MRC
17 SERIES (MACHINERY, TOOLS, AND TEST EQUIPMENT)	
17-1 Shop and Warehouse Machinery, Tools, and Equipment General	AG-200
17-5 Shop and Warehouse Machinery, Powered Tools, and Equipment	AG-400
17-15 Inspection Test Equipment	AG-600
17-20 Instrument Calibration Procedures	
17-35 Metrology and Calibration	
17-600 Support Equipment Maintenance Requirements Cards	AG-200XX-MRC
XX-6-1 (Preoperational Checklist)	
17-600 Support Equipment Maintenance Requirements Cards	AG-200XX-MRC
XX-6-2 (Periodic Maintenance Requirements Manual)	

**Figure 7. Sample Conventional/TMINS Number Comparisons
(Sheet 3 of 4)**

CONVENTIONAL TM NUMBER	TMINS NUMBER
19 SERIES (SERVICING AND MOBILE EQUIPMENT)	
19-1 General	AG-000
19-5 Oxygen Equipment	AG-100
19-10 Airfield Lighting Equipment	AG-260
19-15 Platform and Scaffolds	AG-220
19-20 Portable Shop Equipment	AG-200
19-25 Fire Truck, Miscellaneous Trucks, and Trailers	AG-200
19-30 Field Starters (Mobile)	AG-320
19-35 Air Compressor (Other Than Power Plant)	GS-210
19-40 Tractors and Aircraft Towing	AG-305
19-45 Mobile Electric Power Plants	AG-320
19-50 Generators for Other Than Power Plants	AG-110
19-60 Portable Heaters and Coolers	AG-160
19-70 Airplane Hydraulic Jacks	AG-250
19-75 Generator, Skid or Trailer Mounted (Gas/Nitrogen)	AG-750
19-80 Motorized Material Handling Equipment	AG-300
19-95 Transporting and Loading Equipment Configuration	AG-800
19-100 Handling Equipment	AG-810
19-105 Gas Turbine Compressors and/or Power Units and Enclosures	AG-850
19-110A Blower – Gasoline Driven	AG-900
19-600- Support Equipment Maintenance Requirements Cards	AG-850XX-MRC
XX-6-1 (Preoperational Checklist)	
19-600- Support Equipment Maintenance Requirements Cards	AG-850XX-MRC
XX-6-2 (Periodic Maintenance Requirements Manual)	
28 SERIES (INSTRUCTIONAL EQUIPMENT, TRAINING AIDS, AND SONOBUOYS)	
	A8-300
50 SERIES (METEOROLOGY DCNO [AIR])	
	AM-000
50-1 Test and Reference Material, Climatological Information, Directive Material, General Information, Techniques, and Procedures	AM-005
50-30 Meteorological and Aerological Weather Equipment	AM-400
51 SERIES (SHIP INSTALLATIONS)	
51-5 Arresting and Barrier Gear	AD-100
51-25 Catapult Support Gear	AD-200
51-35 Homing Devices and Beacons	AE-175
51-40 Landing/Lighting Systems	AD-600
51-50 Visual Landing Aids	AD-400

**Figure 7. Sample Conventional/TMINS Number Comparisons
(Sheet 4 of 4)**

AG-850DA-BIB-000

AG-720A0-S15-000

AT-824M0-MIB-000

AG-670BA-OMP-000

A1-216LA-420-000

AG-220AO-MIB-000

AL-855TM-GYD-000

Figure 8. Sample TMINS Numbers

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HOW TO USE THE NAVAIR TECHNICAL MANUAL

NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM

Reference Material

Equipment Applicability List NAVAIR 00-500A

Alphabetical Index

<u>Title</u>	<u>Page No</u>
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Single Manual	2
Volumized Series	2
Introduction	2
Locating the Proper Technical Manual	2
Use of the Introduction and Index	3
Work Package Format	2
Single Manual	3
Volumized Series	2

Record of Applicable Technical Directives

None

1. INTRODUCTION.

a. This Work Package (WP) was developed to assist the user of NAVAIR technical manuals in understanding the organization of the manuals and how access to information has been enhanced.

b. For purposes of this WP, the technical manuals will be addressed as conventional format and WP format.

2. LOCATING THE PROPER TECHNICAL MANUAL.

a. The Naval Aeronautical Publications Index Equipment Applicability List (NAVAIR 00-500A) is a master listing of equipment part, model, or other designation numbers with reference to the associated technical manual number.

b. To locate the required NAVAIR technical manual, the user should be knowledgeable in the use of NAVAIR 00-500A. In all cases, the user must know the Part Number, Model, or Designation of the equipment before attempting to use the NAVAIR 00-500A. This index cross-references a part number to a publication.

3. CONVENTIONAL FORMAT.**a. VOLUMIZED SERIES.**

(1) In the first manual of a volumized series, normally there is a list of the manuals that make up the series. The user selects the manual title that most closely describes the equipment/system required.

(2) Upon selection of the manual, turn to the Table of Contents or Index and locate the required maintenance function. The location of the needed function will be referenced in the tabular data.

(3) Turn to the referenced section, page, or paragraph and locate the information.

(4) For an explanation of the use of the Illustrated Parts Breakdown (IPB), refer to the "Introduction to the Illustrated Parts Breakdown" paragraph in the Introduction section (or chapter) of the manual in which the IPB is located.

b. SINGLE MANUAL.

(1) Turn to the Table of Contents or Index, find the required maintenance action, and note the reference to a section, page, or paragraph.

(2) Turn to the referenced section, page, or paragraph and locate the information.

(3) For an explanation of the use of the IPB, refer to the "Introduction to the Illustrated Parts Breakdown" paragraph in the Introduction section (or chapter) of the manual in which the IPB is located.

4. WORK PACKAGE FORMAT.**a. VOLUMIZED SERIES.**

(1) In volumes with unique subject matter, each volume is essentially an independent manual and shall contain its own list of effective work packages. When the manual has been volumized because of bulk, the first volume contains a complete list of all the work packages in the series. In the second and subsequent volumes, only those work packages included in each volume are identified in that volume. The title page of each volume contains a statement that the applicable volume is incomplete without the other volume(s) of the set.

(2) In the Introduction WP of the first manual in the series, there is a list of the manuals that make up the series. The user selects the manual title that most closely describes the equipment/system.

(3) In the selected manual, turn to the Alphabetical Index (WP 001 00) and locate the title

describing the information required.

(4) Turn to the referenced WP and locate the title describing the information required on the WP title page under "Alphabetical Index".

(5) Turn to the referenced page and locate the information required.

(6) For an explanation of the use of the IPB, refer to the "Introduction to the Illustrated Parts Breakdown" paragraph in the Introduction (WP 002 00) of the manual in which the IPB is located.

b. SINGLE MANUAL.

(1) Turn to the Alphabetical Index and locate the title describing the information required. ■

(2) Turn to the referenced WP and locate the information required on the WP title page under "Alphabetical Index".

(3) Turn to the referenced page and locate the information required.

(4) For an explanation of the use of the IPB, refer to the "Introduction to the Illustrated Parts Breakdown" paragraph.

5. USE OF THE INTRODUCTION AND INDEX.

a. A properly developed manual will explain the use of the manual in the introduction.

b. The most important contribution to research in a technical manual is knowledge of the use of the index. Extensive indexing has been provided to improve access to the technical content and the more the indexes are used, the easier the job will be.

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INTERSERVICE EXCHANGE OF TECHNICAL DATA

NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM

Reference Material

Technical Publications Requisitioning Procedures WP 017 00
Air Force Technical Order TO 00-5-2
Joint Interest List of Technical Manuals NAVAIR 00-25-566
Interservicing of Technical Manuals and Related Technology OPNAVINST 5600.22

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Single Point Contact	2
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Record of Applicable Technical Directives

None

1. GENERAL.

a. The policies and agreements for assuring maximum exchange of Technical Manuals (TMs) and associated information on common use equipment by the military services and the Defense Logistics Agency are covered in OPNAVINST 5600.22.

(1) Joint Interest List (JIL) of Technical Manuals, NAVAIR 00-25-566, contains a list of TMs that have common service application. These TMs are identified as:

(2) Jointly used by two or more DOD components and each component has assigned its own TM number or,

(3) Wherein one component is providing direct distribution support to one or more of the other DOD components.

(4) The JIL is divided into five sections as follows: Army, Navy, Air Force, Marine Corps, and Defense Logistics Agency.

(5) Distribution of the JIL is not made to all activities. Activities requiring initial issue and automatic distribution of the JIL must submit their requirements by forwarding a letter of request with justification to the Commanding Officer, NATEC, P.O. Box 357031, San Diego, CA 92135-7031 (619) 545-2357, DSN 735-2357.

2. EXPLANATION OF TERMS USED IN OPNAVINST 5600.22.

a. **COMPONENT.** Military service or agency including Army, Air Force, Navy, Marine Corps, and Defense Logistics Agency.

b. **JOINT INTEREST LIST**

(1) The JIL provides status of all joint interest TMs or Technical Orders (TOs).

(2) The JIL is maintained by the Naval Air Technical Data and Engineering Services Command (NATEC), based on inputs provided by all components.

c. **CONTINUING, FOLLOW-ON, OR BULK REQUIREMENTS.** A continuing need for any TM or TO listed in OPNAVINST 5600.22, i.e., automatic distribution of future changes.

d. **REASONABLE QUANTITY.**

(1) Any quantity up to, but usually agreed upon as, no more than 10 copies of a TM or TO per component request.

(2) If the requirement exceeds these limits, it must be submitted as a "bulk requirement", with chargeable printing funds identified.

e. **SINGLE POINT CONTACT.** The designated activity within each component, which is the contact for other components on all matters dealing with joint use TMs or TOs. The Single Point of Contact for NAVAIR publications is NATEC. Other Single Point Contacts are listed in [figure 1](#).

3. EXCHANGE OF TECHNICAL MANUALS.

a. The exchange of TMs is predicated on "reasonable quantity" requirements and is made on a no cost basis. This exchange requisitioning arrangement applies when one DOD element requires a technical manual sponsored by another DOD element, i.e., a Navy unit requesting up to 25 copies of an Air Force TO. Detailed procedures are identified in OPNAVINST 5600.22.

b. NAVY TECHNICAL MANUALS.

(1) Submit these requirements in accordance with the technical publications ordering procedures in [WP 017 00](#) to the Commanding Officer, Naval Inventory Control Point, Philadelphia (NAVICP-Philadelphia), Code 03334, 700 Robbins Avenue, Philadelphia, PA 19111-5098.

c. AIR FORCE TECHNICAL ORDERS.

(1) One-time requisitions, not to exceed a quantity of 25 copies each, for Air Force TOs can be submitted by letter to OC-ALC/TILUB, 7851 Arnold Street (Suite 201), Tinker AFB, OK 73145-9147, DSN 336-3637/3604/3868/3680, Commercial (405) 736-3637/3604/3868/3680, FAX DSN 336-7469/7734, Commercial (405) 736-7469/7734. The letter must include the TO number, quantity, justification, point of contact, and DSN number. Air Force Technical Orders are available on the Wright Patterson Air Force Base website at www.pdsm.wpafb.af.mil.

(2) Activities that require follow-on support for revisions, changes, and supplements to Air Force TOs may request a Technical Order Distribution Office (TODO) code by submitting a letter of justification to OC-ALC/TILUB.

(a) The Air Force restricts TODO code assignments and, when practical, prefers assigning one code to each installation, i.e., air station. When a TODO code has been assigned to an installation, the departments, e.g., AIMD, or divisions located at the installation shall establish themselves as a sub-account to the assigned "Base TODO". Contact OC-ALC/TILUB to verify whether a "Base TODO" has been established.

(b) Separate entities such as deployable squadrons, wings, or groups may also be assigned a TODO code when it is not operationally practical for them to be sub-accounts of the "Base TODO".

(c) Once a TODO code has been assigned, requisitioning procedures will be established by the Air Force office in charge of the publications. Assistance in requisitioning publications can be obtained from OC-ALC/TILUB, Tinker AFB, OK, DSN 336-3637/3604/3868/3680, Commercial (405) 736-3637/3604/3868/3680, FAX DSN 336-7469/7734, Commercial (405) 736-7469/7734.

d. MARINE CORPS TECHNICAL MANUALS.

(1) Non-Marine Corps activities should submit requirements by letter or request to the Commandant of the Marine Corps (ARDE), Headquarters, USMC, 2 Navy Annex, Room 1306, Washington, DC 20380-1775, DSN 224-3075/3552, Ext 164, Commercial (703) 614-3075/3552, FAX DSN 224-1463.

e. ARMY TECHNICAL MANUALS.

(1) Activities not desiring or required to establish an account for Army manuals may request a one-time issue of TMs on organizational letterhead or DD Form 1149. Submit the letter stating "One-Time", publication titles or numbers, quantities, and justification to the address below. Be sure to include a P.O.C. and telephone number in the request. Customer service P.O.C. DSN 693-7305, ext. 266/268. The letter or form may be sent via fax to DSN 693-7395. Army technical manuals are available on the Army website at www.logsa.army.mil.

Department of the Army
Distribution Operations Facility
Attn: Customer Services
1655 Woodson Road
St Louis, MO 63114-6128

(2) Navy activities requiring an Army Publications Account must complete DA Form 12-R to establish the account and forward it to the following address for approval: Commanding Officer, Naval Inventory Control Point, Code 03334, 700 Robbins Avenue, Philadelphia, PA 19111-5098.

(3) The DA Form 12-R may be downloaded from the Army website below. After establishing the account the activity may access the Army Publications and Forms Ordering and Subscription System on the Internet at <http://www.usapa.army.mil>.

(4) The instructions on the website will enable the user to view or download Army publications or contact the Customer Service to assist in preparing the DA Form 12-99-R to show the publication and quantity requirements.

(5) If an immediate issue of publications is desired, submit these on DA Form 4569. This is also an electronic form to be completed on the website.

(6) A guide, Army Pamphlet 25-33, User's Guide for Army Publications and Forms, is available and may be downloaded from the website, <http://books.army.mil>.

(7) Requests for other than an unclassified account must be justified in writing via letter through the requesting activity's chain of command.

f. DEFENSE LOGISTICS AGENCY TECHNICAL MANUALS.

(1) Submit a letter to the Publications Requirements Manager of the nearest Defense Logistics Agency Field Activity listed in OPNAVINST 5600.22.

4. CONTINUING, FOLLOW-ON, OR BULK REQUIREMENTS FOR OTHER COMPONENT TMS OR TOS.

a. Activities with continuing, follow-on, or bulk requirements for TMs or TOs from another component which exceed "reasonable quantity" (refer to paragraph 2.d.) shall submit a letter of request, with justification to their intraservice component control office. For Department of the Navy activities this is:

Commanding Officer
Code 03334
NAVICP Philadelphia
700 Robbins Ave
Philadelphia, PA
19111-5098

b. The intraservice component control office will review and forward the request to the required TMs or TOs component manager's control office. The component manager's control offices are listed in OPNAVINST 5600.22.

<p>Sponsoring Activity of Publication requested: Department of the Army</p>	<p>Submit request (with justification) to Service/Agency Control Office at this address: Commander U.S Army Publications Distribution Center St. Louis Attn: SAIS-PRS 1655 Woodson St. Louis, MO 63114-6181 DSN: 693-7300 Commercial: (314) 263-7300</p>
<p>*Department of the Navy (NAVAIR publications controlled by NATEC only)</p>	<p>Commanding Officer Naval Air Technical Data and Engineering Service Command P.O. Box 357031 NAS North Island San Diego, CA 92135-7031 DSN 735-2357, Commercial (619) 545-2357 FAX DSN 735-1883, Commercial (619) 545-1883</p>
<p>**Dept of the Air Force</p>	<p>OC-ALC/TILUB 7851 Second Street, Suite 201 Tinker AFB, OD 73145-9147 DSN 336-3637/3604/3868/3680 Commercial (405) 736-3637/3604/3868/3680</p>
<p>U.S. Marine Corps</p>	<p>Commandant of the Marine Corps (ARDE) Headquarters, USMC 2 Navy Annex, Room 1306 Washington, DC 20380-1775 DSN 224-3075/3552, Commercial (703) 614-3075/3552 FAX DSN 224-1463, Commercial (703) 614-1463</p>
<p>Defense Logistics Agency</p>	<p>Director Defense Logistics Agency (DASC-P) 8725 John J. Kingman Road Ft. Belvoir, VA 22060-6221</p>
<p>*a. NAVAIR TM REQUIREMENTS. Automatic distribution of NAVAIR TMs is available through NAVAIR Automatic Distribution Requirements List Program.</p>	
<p>**b. Instructions on Air Force T.O. system. Automatic Distribution of Air Force TODO/Technical Order Publications Requirements shall be submitted on AFTO Form 187.</p>	
<p>(1) If the activity does not have a Technical Order Distribution Office Code (account number), an AFTO Form 43 must be filled out in duplicate and submitted.</p>	
<p>(2) Detailed instructions on how to obtain Air Force Technical Orders, including how to use the forms, are covered in Air Force T.O. 00-5-2. To obtain a copy of T.O. 00-5-2, a letter of request for a one time requirement only must be sent to: Technical Order Distribution System, OC-ALC/TILUB, 7851 Second street, Suite 201, Tinker AFB, OD 73145-9147.</p>	

Figure 1. Single Point Contacts for Automatic Distribution and/or Bulk Publications Requirements

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TECHNICAL MANUAL QUALITY ASSURANCE PROGRAM

NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM

Reference Material

NAVAIR Manual Deficiency Reporting Programs	WP 014 00
Technical Manual Quality Assurance Program Guide	AL-855TM-GYD-000
Naval Aviation Maintenance Program (NAMP)	OPNAVINST 4790.2
Naval Ordnance Maintenance Management Program (NOMMP).....	OPNAVINST 8000.16
NAVY Technical Manual Program.....	NAVAIRINST 4160.2
Policy and Responsibilities for the Naval Air Systems Command Technical Manual Program.....	NAVAIRINST 5600.20
Policies and Responsibilities for Management and Coordination of the NAVAIR Technical Manual Quality Assurance Program.....	NAVAIRINST 5600.9

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Record of Applicable Technical Directives

None

1. NAVAIR TECHNICAL MANUAL PROGRAM (Quality Assurance).**a. GENERAL.**

(1) Management Requirements. NAVAIR has established a centralized management program for the acquisition and maintenance of TMs. The acquisition and maintenance of all technical manuals (TMs) must be effectively managed through the life cycle of the system/equipment that the TMs support. (Refer to NAVAIRINST 4160.2)

(2) Technical Manual Management Agency (TMMA) (Refer to NAVAIRINST 5600.9).

(a) NATEC is the NAVAIR designated Technical Manual Management Agency (TMMA) responsible for implementing TM policy and managing and coordinating the NAVAIR TM program.

(b) Primary management responsibilities for TMs are vested in the NATEC Technical Data Logistics Element Management Department.

b. QUALITY ASSURANCE PROGRAM (Refer to NAVAIRINST 5600.20).**(1) General.**

(a) A continuing technical manual quality assurance program must be maintained to assure the adequacy, accuracy, and usability of technical documentation.

(b) To further enhance this effort, NAVAIRSYSCOMHQ authorized the establishment and implementation of a Quality Assurance (QA) division within the Naval Air Technical Data and Engineering Service Command (NATEC) organization to manage QA functions.

(c) The Technical Manual Quality Assurance functions have been delegated to Naval Air Technical Data and Engineering Service Command (NATEC) QUALITY ASSURANCE DIVISION ATLANTIC, code 3.3.1.4.

(d) The QUALITY ASSURANCE DIVISION ATLANTIC may be contacted at the following address or by calling the appropriate telephone number.

NATEC QUALITY ASSURANCE DIVISION ATLANTIC

Attn: Code 3.3.1.4

1683 Pocahontas St., Ste. 300

Norfolk, Virginia 23511-2999

Message address: NATEC QA DIVLANT// 3.3.1.4//

DSN 564-7475, Commercial (757) 444-7475

Fax DSN 565-2817, Commercial (757) 445-2817

(2) Quality Assurance Division Responsibilities. Quality Assurance in documentation is attained through a uniform program of:

(a) Monitor and provide guidance on the Contractor's Quality Assurance Program: Refer to AL-855TM-GYD-000 (WP004 00 and WP006 00) for details.

1 Conduct Quality Assurance Program Planning Conference, as required.

2 Review/approve contractor's Quality Assurance Program Plan (QAPP).

3 Conduct Quality Program Reviews (QPR).

4 Review/Approve Technical Manual Validation Plans.

5 Review/Approve Technical Manual Verification Plans.

(b) Conduct Technical Manual Initial Guidance Conferences, as required.

(c) Conduct Technical Manual Outline Reviews.

(d) Conduct joint government and contractor In-Process Reviews (IPRs):

1 Task Development In-Process Reviews.

2 Preparation Cycle In-Process Reviews.

3 Final (Pre-Publication) In-Process Reviews.

(e) Monitor Contractor (User Site) Validation, as required.

(f) Conduct Verification.

(g) Fleet use (User comments).

(h) Provide Direct support to the NATEC LEMs or others (PMAs, APMLs, NADEPs, Type Commanders, contractors or TM users), upon request. e.g.:

1 Attend ILSMTs or other logistics support meetings (Integrated Product Teams (IPTs), Technical Interchange Meetings (TIMs), etc.);

2 Attend Technical Manual Management Team (TMMT) meetings.

(i) Special Reviews, as required:

1 Technical Manual Acceptability Reviews. Technical Manual Acceptability Reviews are used to review existing manuals to determine if they are acceptable for use by NAVAIR users.

a Commercial Manuals.

b Non-NAVAIR (other Government) approved Technical Manuals.

2 Adequacy Reviews.

a Normally conducted concurrent with an IPRs, Verification and as part of a Technical Manual Acceptability Review.

b Conducted when complete logistics support data was not available for the IPR, Verification, or Technical Manual Acceptability Reviews.

3 Fleet Reviews are used to identify the specific Technical Manual problems for correction.

4 Technical Manual Specification Reviews. Review Technical Manual Specifications, recommended changes, deviations (limited/standard) reviews, etc.

(3) Detailed instructions on the Quality Assurance Program are contained in AL-855TM-GYD-000. (Refer to Figure 1 for overview of the Technical Manual Program).

c. TECHNICAL PUBLICATIONS DEFICIENCY REPORTING (TPDR) PROGRAM (WP 014 00).

(1) Technical Publications Deficiency Reporting (TPDR) System (WP 014 00) was devised as a

means for the users to recommend corrections to NAVAIR publications.

(2) The TPDR system is coordinated by NATEC (Fleet Liaison) by coordinating the efforts of the technical manual preparing activity, the CFA and the user.

(3) Detailed instructions on the TPDR program are contained in [WP014 00](#).

2. QUALITY ASSURANCE PROGRAM OBJECTIVES.

a. Provide Guidance to Preparing Activity to ensure mutual understanding of the technical manual requirements as required by the contract and to minimize deficiencies in delivered data.

b. Identify technical manual discrepancies and recommend corrective action.

3. QUALITY ASSURANCE PROGRAM POLICY AND REQUIREMENTS. (Refer to OPNAVINST 4790.2 and 8000.16) Full appreciation and understanding of the policy and requirements criteria covering the technical manual quality assurance program require that the basic definitions of various program elements be thoroughly understood. Detailed information is contained in AL-855TM-GYD-000. The Primary Quality Assurance Functions follow.

a. BASIC TECHNICAL MANUAL REQUIREMENTS.

(1) The manual must precisely reflect the configuration of the aircraft or equipment being procured.

(2) The technical content shall be compatible with the approved Navy maintenance concept, provisioning, and user environment (organizational and/or intermediate).

(3) The manual shall be suitable in terms of comprehension and readability for the intended user.

(4) The manual shall be usable as a basic source of technical information to support training.

(5) All required safety precautions shall be included.

(6) The technical manual shall reflect support equipment approved for Navy use. The support equipment or alternates shall be selected from NAVAIR 16-1-525 (Avionics), NAVAIR 19-1-127 (non-Avionics), or procured and provided to the users.

(7) The manual can be maintained to the configuration of the hardware throughout the expected life-cycle of the equipment.

(8) For a technical manual to be usable by Navy fleet maintenance activities, its information must be accurate and in correct sequence, adequate in depth and scope of coverage, clear in meaning, and complete.

(9) The text and illustrations must be arranged in logical, functional order and properly indexed to make the information readily accessible to the user.

(10) The content must accurately describe the equipment being covered and it must cover all configurations in the fleet.

(11) Quality Assurance is the means used to assure that technical manuals are adequate, accurate, and usable.

b. TECHNICAL MANUAL SPECIFICATIONS AND STANDARDS.

(1) Purpose. Military specifications and standards are developed as a means of establishing and defining a contract requirement.

(a) These specifications define the basic style, format, and content of the “completed” technical manual.

(b) The specification is an excellent tool for inspection and acceptance by quality assurance personnel.

(c) The new Work Package (WP) specifications were developed primarily to group the requirements by elements and to clarify them.

(2) Work Package (WP) concept. The WP concept style of writing is that the following fundamental guidelines are an essential part of the technical manual development:

(a) Format design and assembly arrangement of the WP manual is predicated on the basic needs of the maintenance technician. It must be representative of his/her work environment, his/her educational, and the presentation medium used. With this in mind, the ultimate usability of the technical manual is paramount.

(b) The technical manual and its operational and maintenance requirements and information must be presented realistically in the appropriate order of performance.

(c) WPs within the manual must be capable of standing alone, that is, each WP must be complete and have the quality of being applied technically with minimum reference to other WPs or manuals.

(d) The importance of WP and paragraph titles, simple language, the compatibility of text and illustrations, detailed effective indexing and other factors that have a direct bearing on access to data must be emphasized.

c. QUALITY ASSURANCE REVIEW REQUIREMENTS. The following Technical Manual requirements are reviewed during the Quality Assurance reviews for compliance and establish the acceptance/rejection criteria:

(1) Page format manuals.

(a) Page style and format requirements (layout, type size, type font, numbering, etc.).

(b) Access to data. (Table of Contents, Indexes, Listings, etc.).

(c) Introduction. (Content).

(d) Arrangement.

(e) Presentation techniques.

(2) Interactive Electronic Technical Manuals (IETMs).

(a) Access to data. (Menus, Indexes, Listings, etc.)

(b) Introduction. (Content)

(c) Presentation techniques

(d) Usability

(3) Arrangement.

(a) Conventional Format Manuals. Logical, functional order by function elements (Parts, Chapters, and/or Sections)

(b) WP concept. WP concept technical manual is specifically designed to respond to work tasks or to provide direct support of work tasks.

1. The usability of the TM is the direct result of applying coordinated techniques to improve access of technical information and simplifying presentation methods.

2. This is accomplished through:

- a. Controlled text legibility.
- b. Highly visible primary and secondary headings.
- c. Coordinated and consolidated text and illustrations by task.
- d. Improved line art presentation and more effective index

requirements.

3. WP concept is defined as a logical combination of requirements analysis and improved presentation techniques. It has been specifically designed to enhance documentation usability in performance of aeronautical maintenance.

4. Technical Manual usability is keyed to three primary elements:

- a. A logical organization and arrangement.
- b. An easily understood comprehensive style.
- c. A highly visible, eye attracting format.

5. Technical manual organization and functional elements. WP concept technical manual organization shall be by system or equipment and arranged by functional element in logical task order sequence. Refer to technical content specification for detailed coverage requirements. Functional elements and related data include but are not limited to:

a. Description and principles of operation, including controls and indicators.

b. Preparation for use, including initial installation if not performed by a support activity.

c. Operation Instructions (end item), if required.

d. Testing and troubleshooting (reference to schematics and wiring data).

e. Maintenance with integrated IPB.

f. Preparation for storage or shipment (end item).

g. Local manufacturing and assembly instructions.

h. Support equipment maintenance instructions, when authorized.

i. General maintenance procedures, when applicable to multiple WPs and coverage is not contained in a NAVAIR general series manual.

j. Servicing Instructions.

(4) Style of writing.

- (a) Response to the intended user.
- (b) Comprehensibility.
- (c) Readability.
- (d) Quality Assurance procedures (Inspection requirements and referencing).
- (e) Selected Data. Health Hazard Precaution Data, Nuclear Hardness, ESD requirements, etc.
- (f) Warnings, Cautions, and Notes (location/use).
- (g) Nomenclature Consistency.

(5) Referencing techniques.

(6) Configuration management techniques.

(7) Artwork requirements, including Schematic .Diagrams and Wire Lists

(8) Change/revision techniques.

(9) Adequacy, Depth and Scope of the coverage.

4. QUALITY ASSURANCE PROGRAM PLANNING CONFERENCE.

(Refer to AL-855TM-GYD-000, WP 006 00)

a. OBJECTIVES.

(1) The primary objective of the Quality Assurance Program Planning Conference is to ensure an adequate understanding of all Quality Assurance requirements relative to a specific TM acquisition.

(2) The conference will also provide the opportunity for establishing contacts and providing guidance on various Quality Assurance techniques, which can be applied to the TM preparation processes and procedures.

b. FUNCTIONS.

(1) Review of the Technical Manual Contract Requirement (TMCR) to identify and ensure understanding of contractually imposed Quality Assurance requirements, including required Quality Assurance deliverables.

(2) Review of MIL-M 85337(AS) with approved deviations.

(3) Review of the contractor's Quality Assurance Program Plan for TMs and Validation Plan.

(4) Guidance will be given, as required, in implementation of the Quality Assurance requirements of MIL-M-85337 (AS).

(5) Guidance will be given, as required, in application of Quality Assurance techniques to TM development processes and procedures.

(6) Identification of organization responsible for applying Quality Assurance requirements

(7) Establishment of contacts for guidance and information

5. TECHNICAL MANUAL INITIAL GUIDANCE CONFERENCE.

(Refer to AL-855TM-GYD-000, WP 005 00)

a. OBJECTIVES.

(1) Minimize deficiencies in technical manual task analysis and planning data resulting from the Contractor not fully and clearly understanding:

- (a) Contract/program requirements.
- (b) The system support plan.
- (c) NAVAIR maintenance concept.
- (d) NAVAIR technical manual policy, and
- (e) Intended user capabilities, needs or environment.

(2) Minimize deficiencies arising from improper interpretation and application of specifications.

b. FUNCTIONS.

(1) To ensure mutual understanding of the technical manual requirements.

(2) To establish contacts for assistance and/or guidance.

(3) To provide guidance on the methods, techniques and requirements of the task development phase.

(4) As required, provide guidance in work package manual development, preparation, style and format requirements.

6. TECHNICAL MANUAL OUTLINE REVIEW.

a. GENERAL.

(1) Technical manual outline reviews are a Quality Assurance (QA) function and are part of the Technical Manual™ Quality Assurance program.

(2) Technical manual outline reviews are normally conducted by NATEC QA DIVLANT in the office as a desk review.

b. PURPOSE. Technical manual outline reviews are conducted to evaluate the contractor's understanding of the contract, specification, and program requirements.

c. OBJECTIVES.

(1) Minimize deficiencies in technical manual task analysis and planning data resulting from the Contractor not fully and clearly understanding:

- (a) Contract/program requirements.
- (b) The system support plan.
- (c) NAVAIR maintenance concept.

- (d) NAVAIR technical manual policy, and
- (e) Intended user capabilities, needs or environment.

(2) Minimize deficiencies arising from improper interpretation and application of specifications.

d. FUNCTIONS.

(1) Review Outline. The Technical Manual Outline Review is conducted to evaluate the outline using:

- (a) TMCR requirements;
 - 1 On contract specifications and applied standard/limited deviations,
 - 2 Any special requirements.
- (b) Technical Manual Plan, if supplied.
- (c) Available logistics support requirements, at minimum*;
 - 1 Maintenance plan, or
 - 2 Maintenance concept with list of repairable items.

NOTE: The outline cannot be properly evaluated without one of these requirements.

- (d) Available data base material.

(2) Provide Guidance. Provide guidance to the contractor, as required:

- (a) To ensure mutual understanding of the technical manual requirements.
- (b) To establish contacts for assistance and/or guidance.
- (c) To provide guidance on the methods, techniques and requirements of the task development phase.
- (d) As required, provide guidance in work package manual development, preparation, style and format requirements.

7. IN-PROCESS REVIEWS. (Refer to AL-855TM-GYD-000, WP 007 00)

a. PURPOSE.

- (1) Contractor compliance with requirements,
- (2) Assess program progress,
- (3) Provide guidance, and
- (4) Identify required corrective action during crucial points in TM development.

b. OBJECTIVES.

(1) Minimize deficiencies in delivered data resulting from the contractor not fully and clearly understanding:

- (a) Contract/program requirements.
 - (b) The weapon system support plan.
 - (c) NAVAIR maintenance concept.
 - (d) NAVAIR technical manual policy.
 - (e) User capabilities, needs, or environment.
- (2) Minimize deficiencies arising from improper interpretation and application of specifications.
- (3) Avoid the need for major changes during the later phases of manual preparation or after manual delivery.
- (4) Identify deficiencies while corrective action is economical and can be accomplished without penalty to delivery schedules.
- (5) Assure the completion of manuals, which meet quality requirements in terms of;
- (a) Reliability,
 - (b) Adequacy,
 - (c) Completeness,
 - (d) Usability, and
 - (e) Compatibility with approved maintenance plan/support equipment.
- (6) Assure the completion and timely delivery of manuals which are fully capable of supporting all operation and maintenance requirements at the prescribed maintenance level, and to the full depth of provisioning.

c. TYPES OF IN-PROCESS REVIEWS (IPRs). There are three different types of in-process reviews covered in this work package. Each of the three different types has been designed to:

- (1) Evaluate the elements of technical manual development at crucial points, and
- (2) Provide timely and effective guidance to the preparing activity. These reviews, listed chronologically are:
 - (a) Task Development In-Process Review.
 - (b) Preparation Cycle In-Process Review.
 - (c) Final In-Process Review.

d. FUNCTIONS OF IN-PROCESS REVIEWS (IPRs). Reviews are conducted at coordinated phases of the technical manual development using checklists and general procedures for guidance. Specific functions for each type of review are as follows:

(1) Task Development In-Process Review. The Task Development In-Process Review is scheduled concurrent with the completion of the task development phase and the technical manual outline preparation/submission. The requirement for this IPR is established during initial guidance or by specific request. The task development in-process review is conducted to:

- (a) Review the technical manual planning data.

(b) Provide assistance and guidance in:

1 Adjustment to TM planning data.

2 TM development and presentation techniques.

(c) Critique and approve adjusted/changed TM planning data and outline(s).

(2) Preparation Cycle In-Process Review. The Preparation Cycle In-Process Review is scheduled at crucial point(s) in the technical manual development and preparation. The frequency/number of reviews required will vary directly with the length and scope of the preparation cycle. Preparation cycle IPRs are conducted to:

(a) Evaluate the technical manual product at various stages of completion.

(b) Provide guidance to the contractor, as required.

(3) Final In-Process Review. The Final In-Process Review is scheduled on the completed/nearly completed draft copy, before it is released for the production of final product. It is conducted to ensure:

(a) Compliance with contract requirements.

(b) The manual meets the quality requirements.

(c) Incorporation/compliance with previous in-process review comments or requirements.

8. ADEQUACY REVIEW. (Refer to AL-855TM-GYD-000, WP 008 00)

a. PURPOSE. Adequacy reviews are formal reviews conducted by the government to examine Maintenance Instructions Manuals (MIMS) and Illustrated Parts Breakdowns (IPBs) simultaneously:

(1) For adequacy in depth and scope of coverage of the;

(a) Description and Principles of Operation,

(b) Testing and troubleshooting,

(c) Maintenance Instructions, and

(d) Illustrated Parts Breakdown (IPB).

(2) To monitor the preparation of (IPBs); and

(3) To determine the adequacy of the data prior to and/or during;

(a) In-Process Reviews (IPRs), and

(b) Verification.

b. GENERAL REQUIREMENTS.

(1) The Adequacy Reviews are conducted by:

(a) Quality Assurance representative:

1 As a Desk Review prior to and/or as part of an IPR or Verification.

2 The results can be provided by separate correspondence or included in the IPR or Verification findings.

(b) Adequacy Review Team.

(2) Adequacy Reviews are conducted at different levels dependant upon the availability of the required logistics source data and technical manual data.

(a) IPRs are usually conducted using the Maintenance Plan or Concept.

(b) Verifications are usually conducted using the Approved Maintenance Plan.

(c) Quality Assurance Desk Reviews are frequently conducted after Verification using the Approved Provisioning Data.

c. POLICY REQUIREMENTS. NAVAIRINST 4160.2 and NAVAIR policy requires that technical manuals contain all technical information necessary for the maintenance and repair of the equipment for all designated NAVAIR levels of maintenance. In order to meet this requirement, technical manuals must provide the following for each maintenance level:

(1) Illustrated Parts Breakdowns as necessary to properly identify all parts that have been provisioned.

(2) Maintenance procedures for each maintenance function for end items, assemblies, subassemblies, and parts as follows:

(a) Adjustment/alignment.

(b) Assembly/disassembly.

(c) Cleaning.

(d) Lubrication.

(e) Corrosion control.

(f) Fault analysis.

(g) SE maintenance.

(h) Inspection.

(i) Operational check.

(j) Remove/install.

(k) Repair.

(l) Rigging.

(m) Servicing.

(n) Fleet Manufacture or Assembly (except Depot Level maintenance manuals).

(3) Testing, troubleshooting procedures, with supporting principles of operation, for all items required to be removed and/or repaired.

d. OBJECTIVES.

(1) The specific objective of Adequacy Reviews is to determine if the depth and scope of coverage in maintenance manuals/IPBs are sufficient to support repairables, replaceables, and items to be assembled or manufactured at the approved NAVAIR maintenance level(s).

(2) To achieve Adequacy Review objectives, guidance is given to the contractor during the formative stages of manual planning data/manual development. Assistance is also provided in resolving program interface problems.

9. TECHNICAL MANUAL ACCEPTABILITY REVIEWS. (Refer to AL-855TM-GYD-000, WP 012 00)

a. PURPOSE. Commercial and APPROVED non-NAVAIR technical manual acceptability reviews are an integral part of the technical manual (TM) quality assurance program. They are the formal processes through which the Government determines the acceptability of existing technical manuals.

b. TYPES OF MANUALS.

(1) Commercial Manuals: Commercial manuals are defined as contractor developed technical manuals intended for support of contractor designed, off the shelf hardware. They are primarily developed for sale to the commercial/industrial community or for the contractor's technical representative's use.

(2) Approved Non-NAVAIR Technical Manuals: Approved Non-NAVAIR technical manuals are technical manuals that are approved for use by other Naval System Commands, including Marine Corps and other services (Army/Air Force/ Coast Guard).

c. NAVAIR POLICY (NAVAIRINST 4160.2 and 5600.22):

(1) NAVAIR Use Acceptability: Technical manuals may be used only when they have been determined to be acceptable by the Government user for NAVAIR use.

(2) Evaluation: Technical manuals must be evaluated to assure that they meet the intended user's requirements.

(3) Military Design: Commercial manuals shall not be procured for military design aircraft or equipment.

(4) Acceptance Criteria: When Technical manuals are proposed in support of commercially designed aircraft or equipment, the following minimal acceptance criteria shall be met prior to authorization for use:

(a) The Technical manual must precisely reflect the configuration of the aircraft or equipment being procured.

(b) The technical content shall be compatible with the approved NAVAIR maintenance plan, provisioning, and user environment (organizational and/or intermediate).

(c) The manual shall be suitable in terms of comprehension and readability for the intended user.

(d) The manual shall be usable as a basic source of technical information to support training.

(e) All safety precautions shall be included.

(f) The technical manual shall reflect support equipment approved for NAVAIR use. The support equipment or alternates shall be:

1 Selected from:

a NAVAIR 16-1-525 (Avionics) or

b NAVAIR 19-1-127 (non-Avionics).

2 Procured and provided to the users.

(g) The Technical manual can be maintained to the configuration of the hardware throughout the expected life-cycle of the equipment.

d. FUNCTIONS. The primary function of a Technical Manual Acceptability Review is to ascertain the TMs adequacy and usability.

(1) Review For Adequacy. This review is conducted to determine if the depth and scope of maintenance coverage:

(a) Is sufficient to support the:

1 Maintenance plan or concept, and

2 Provisioning or supply support.

(b) The procedures reflect sound engineering principles and are compatible with NAVAIR standard maintenance practices.

(c) Precisely reflects the configuration of the equipment that is being procured.

(d) All required safety precautions are included.

(e) Support equipment required is, or will be approved for use.

(2) Review For Usability. This review is conducted to ascertain if the manual(s) meet the requirements in terms of quality and usability. The manual must:

(a) Meet the quality requirements of:

1 Comprehensibility.

2 Consistency.

3 Data match.

4 Readability

5 Usability.

(b) Be compatible with the skill and needs of the intended user.

(c) Be usable as a basic source of technical information to support training.

(d) Be compatible with the approved support equipment use and testing philosophy.

e. TYPES OF REVIEWS.

(1) Quality Assurance Representative Desk Review. This review is conducted, with CFA and

user liaison, as appropriate, when:

- (a) The manual(s) apply to one item of equipment or support equipment, and
- (b) The logistics support data is available.

(2) Separate Reviews For Adequacy And Usability: These reviews are coordinated by the Quality Assurance representative and performed *when logistics support data is not available*.

(a) Review for Adequacy. This review is conducted by the CFA, with the Quality Assurance representative and user liaisons required.

(b) Review for usability. The review is conducted by Quality Assurance representative with CFA and user liaison.

(3) Acceptability Review. This review is conducted by Acceptability Review Team, which may include representatives from selected user and support activities. This type of is required when any of the following conditions exist.

- (a) Extensive review effort.

1 FAA approved commercial aircraft coverage.

2 Major system coverage.

3 Duration (in excess of one week).

(b) Logistics support data must be determined or developed in conjunction with the manual review.

- (c) Major problems are known or identified during preliminary review.

10. VALIDATION. (Refer to AL-855TM-GYD-000, WP 009 00).

a. GENERAL REQUIREMENTS.

(1) Validation is an integral element in the Contractor's Quality Assurance program and requires the use of general and specific techniques tailored to the contractor's technical data development procedures.

(2) In the most basic sense, Validation is the contractor's evaluation of technical documentation through the actual performance of operational and maintenance tasks using the appropriate configuration of the applicable weapon system/equipment.

(3) Validation is accomplished after the technical data has been prepared but prior to issuance of the manual.

(4) Validation is a contractor responsibility and should be conducted on all technical manuals and changes/revisions thereto.

(5) The contractor is responsible for all aspects of Validation as specified herein.

(6) Further, the contractor is responsible for proper Validation of all manuals or manual data prepared by a sub contractor, vendor or other writing activity.

(7) Normally, Validation will be conducted at the contractor's facility.

b. OBJECTIVE. The objective of Validation is to assure that the contractor has provided accurate and

adequate TM content for support of the weapon system/equipment, in accordance with the approved maintenance/logistics support plan and user environment.

c. BASIC CONCEPTS. Validation is the cornerstone of an adequate quality assurance program. The Validation effort will reflect the following concepts:

(1) Validation is a continuing effort accomplished on all TMs and changes/revisions thereto. It may be accomplished as an integral part of research and development for the equipment concerned; however, it will normally be conducted during regularly scheduled tests and inspection.

(2) All TM products will be validated prior to delivery to the government unless NATEC grants specific deviation.

(3) Validation will be conducted by demonstration (i.e., actual performance of the procedure utilizing the system/equipment) whenever possible.

(4) The tasks or instructions being validated by demonstration should be performed using an environment and facility closely duplicating user facilities.

(5) The contractor is responsible for coordinating the availability of the weapon system, components, hardware and equipment necessary for conducting Validation.

(6) The method of Validation shall permit the performance of tasks in an environment, which closely duplicates service conditions.

d. GOVERNMENT WITNESS OF VALIDATION.

(1) Contractor Responsibilities. The contractor is responsible for notifying the Contract Administration Office (CAO) and other on-site review team (such as RILSD) of the time and place of Validation.

(2) Government Responsibilities. The government may choose to witness the Validation effort to assure that the data being validated meets the requirements of adequacy, completeness and usability.

(a) Contract Administration Office (CAO) representative. The CAO should designate a resident Quality Assurance inspector responsible for certifying that the contractor has fulfilled contractual requirements for Validation. The designated CAO Quality Assurance representative should perform the following functions, as appropriate:

1 Make recommendations concerning the technical effectiveness of the contractor Validation program.

2 Witness/participate in the Validation effort.

3 Request advice and assistance from NATEC Quality Assurance when reasonable doubt concerning adequacy of data exists.

4 Notify the contractor of inadequate procedures, stating facts and identifying deficiencies.

(b) NATEC Quality Assurance representative. The NATEC Quality Assurance representative, when requested by the CAO, will witness field site Validation efforts.

11. VERIFICATION. (Refer to AL-855TM-GYD-000, WP 010 00)

a. GENERAL REQUIREMENTS.

(1) Purpose. Verification is the formal process through which the Government determines the

accuracy, quality and usability of the technical manuals.

(2) Verification Coordination. Verification is coordinated and managed by the designated Quality Assurance representative.

(3) Verification Responsibility. Verification is a joint responsibility shared by the contractor (when support of Verification is contracted) and the Government Verification team.

(a) Verification should be accomplished prior to the deployment of the production equipment.

(b) Verification is normally accomplished at a Government facility or activity of the same maintenance level as the technical data being verified.

(c) Depot level manual/work package Verification (except for Weapons) is performed only, as requested, by the applicable NAVAL AVIATION DEPOT following a NATEC Quality Assurance and NAVAL AVIATION DEPOT screening of the depot level TM.

(d) Verification is conducted by Government personnel, normally includes contractor assistance, and consists of:

1 A technical review of the Principles of Operation and related data.

2 Actual performance of selected operating, testing and troubleshooting, and maintenance procedures.

b. OBJECTIVES OF VERIFICATION.

(1) Identification of TM Discrepancies.

(a) Specific data that does not meet the user's requirements. e.g.;

1 Cannot be properly interpreted (Quality).

2 Does not match equipment (Configuration).

3 Cannot be used in some application; e.g., shipboard.

4 Omission of required data.

5 Violation of standard procedures or safety regulations.

6 Inadequate presentation technique(s).

(b) Specific data containing errors (refer to table 1 for classification of defects).

(2) Recommend Corrective Action Procedures. If time permits, the Verification coordinator may obtain engineering assistance to determine required corrective action and/or suggest improvement in presentation techniques.

12. TECHNICAL MANUAL FINAL ACCEPTANCE. (Refer to AL-855TM GYD-000, WP 011 00)

a. ACCEPTANCE RESPONSIBILITIES.

(1) Acceptance of Technical Manuals (TMs) will be in accordance with the requirements of the contract under which the Technical manual products are being acquired.

(2) Specific administrative responsibilities will be detailed in the contract.

(a) Normally, the cognizant Contract Administration Office (CAO) will be responsible for acceptance of Technical manual products. The CAO will assign this responsibility to personnel in his Quality Assurance (QA) group responsible for Technical manual products.

(b) If desired, the CAO may request NATEC guidance in acceptance of Technical manuals.

b. CRITERIA FOR ACCEPTANCE:

(1) Contract Administration Office (CAO) Evaluation. The CAO will be guided by contractual requirements, as specified in the Technical Manual Contract Requirement (TMCR), in his evaluation of product for acceptance;

(a) These requirements include format, technical content, preparation and packaging specifications; as well as type, quantity and delivery requirements.

(b) The CAO will rely upon objective evidence that the contractually imposed requirements of MIL-M-85337 (AS), as specified in the TM CR, have been properly met.

(2) Validation Requirements.

(a) The CAO will assure that contractor Validation requirements have been accomplished prior to acceptance of the Technical manual.

(b) The contractor will ensure that the following material is available for CAO review upon delivery of the Technical manual/data for acceptance:

1 Validation Certification will be presented listing applicable exceptions and waivers.

a Validation certificates should bear the signatures of authorized contractor and government representatives.

b Validation exceptions shall be justified by contract provisions and/or letters of concurrence from NATEC.

2 Lack of NATEC approved justifications, for exception(s), shall be grounds for rejection of the Technical manual.

(c) The Validation record shall be available and of sufficient detail to present objective evidence that Validation has been performed and all noted discrepancies incorporated in the Technical manuals.

(3) Verification Support.

(a) When appropriate, the CAO will assure that contractual requirements for Verification support have been accomplished prior to acceptance of the verified issue of the Technical manual.

(b) The contractor will ensure that the following material is available for CAO review upon delivery of the Technical manual for acceptance:

1 Validation Certification. Validation Certification must have been previously performed and approved as defined in paragraph 2.above.

2 Verification Incorporation Certification. Verification Incorporation Certification will be presented detailing exceptions.

3 Approved Verification Disposition Report. The NATEC Quality Assurance Division approved Verification Disposition Report will be available for use in checking the Technical manual for compliance with required corrective actions.

**Team Members
(participating activities)**

	** NAWC Weapons Division China Lake, CA	Naval Aviation Logistics Command	Type Commanders	Cognizant Field Activity	Using Command	Contract Administration Office	* NATEC Quality Assurance Department	NATEC LEM Data Management Department	Naval Air Systems Command	Contractor	NATEC DET (ETS)
Pre-Contract Planning					AR		AR	X	X	X	AR
Define Requirements in TMCR				AR			AR	X	AR		
Prepare/Submit Plans and Schedules							AR	AR		X	
Review/Approves Plans and Schedules					AR		AR	X	AR		AR
TMMT	AR	AR	O	AR	AR	AR	X	X	O	X	AR
Guidance and/or Quality Planning Conferences	AR	AR		AR	AR	X	X	AR	O	X	AR
TM Outline Review		AR					X	AR	AR	AR	
Quality Reviews										X	
Quality Program Reviews	AR	AR		AR	AR	X	X	AR	O	X	
In-Process Reviews and Adequacy Reviews	AR	AR	O	AR	X#	X	X	AR	O	X	SR
TM Acceptability Review, Formal	AR	AR	O	AR	X	AR	X	AR	O		SR
Validation						M	AR			X	AR
Verification	AR	AR	O	AR	X	O	X		O	AR	SR
Verification follow-up			AR	AR	AR	X	X	X	AR	X	AR
Manual Acceptance						S	S	S			

* or designated review activity

** or other specialized support activity (NAVSAFECEN, NAVWPNCEN, NAVTACDOCACT, etc.)

per OPNAVINST 4790.2

X = participation required

S = as specified in the contract

M = monitor

O = at own option

AR = as required

SR = strongly recommended

Figure 1. Team Members (Participating Activities) and Area of Responsibility

MAJOR DEFECTS

1. Incorrect maintenance Procedures
2. Schematic errors
3. Part number errors and omissions
4. SM&R code errors and omissions
5. Illustration errors
6. Incorrect references
7. Technical content does not coincide with hardware database
8. Dimensions, values and tolerance errors or omissions
9. Safety, e.g., omission of “CAUTION” or “WARNING”
10. Safety: NOTES, CAUTIONS or WARNINGS not properly designated
11. Publication indices; errors and omissions
12. Classified matter - incorrect marking/identification
13. Missing pages
14. Quality Assurance provisions; errors and omissions

MINOR DEFECTS

1. Typographical errors (errors that do not distort technical content meaning or interpretation)
2. Improperly collated pages
3. Writers guide errors in format, pagination, grammar, etc.

TABLE 1 CLASSIFICATION OF DEFECTS

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NAVAIR TECHNICAL PUBLICATIONS DEFICIENCY REPORTING PROGRAMS

NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM

Reference Material

NAVAIR Documentation Controlled by other Navy Elements WP 004 00
NAVAIR Technical Directives WP 015 00
NATOPS General Flight and Operating Instructions OPNAVINST 3710.7
Naval Aviation Maintenance Program (NAMP) OPNAVINST 4790.2
Naval Ordnance Maintenance Management Program (NOMMP) OPNAVINST 8000.16

Alphabetical Index

<u>Title</u>	<u>Page No</u>
Deficiency Reporting Definition and Examples	2
NATOPS Deficiency Reporting	3
Technical Publications Deficiency Reporting	2
CAT I and CAT II TPDRs	2
TPDR Incorporation	4
Types of Deficiency Reporting Programs	2

Record of Applicable Technical Directives

None

1. DEFICIENCY REPORTING DEFINITION AND EXAMPLES.

a. This work package will familiarize users of NAVAIR manuals with how to report deficiencies in a technical manual.

b. For the purpose of this work package, a deficiency is defined as a manual lacking some form of quality, faculty, or characteristic necessary for accuracy and completeness. Some of the more prevalent deficiencies are:

- (1) Incomplete information
- (2) Technical inaccuracy
- (3) Erroneous information
- (4) Incorrect artwork
- (5) Missing details
- (6) Incorrect/lacking part numbers
- (7) Format errors affecting maintenance
- (8) Warnings/Cautions not identified
- (9) Incorrect operating procedures
- (10) Incomplete troubleshooting
- (11) Inaccuracies of any other kind

2. TYPES OF DEFICIENCY REPORTING PROGRAMS.

a. There are two types of manuals used to support Naval Aviation. They are Technical Manuals (TM) and Naval Aviation Tactical Operations Procedures Standardization (NATOPS). Each has a separate and distinct process for reporting deficiencies. Both methods will be outlined in this work package.

b. Deficiencies discovered in NAVAIR Technical Directives ([WP 015 00](#)) shall be reported using the same methods as Technical Manuals.

(1) CAT I and CAT II TPDRs against NAVAIR 17-20, 17-50, and 17-35 Series technical manuals are to be submitted using the process outlined in [WP 004 00](#). They are not to be submitted to NATEC.

(2) Refer to OPNAVINST 4790.2, and OPNAVINST 8000.16 for a complete description of deficiency categories, types of technical publications, and detailed instructions on the use and transmittal of TPDRs.

3. TECHNICAL PUBLICATIONS DEFICIENCY REPORTING.

a. Technical publications deficiencies are prepared in accordance with the Naval Aviation Maintenance Discrepancy Reporting Program (NAMDRP) and reported using the Technical Publication Deficiency Reporting (TPDR) process. This process provides procedures for reporting technical publication safety hazards (Category I or CAT I) and routine deficiencies (Category II or CAT II).

b. CAT I and CAT II TPDRs are tracked by Report Control Number (RCN) as established by the originating activity. The RCN is comprised of three elements. The first five characters are the originating activity Unit Identification Code (UIC), the middle two digits are the last two numbers of the calendar year, and the last four digits are sequentially assigned by the originator and revert to 0001 at the beginning of each calendar year. One set of sequential numbers will be used by each originating activity for all NAMDRP reports and are assigned sequentially without regard

for the type of report. See OPNAVINST 4790.2 series for other types of reports that are included in the NAMDRP report numbering system.

(1) Originators must submit separate TPDRs for each discrepancy whether the discrepancies are in the same or a different manual. This will facilitate tracking and final resolution of a valid TPDR for incorporation into the affected technical manual.

(a) CAT I TPDR. If a technical publication deficiency is discovered which, if not corrected, could result in death or injury, damage or loss of aircraft, equipment, or facilities, a CAT I TPDR message will be submitted within 24 hours using the format provided in [figure 1](#).

1. Originators will include the Naval Air Technical Data and Engineering Services Command (NATEC) as an addressee on messages using the plain language address (PLAD): NATEC SAN DIEGO CA//TPDR//.

2. Upon receipt of a CAT I TPDR, NATEC will enter the pertinent data into the TPDR database for tracking, trend analysis, and maintenance of historical files. NATEC will readdress the message to the Cognizant Reviewing Activity (CRA). The CRA is the agency responsible for producing technical manuals for the aircraft/equipment they are supporting. While the aircraft/equipment is IN-PRODUCTION the CRA may be a contractor or another agency other than the Cognizant Field Activity (CFA). Once the aircraft/equipment is OUT OF PRODUCTION then the CFA and CRA are one and the same.

3. CRA will determine the validity of the discrepancy and respond within five days of receipt of NATEC message. CRA will provide interim status messages to the originator and NATEC until a final status message is released.

(b) CAT II TPDR. These deficiencies include technical errors, wrong measurement values, incorrect use of support equipment (SE), wrong sequence of adjustments, part number errors, omissions, etc.

1. TPDRs that can be categorized as routine shall be reported using the Technical Publications Library (TPL) Program or entered directly into the NATEC website (www.natec.navy.mil). The TPL created TPDR may be transmitted via email to tpdr@navair.navy.mil.

2. If necessary, OPNAV Form 4790/66 may be used ([figure 2](#)). Instructions for completion are contained on the reverse side of the form and may be reproduced locally. Mail to Commanding Officer, Naval Air Technical Data and Engineering Service Command, Bldg. 90 Attn: TPDR, P.O. Box 357031, San Diego, CA 92135-7031.

(c) NATEC will post TPDRs on the NATEC website for CRA response.

(d) CRA will post response on NATEC website where originator and all interested parties can view the TPDR and its response.

4. NATOPS DEFICIENCY REPORTING.

a. NATOPS publications include Flight Manuals, NATOPS checklists, Passenger Information Cards, and Ditching and Bailout Placards. Aircraft tactical manuals include Tactical Manuals, Tactical Pocket Guides, and Tactical Information Airborne Information Documents.

b. Deficiencies are reported under the NATOPS and Aircraft Tactical Manual Programs by submitting a NATOPS/Tactical Change Recommendation OPNAV Form 3710/6 or by other acceptable means as specified in OPNAVINST 3710.7.

c. These deficiency reports are not to be submitted to NATEC. Routine deficiencies are forwarded to the NATOPS or Aircraft Tactical Model Manager unit responsible for maintaining the publication. Urgent deficiencies are forwarded to the Type Commander in the originator's chain of command.

d. Detailed information on the NATOPS/Tactical Manual Deficiency Reporting Program is contained in OPNAVINST 3710.7.

5. TPDR INCORPORATION.

a. A response to a CAT I or CAT II TPDR will not be used to make a pen change to a NAVAIR technical manual. Physical alteration of the technical content of NAVAIR technical manuals is not authorized.

b. A TPDR may be significant cause for the creation of an IRAC if deemed necessary by the CRA. All source data is to be incorporated during the next scheduled update of the affected technical manual.

PATUZYUW RUEDMCC1930 0142359-UUUU—RUWFTBA.
 ZNR UUUUU ZUI RUWIBHN0001 0140100
 RUCCNOQ T CG FOURTH MAW
 RUHEHMS T COMMARFORPAC
 RUHEKCZ T HMH THREE SIX SIX
 RHWIPWR T VAQRON ONE FOUR ONE
 RUCKFDG T VMAT TWO ZERO THREE
 P 140100Z JAN 99 ZYB PSN 478014Q24
 FM MALS THIRTEEN//AMO/QAO//
 TO NATEC SAN DIEGO CA//3.3//
 RUCKFDA/NAVAVNDEPOT CHERRY PT NC//AV8FST.3//
 AIG FOUR TWO THREE//JJJ//
 INFO RUWFEEA/COMNAVAIRPAC SAN DIEGO CA//N421G/N421A1/N421G1/N413//
 RULSFAN/COMNAVAIRSYSCOM PATUXENT RIVER MD//3.1.2D//
 RUWIKBC/CG THIRD MAW//ALD//
 ZEN/MAG THIRTEEN//CO//
 ZEN/VMA TWO ONE ONE//AMO//
 ZEN/VMA TWO ONE FOUR//AMO//
 ZEN/VMA THREE ONE ONE//AMO//
 ZEN/VMA FIVE ONE THREE//AMO//
 ZEN/MCAS YUMA AZ//AV8FST//

SAMPLE MESSAGE

BT
 UNCLAS //N04790//
 MSGID/GENADMIN/MALS-13 QAO/001/JAN//
 SUBJ/CAT I TPDR A1-AV8BB-290-310//
 REF/A/MSG/NAVAVNDEPOT/061936ZAUG92//
 NARR/REF A IS AFB -241//
 RMKS/1.MALS-13/57082 (Reporting custodian and UIC)
 2. NADEP CHERRY PT (Aircraft/equipment/program CFA or LMTC)
 3. 57082-01-0017 (Report Control Number)
 4. 9014/MALS-13 (Julian date of deficiency discovery & location of reporting unit)
 5. 0801LP8219704 (NSN of publication)
 6. THROUGH 21, N/A.
 22. A. A1-AV8BB-290-310 (Technical publication number)
 B. AV8B (Aircraft/weapon system model or equipment number)
 C. 01 JAN 1995 (Basic date of technical publication)
 D. 01 JUN 1998 CHANGE 4 (Change date and change number)
 E. 112 00 (Work package number (if applicable))
 F. PG. 6 (Page number)
 G. ITEM 4 AND 5 (Paragraph number)
 H. N/A (Figure number/table number)
 I. THROUGH K. N/A
 L. REF A IDENTIFIED NEW BUTTERFLY VALVE ATTACHMENT BOLTS.
 CHANGE 4 TO THE A1-AV8BB-290-310 LISTS THE PRE REF A BOLTS
 (P/N B426733) SUPERSEDING THE BOLTS (P/N 3M1103-4H4)
 INSTALLED IN COMPLIANCE WITH REF A. (Deficiency)

UNCLAS

Figure 1. Sample CAT I TPDR Message (Sheet 1 of 2)

M. CHANGE THE A1-AV8BB-290-310 TO LIST ONLY THE CORRECT BOLTS
P/N 3M1103-4H4 TO BE USED. (Recommendations, be specific)
N. POC CAPT M.C. HOWELL/QAO/SSGT M.T. COLLEY/QAR DSN 951-3324// (Name, title, DSN and COMM
telephone number of cognizant official (E-7 or above), email address. Note if deployed.)
BT
#1930
NNNN
RTD:000-000/COPIES:
@DTA: filed message at 19:09 01-15-1999
@DTA: MESSAGE MANUALLY FILED

Figure 1. Sample CAT I TPDR Message (Sheet 2 of 2)

TECHNICAL PUBLICATIONS DEFICIENCY REPORT					
NATEC USE ONLY		a. QA SEQUENCE NUMBER		b. DATA MANAGER CODE	c. CFA/PRIME CODE
1. REPORTING ACTIVITY		2. REPORT CONTROL NO.			
		3. REPORT DATE (YRMODA)		4. WEAPONS SYSTEM APPLICATION	5. DISCREPANCY CODE
6. TECHNICAL MANUAL NUMBER		7. TECH MAN DATE		8. CHG NO DATE	9. W/P NO.
10. SEC/PG NO.	11. PARA NO.	12. FIG/TBL NO.	13. CART NO.	14. CART DATE	15. FRAME NO.
16. DEFICIENCY					
17. RECOMMENDATION					
18. IMPACT					
19. MEDIA EVALUATED (Only one check block is required per item) <input type="checkbox"/> FILM <input type="checkbox"/> PAPER <input type="checkbox"/> PAPER & FILM					
REMARKS					
20. REPORTED BY (NAME,RANK/RATE) AUTOVON			21. RELEASED BY (NAME,RANK/RATE) AUTOVON		

Figure 2. Sample CAT II TPDR (OPNAV Form 4790/66) (Front) (Sheet 1 of 2)

INSTRUCTIONS

-
1. FROM: (Reporting Activity) The Reporting Activity will enter complete mailing address.
 2. REPORT CONTROL NUMBER: Enter the Report Control Number (RCN)
 3. REPORT DATE: This identifies the year, month, and day that the report was prepared, and consists of six digits. The date 15 June 1989 would be presented in the following format: 890615. The first two digits indicating the year (89), the second two digits indicate the month (06), and the remaining two digits specify the day (15).
 4. WEAPONS SYSTEM APPLICATION: Give the specific weapons system against which the deficiency is detected.
 5. DISCREPANCY CODE: This is a numeric code used to describe the type of discrepancy found in the technical publication being reported deficient. A complete list of codes are as follows:
 1. Typographical Errors
 2. Incorrect Procedures
 3. Schematic Errors
 4. Part Number Errors
 5. SM&R Code Errors
 6. Illustration Errors
 7. Incorrect Values/Tolerances
 8. Incorrect References
 9. Safety (Cautions & Warnings)
 10. Indexing Problems
 11. Illegible
 12. Print Error (Head to Toe or Information Cut Off)
 13. Missing/Improperly Collated Pages
 14. Film Density
 15. Cartridge Loading (Wrong Film, Cartridge Indexing, No Film, and inverted Loading)
 16. Other
 6. TECHNICAL MANUAL NUMBER: Give the complete NAVAIR number assigned to the manual being reported as deficient. Only one technical Manual should be reported per TPDR.
 7. TECHNICAL MANUAL DATE: This date appears on the bottom right hand corner of the title page. The date shall be presented in the format described in Item 3.
 8. CHANGE NUMBER AND DATE: This appears directly under the basic date of the manual on which deficiency is located. Present date in same format as item 3.
 9. WORK PACKAGE NUMBER: Enter the number in which the deficiency is located.
 10. SECTION/PAGE NUMBER: Enter the number of the pages of the technical manual on which the deficiency is located.
 11. PARAGRAPH NUMBER: Enter the specific number in which the deficiency is located.
 12. FIGURE/TABLE: Enter when an illustration or table is involved in the deficiency
 13. CARTRIDGE NUMBER: Enter the number being reported deficient
 14. CARTRIDGE DATE: The date shall be presented in the format described in item 3.
 15. FRAME NUMBER: Enter the frame number of the cartridge on which the deficiency is located.
 16. DEFICIENCY: Be very specific. Provide complete information regarding discrepancy, including drawings, schematics, sketches, and references. If necessary, attach copies.
 17. RECOMMENDATION: Be very specific. Provide complete information regarding the corrective action required, including drawings, schematics, sketches, and references. If necessary, attach copies.
 18. IMPACT: Enter concise statement of the impact of this discrepancy on work load/operational readiness.
 19. MEDIA EVALUATED: Check applicable block for media that is being reported deficient.
 20. REPORTED BY: Give name, rank/rate, and autovon number of person reporting deficiency to ensure receipt by reporter of notification of action taken.
 21. RELEASED BY: Name, rank/rate, title, and autovon number of releasing official.
-

MAIL ORIGINAL AND 1 COPY TO:

Commanding Officer, Naval Air Technical Data and Engineering Service Command, Attn: TPDR, P. O. Box 357031, NASNI, San Diego, CA 92135-7031

COPY TO FLEET SERVICE TEAM

OPNAV 4790/66 (Rev. 5-88) (Back)

Figure 2. Sample CATII TPDR (OPNAV Form 4790/66) (Back) (Sheet 2 of 2)

NAVAIR TECHNICAL DIRECTIVES

NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM

Reference Material

Naval Aeronautical Publication Index	WP 009 00
NAVAIR Manual Deficiency Reporting Programs	WP 014 00
Technical Publication Requisitioning Procedures	WP 017 00
Central Technical Publications Library Operating Procedures	WP 020 00
Central Library Verification/Audit Requirements	WP 021 00
NATEC Technical Publications Library Program	WP 024 00
NAVAIR Technical Directives System Management and Procedures Manual	NAVAIR 00-25-300
NAVAIR Technical Directive System	NAVAIRINST 5215.12
Processing of Rapid Action Minor Engineering Changes	NAVAIRINST 5215.10

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CTPL TD Management Procedures (WP020 00)	7
Methods of Updating Technical Directives	5
Amendment	5
Revision	5
NATEC TD Assistance	8
NAVAIR Technical Directive (TD) System	3
Technical Directive Categories	4
Immediate	4
Record Purpose	5
Routine	4
Urgent	4
Technical Directive Completion, Supersedure, and Cancellation	6
Cancellation	6
Completion (Formerly Rescission)	6
Supersedure	6
Technical Directive Issued in Parts	6
Technical Directive Requisitioning Procedures	7
Formal (Hard Copy) Documents	7
Messages or Message Format Letters (If Enclosures are Required)	7
Bulletin Messages or Message Format Letters	8
Interim Change Messages or Message Format Letters	7
RAMEC Messages or Message Format Letters	8
Technical Directive Types	3
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<u>Title</u>	<u>Page No</u>
Interim Change	3
Rapid Action Minor Engineering Change (RAMEC)	4
Validation of Proposed Technical Directives	6
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Record of Applicable Text Directives

None

1. **NAVAIR TECHNICAL DIRECTIVE (TD) SYSTEM.** The TD system is the only authorized medium for directing the accomplishment and recording of modifications and one-time inspections of NAVAIR accepted equipment.

a. **NAVAIR INSTRUCTION 5215.12** contains governing policy instructions on the TD system. NAVAIR 00-25-300 is the management and procedures manual for the TD system.

b. **The Central Technical Publications Library (CTPL)** will maintain a master file of applicable TDs. Copies of TDs properly stamped, issued, and controlled by the CTPL are authorized for use in workcenters.

NOTE

Effective changes and bulletins which affect Aviation Life Support Systems (ALSS) equipment and clothing and are issued between changes or revisions to ALSS publications should be recorded in the appropriate section of the manual as directed by the change or bulletin. The modification section of the manual for the affected equipment shall be annotated in the outer margin of the page with a vertical line and the number of the change or bulletin. A copy of the change or bulletin will be filed in a separate binder in the ALSS workcenter. When ALSS publications are updated these documents will be listed in the modification sections of the applicable chapters and the text of the chapters updated to reflect these changes and bulletins.

c. Deficiencies discovered in the TD system shall be reported as a CAT I Technical Publications Deficiency Report (TPDR) Message or as a CAT II TPDR ([WP 014 00](#)).

2. **TECHNICAL DIRECTIVE TYPES.** A Technical Directive is a collective term which includes four types of technical issues: Formal Change, Interim Change, Bulletin, and Rapid Action Minor Engineering Change (RAMEC).

a. **FORMAL CHANGE.** A Formal Change TD directs the accomplishment and recording of a configuration change; that is, a material change, a repositioning, a modification, or an alteration in the characteristics of a system.

(1) Normally, a Change is issued as a formal (hard copy) document identified as an Airframe Change, Avionics Change, Support Equipment Change, etc.

b. **INTERIM CHANGE.** Urgency sometimes dictates dissemination of a technical directive by message or message format letter when enclosures are required. Under these circumstances this action is designated as an Interim Change.

c. **BULLETIN.** A Bulletin directs a one-time inspection to determine whether a given condition exists and specifies what action shall be taken if the condition is found.

(1) It may contain instructions for corrective action using approved repair procedures, provided no change in material or configuration is involved.

(2) Or, it may require issuing a change TD to remedy a deficiency.

(3) Bulletins are disseminated as Naval messages or as message format letters when enclosures are required.

(4) When required and appropriate, a Bulletin may include direction for issuing an Interim Rapid Action Change (IRAC) or for creating a local Maintenance Requirements Card (MRC) to establish continuing inspection requirements for the same action. "Grounding Bulletins" restrict flight operations by requiring inspection prior to further flight, preflight, turn-around, daily inspection, next equipment use, or within the next ten flight hours.

d. RAPID ACTION MINOR ENGINEERING CHANGE (RAMEC). A RAMEC directs the accomplishment and recording of a minor configuration change processed and approved via the RAMEC process authorized by NAVAIRINST 5215.10.

(1) RAMECs are issued by Naval messages or letters (in message format) as change TDs (e.g., AFCs, AVCs).

(2) NAVAIR 00-25-300, Appendix D, describes the management and procedures functions of the NAVAIR RAMEC TD system.

(3) NAVAIR or specifically designated approval authority at cognizant field activities shall issue these types of technical directives.

3. TECHNICAL DIRECTIVE CATEGORIES. Four categories of technical directives are assigned in accordance with the importance and urgency of accomplishing the work involved. The four TD categories are: Immediate Action, Urgent Action, Routine Action, and Record Purpose.

a. IMMEDIATE. This category shall be used when an uncorrected, unsafe condition exists which could result in fatal or serious injury to personnel, or extensive damage to or destruction of valuable property. Such conditions embody risks that are calculated to be unacceptable. The urgency of this category requires Immediate Action to:

(1) Ground aircraft,

(2) Prevent launch of missiles, or

(3) Deny use of related support equipment or munitions.

(a) Assignment of this category shall be justified by incident, accident, hazard, or similar reports.

(b) CNO/CMC concurrence is mandatory.

b. URGENT. This category shall be issued under the governing factors of combat necessity or potential hazardous conditions that could result in injury to personnel, damage to valuable property, or unacceptable reductions in operational readiness.

(1) These conditions compromise safety or embody risks that are calculated to be acceptable only within definite time and/or performance limits.

(2) Urgency of this category requires compliance within specified time limits.

(3) If compliance is not accomplished by expiration of time limit, this category requires action to:

(a) Ground aircraft,

(b) Discontinue use of air launched weapons,

(c) Prevent launch of missiles,

(d) Discontinue operation of ground communications, electronic or meteorological equipment,

(e) Discontinue use of support equipment, personnel equipment, materials, or munitions.

c. ROUTINE. This category shall be issued for conditions that embody degrees of risk calculated to be

acceptable within broad time limits.

(1) The uncorrected existence of these conditions could:

- (a) Have a negative effect on operational effectiveness or readiness,
- (b) Constitute a hazard through prolonged use,
- (c) Reduce tactical utility or supportability,
- (d) Reduce operational service life.

(2) Routine Action category shall not be assigned to Interim Change TDs or Bulletins.

d. RECORD PURPOSE. The Record Purpose category is assigned to Formal Change TDs issued to document configuration changes that have been incorporated in all affected equipment by the change designer/originator before the TD is issued.

(1) The primary purpose of the Record Purpose TD is to provide the official record of an engineering change for Technical Directive Status Accounting (TDSA) purposes.

(2) Some additional criteria governing use of Record Purpose TDs are:

(a) TDs that require forced retrofit or changes to spares in the inventory may not be assigned the Record Purpose category.

(b) TDs issued to supersede and formalize Interim Change TDs may not be Record Purpose.

(c) Bulletins, Interim Change TDs, RAMECs, and other message TDs may not be assigned the Record Purpose category.

(d) The Record Purpose category may be assigned only to Formal Change TDs and only when the period for change incorporation in all affected systems is 12 months or less.

(e) Record Purpose TDs may be used to support changes applicable only to Foreign Military Sales (FMS), on an exception basis, when approved by the Naval Air Systems Command.

4. METHODS OF UPDATING TECHNICAL DIRECTIVES.

a. AMENDMENT. An Amendment to a TD clarifies, corrects, adds to, deletes from, makes minor changes, extends a target completion date, or cancels an existing TD, revision or amendment

(1) An Amendment shall include: TD category, TD title, TD number, TD code, amendment number, issue date, target completion date, subject, references (if required), purpose, detailed instructions, signature, prepared by, and verified by.

(2) The "PURPOSE" section of Amendments shall state the reason the Amendment is required.

(3) When applicable, an Amendment to a TD shall explicitly state additional work required on equipment modified or inspected in accordance with the basic TD, existing amendments, or previous revision.

(4) A maximum of three amendments may be issued before a revision shall be required.

(5) Amendments are identified numerically (e.g. AVC 3500 Amendment 1).

b. REVISION. A Revision is a completely new edition of an existing TD.

(1) The "DOCUMENTATION AFFECTED" section of Revisions shall state that the revision supersedes the basic TD or previous TD Revision and all existing amendments thereto.

(2) The "PURPOSE" section of Revisions shall re-state the purpose of the basic TD, and in addition, state the reason the revision is required.

(3) When applicable, a Revision to a TD shall explicitly state the additional work required on equipment modified or inspected in accordance with the basic TD, existing amendments, or previous revision.

(4) If a rescinded/completed TD requires reactivation status, it shall be issued as a Revision.

(5) Revisions are identified alphabetically (e.g., AVC 3500 Revision A).

5. TECHNICAL DIRECTIVE COMPLETION, SUPERSEDURE, AND CANCELLATION.

a. COMPLETION (FORMERLY RESCISSION). Completion is the normal process by which TDs are moved from active TD files to the history TD files when records show all compliance have been accomplished. The terms "Completion" and "Target Completion Date" have replaced "Rescission" and "Rescission Date".

(1) A completed TD is not cancelled or repealed. It has simply been moved administratively to an inactive (History) file to facilitate and better focus management attention on active TDs.

(2) All TDs, except Interim Changes, are assigned "Target Completion Dates". This date represents a future point in time when compliance requirements are expected to be complete.

(3) A TD does not have to be extended or reactivated to be complied with. COMNAVAIRSYSCOM (AIR-3.1.8) should issue kits on demand. Kits should be ordered and compliance actions should be performed regardless of whether a TD is in active or completed status.

(4) Completed TDs shall not be discarded. They shall be retained as a permanent record of system configuration by NATEC and at the designated compliance maintenance level.

b. SUPERSEDURE. Supersedure is the process by which an issued/published TD is removed from active files upon issue of a superseding TD.

(1) Interim Change TDs are superseded by Formal Change TDs.

(2) TD Revisions supersede the basic TDs, including all previously issued amendments and revisions to them.

c. CANCELLATION: Cancellation terminates compliance requirements and removes TDs from the active files. Cancelled TDs may be discarded. TD cancellation is affected by issuing a TD amendment. Cancellation is applicable to any TD, if after approval, a program manager decides it should be terminated for any reason.

6. TECHNICAL DIRECTIVES ISSUED IN PARTS. When a TD is to be issued in parts, the first or basic issue of the TD will always be Part 1, even though it will not be identified as such in the TD number. Subsequent issues shall be identified by Arabic numbers as Part 2, Part 3, etc. (e.g., F/A-18-AFC-234 Part 2).

a. All parts will have the same category and title.

b. The Issue Date for each part will be the date that specific part was issued.

c. The Target Completion Date for all parts will be the same.

7. VALIDATION OF PROPOSED TECHNICAL DIRECTIVES.

a. Validation is an engineering process by which the originator of a change validates the change instructions by accomplishing all required tasks on applicable systems to ensure the modified items function as intended.

b. Validation is usually conducted at an organic depot or contractor facility, but may be conducted at an operational site as directed by the NAVAIR APML/LM. Software changes usually are validated by designated Software Support Activities (SSAs).

8. VERIFICATION OF PROPOSED TECHNICAL DIRECTIVES.

a. Verification is a TD installation/compliance process where a naval activity tests an unissued TD for accuracy and adequacy. Verification is the actual installation of change kits, incorporation of changes or performance of inspections by personnel of the prescribed skill, using a proposed TD, support equipment and special tools available at, and in an environment comparable to the average service facilities of the lowest authorized compliance maintenance level.

b. Verification is the responsibility of the APML. TDs calling for compliance by naval activities shall be verified prior to issue. TD verification shall be assigned a sufficiently high priority to enable completion of the required action within the prescribed time limit.

c. If a verifying activity determines a TD to be unsatisfactory or deficient in any respect, that activity shall report difficulties, make recommendations or corrections, and request instructions from the APML/LM.

d. Exceptions to verification requirements are identified in NAVAIR 00-25-300, Section III.

9. CONCURRENT VALIDATION/VERIFICATION OF TECHNICAL DIRECTIVES. Concurrent validation/verification shall be accomplished in accordance with the instructions contained in NAVAIR 00-25-300, Section III.

10. CTPL TD MANAGEMENT PROCEDURES ([WP 020 00](#)).

11. TECHNICAL DIRECTIVE REQUISITIONING PROCEDURES. TDs fall into two distinct classifications. The procedures for requisitioning vary, based on the classification of the TD involved.

a. FORMAL (HARD COPY) DOCUMENTS

(1) These TDs are printed by the Defense Automated Printing Service (DAPS) and stored at Defense Distribution Depot Susquehanna Pennsylvania, Mechanicsburg, PA.

(2) They are stock numbered and listed in the NAVSUP P2003.

(3) To order required TDs, the MILSTRIP system will be used ([WP 017 00](#)).

b. MESSAGES OR MESSAGE FORMAT LETTERS (IF ENCLOSURES ARE REQUIRED)

(1) Interim Change Messages or Message Format Letters.

(a) Shall be distributed by the NAVAIR Address Indicator Group (AIG) and supplemental AIG number system. Other affected addressees shall be included when a supplemental AIG number has not been established.

(b) Interim Change message format letter distribution is accomplished utilizing NAVAIR AIG system as a guide in conjunction with the Standard Navy Distribution List (SNDL) to affected addressees.

(c) Activities shall submit requests for additional copies of Interim Change Messages or message format letters to NATEC, by calling DSN 735-2264/-2287 or Commercial (619) 545-2264/-2287, or fax

DSN 735-2276 or fax Commercial (619) 545-2276.

(2) Bulletin Messages or Message Format Letters.

(a) Shall be distributed by the NAVAIR AIG and supplemental AIG number system. Other affected addresses shall be included when a supplemental AIG number has not been established.

(b) Bulletin message format letter distribution is accomplished utilizing NAVAIR AIG system as a guide in conjunction with the Standard Navy Distribution List (SNDL) to list affected addressees.

(c) Activities shall submit requests for additional copies of Bulletin Messages or message format letters to NATEC, by calling DSN 735-2264/-2287 or Commercial (619) 545-2264/-2287, or fax DSN 735-2276 or fax Commercial (619) 545-2276.

c. RAMEC Messages or Message Format Letters.

(1) Shall be distributed by the NAVAIR AIG numbering system and the applicable AIG supplemental list.

(2) Activities shall submit requests for additional copies of RAMEC messages or message format letters to NATEC, by calling DSN 735-2264/-2287 or Commercial (619) 545-2264/-2287, or fax DSN 735-2276 or fax Commercial (619) 545-2276.

12. NATEC TD ASSISTANCE. NATEC provides the following TD assistance functions:

a. Maintains a master archival file of TDs. Activities requiring copies may submit a request by letter to:

COMMANDING OFFICER
ATTN: TECH DIRECTIVES (BLDG 2)
NAVAL AIR TECHNICAL DATA AND ENGINEERING SERVICE COMMAND
P O BOX 357031
SAN DIEGO CA 92135-7031

Or Email to: techdirectives@navair.navy.mil

b. Assistance in this area may also be obtained from NATEC, by calling DSN 735-2264/-2287 or Commercial (619) 545-2264/-2287 or fax DSN 735-2276 or fax Commercial (619) 545-2276.

c. Furnishes automatic distribution of formal (hard copy) changes through the NAVAIR Automatic Distribution Requirements List Program (ADRL), [WP 024 00](#).

d. Provides a Weekly Summary for issued Technical Directives that were distributed during the previous week ([WP 021 00](#))

(1) This summary is a message directed to the TYCOMS for readdressal to fleet activities.

SPECIFICATIONS, STANDARDS, AND DATA ITEM DESCRIPTIONS (DIDs)

NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM

Reference Material

Technical Publication Requisitioning Procedures WP 017 00
List of Specifications and Standards..... Military Bulletin 544/1,/2, and /3
Acquisition Management Systems and Data Requirements Control List..... AMSDL 5010.12-L
DOD Index of Classified Standardization Documents..... No Number
DOD Index of Specifications and Standards (DODISS) No Number
How to Obtain Specifications and Standards from the Department of Defense Single Stock
Point (DODSSP) <http://dodssp.daps.mil>

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Record of Applicable Technical Directives

None.

1. DEFINITIONS OF SPECIFICATIONS AND STANDARDS.

a. Specification and standards are issued by the Department of Defense (DOD) to standardize material and equipment used within the government service.

b. Procuring activity will refer to a specification or standard in the contract when purchasing material or equipment for use by a government agency. This ensures the purchased material/equipment meets the requirements of the Navy and user activity.

(1) A typical example is the procurement of a technical manual. Naval Air Technical Data and Engineering Service Command (NATEC) imposes selected specifications in the contract. These specifications stipulate the format, technical content and illustrated parts breakdown requirements. Additional specifications and standards details to be used in the technical manual data.

(2) Another example is that of hardware. Bolts are procured in very large numbers. When bolts are required, a procuring activity advertises for bids to provide X number of bolts in accordance with a designated specification or standard. The specification or standard in turn fully described the bolt by material to be used, bolt length, diameter, thread size, head size, and any other pertinent information to ensure uniformity of all bolts under that specification or standard number.

2. DEPARTMENT OF DEFENSE SINGLE STOCKING POINT (DODSSP).

a. The Defense Automated Printing Service (DAPS) has established an office for the management of specifications and standards. This office, DODSSP, was created to centralize the control, distribution, and access to the extensive collection of Military Specifications, Standards, and related standardization documents either prepared by or adopted by the DOD.

b. The responsibilities of the DODSSP include electronic storage, indexing, cataloging, maintenance, publish-on-demand (POD), distribution, and sale of Military Specifications, Standards, and related standardization documents and publications comprising the DODSSP collection.

c. The DODSSP also maintains the Acquisition Streamlining and Standardization Information System (ASSIST) management/research database. For more information please refer to the DODSSP website at <http://astimage.daps.dla.mil> and click on "What's new" or call customer service at (215) 697-2179.

d. A website has been established at DODSSP to distribute the specifications and standards. The address is <http://dodssp.daps.mil>. The website may be used to obtain a copy of the ASSIST Online program, user ID and password. There is no charge for the program or for the documents.

3. DEPARTMENT OF DEFENSE INDEX OF SPECIFICATIONS AND STANDARDS (DODISS).

a. INDEXING.

(1) Military Specifications and Standards are indexed in two separate documents:

(a) Department of Defense Index of Specifications and Standards (DODISS).

(b) List of Federal/Military/Industry Specifications and Standards, and NAVAIR Series Documents Approved by the Naval Air Systems Command; Military Bulletin 544/1, /2, /3 (Book Form).

(2) Full instructions covering policy and procedures are covered in the Introductory Material of the Indexes.

(3) Specifications and Standards are issued free of charge.

(4) Unclassified Specifications and Standards are cataloged in the DODISS. Classified Specifications and Standards are cataloged in the DOD Index of Classified Standardization Documents.

b. REQUISITIONING PROCEDURES.

(1) The ASSIST program is a database system for DOD-wide standardization document information management. ASSIST is the official source of DOD specifications and standards. ASSIST accounts may be established free of charge to view or download specifications and standards.

(2) Activities that have not established ASSIST accounts to download from the Internet may submit requests for specifications by FAX at DSN 442-1462, Commercial (215) 697-1462.

(3) Unclassified specifications and standards may also be requisitioned on DAPS-Phila-4125 or company letterhead and submitted to DODSSP, Philadelphia, PA.

(4) Address mail to: DODSSP, Building 4/D, Attn Subscriptions, , 700 Robbins Avenue,, Philadelphia, PA 19111-5094,.

(5) Customer Assistance: DSN 442-6257, Commercial (215) 697-6257.

(6) DODSSP Philadelphia web page also contains information on obtaining reports and other products generated by DAPS.

(7) Requisitions for classified specifications and standards will be submitted to DODSSP, with a statement of justification. The request may be on letterhead or FAX. Classified documents are available only through the proper releasing activity within the military services on a "need to know" basis.

(8) Certain Standardization Documents, e.g., "NOFORN" (No Foreign) and documents with Distribution Statements other than "A" (Approved for public release. Distribution is unlimited.) are issued to DOD activities only. Non-DOD activities should submit request for these items to the activity that originated the standardization document for approval.

c. MEDIA.

(1) The DODISS is available in "Hard Copy" (paper) and in CD-ROM. The DODISS is also on the DODSSP web-site facility and is available to view and download available documents:

(2) The basic edition is published yearly in July with cumulative bimonthly supplement lists of changes that are used in conjunction with the basic. The DODISS consists of four parts:

(a) Part I – Alphabetic Listing.

(b) Part II – Numeric Listing.

(c) Part III – Federal Supply Class Listing.

(d) Part IV – Appendix Cancelled Documents (published every three years).

(3) The DODISS in the paper form is available on subscription basis at no cost.

(4) The CD-ROM version is available for a subscription fee.

(5) The on-line DODISS can be accessed at no cost. It is available via the Internet at <http://dodssp.daps.mil>.

d. DODISS ONE TIME ISSUE.

(1) Submit request on Product/Subscriptions Order Form (DAPS-Phila 5270) to DODSSP, Building 4/D, Attn: Subscriptions, 700 Robbins Ave, Philadelphia, PA 19111-5094.

e. DODISS AUTOMATIC DISTRIBUTION.

(1) Navy and Air Force activities may be placed on Automatic Distribution by submitting requirements to DODSSP, Building 4/D, Attn: Subscriptions, 700 Robbins Avenue, Philadelphia, PA 19111-5094,

(2) All other DOD activities may submit their request for automatic distribution to DODISS through their respective Departmental Standardization Office (DEPSO).

(3) Following is a list of the proper addresses to use in procuring the DODISS:

(a) Army Activities: Submit request to DODSSP via:

Department of the Army
Distribution Operations Facility
1655 Woodson Road
St Louis, MO 63114-6128

Customer Service P.O.C. DSN 693-7305 ext. 266/268

(b) Defense Logistics Agency: Submit request to DAPS Philadelphia/DODSSP via:

Director
Defense Logistics Agency
Attn: DLA-SE
Cameron Station
Alexandria, VA 22314

(4) Government/Civil Agency/Industry/Individuals may obtain DODISS from DODSSP, Building 4/D Attn Subscriptions, 700 Robbins Ave, Philadelphia, PA 19111-5094

4. DATA ITEM DESCRIPTIONS (DIDS).

a. DIDs information as it applies to technical data is provided in Acquisition Management System and Data Requirements Control List (AMSDL 5010.12-L). DIDs define the data required of a contractor to successfully solicit for a government contract. DIDS specifically define the data content, preparation instructions, format, and intended use.

b. DODSSP issues DIDs as a complete set twice a year in April and October-called the AMSDL 5010.12L.

c. DIDs are available as a complete set, single issue for a fee using the Products/Subscriptions Order Form (DAPS-Phila-5270).

d. For an additional fee activities may also be placed on automatic distribution for updates to the DIDs sets by use of the DAPS-Phila-5270.

5. LIST OF FEDERAL/MILITARY/INDUSTRY SPECIFICATIONS AND STANDARDS, AND NAVAIR SERIES DOCUMENTS APPROVED BY THE NAVAL AIR SYSTEMS COMMAND, , MILITARY BULLETIN 544/1,/2, AND /3 (BOOK FORM).

a. Military Bulletin 544/1, /2, and /3 is published by the Naval Air Systems Command and is dedicated to indexing specifications, standards, and bulletins pertaining to NAVAIR cognizant equipment that have been adopted by NAVAIRSYSCOM.

b. Military Bulletin 544/1 is the alphabetical listing of active documents.

c. Military Bulletin 544/2 is the numerical listing of active documents.

d. Military Bulletin 544/3 is the listing of the cancelled/superseded specifications, standards, and

documents.

- e. Requests for Military Bulletin 544/1, /2, or /3 should be submitted to DODSSP.
- f. All documents that are listed in the DODISS will be requested from DODSSP ([WP 017 00](#)).
- g. Purchase Descriptions (PDs), NAVAIR Requirements (ARs) and NAVAIR Data (ADs) are management documents generated by NAVAIRSYSCOM. These documents are listed only in Military Bulletin 544/1, /2, and /3.
- h. These management documents should be ordered directly from NAVAIRSYSCOM HQ Attn: AIR-4.1.C.

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TECHNICAL PUBLICATIONS REQUISITIONING PROCEDURES

NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM

Reference Material

NATEC Fleet Liaison Division	WP 006 00
NAVAIR Technical Directives	WP 015 00
MILSTRIP/MILSTRAP Desk Guide	NAVSUP PUB 409
Supply Ashore Procedures	NAVSUP PUB 437
Supply Afloat Procedures	NAVSUP PUB 485
Naval Logistics Library	NAVSUP PUB 600
Fleet Use of MILSTRIP; Promulgation of	NAVSUPINST 4235.3
Department of the Navy Information Security Program Regulation	SECNAVINST 5510.36
Marine Corps Printing and Publications Regulation	Marine Corps Order P5600.31

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Record of Applicable Technical Directives

None

1. GENERAL.

a. This work package describes procedures to be used by Naval activities and other Department of Defense organizations requiring technical publications or technical directives that are under the management cognizance of the Naval Air Systems Command.

b. Additional information is provided to assist in procurement of publications issued by the Naval Supply System and instructions and directives issued by the offices of the Secretary of the Navy (SECNAV) and the Chief of Naval Operations (OPNAV).

c. The NAVAIRSYSCOM Publications distribution program is built around a computerized automatic "push to user" system where the requirements are established by the user. However, due to changes in requirements or other extenuating circumstances, it sometimes becomes necessary to submit single action, or onetime requests, through the "pull" process.

2. RESPONSIBILITIES OF NAVAL AIR TECHNICAL DATA AND ENGINEERING SERVICE COMMAND (NATEC), DEFENSE DISTRIBUTION DEPOT SUSQUEHANNA PENNSYLVANIA (DDDSP), and NAVAL INVENTORY CONTROL POINT-PHILADELPHIA (NAVICP-PHILADELPHIA).

a. Under the direction of the Commander, Naval Air Systems Command, technical publications distribution management is delegated to the Commanding Officer, NATEC, Code 3.3.

(1) NATEC Customer Services are briefly outlined on the NATEC website homepage, www.natec.navy.mil.

(2) The mailing address for NATEC, Code 3.3 is:

Commanding Officer
Naval Air Technical Data and Engineering Service Command
Bldg. 90, Code 3.3
P.O. Box 357031
San Diego CA 92135-7031

(a) The services available include:

1 Initial outfitting requests: Letter request to NATEC at the address shown ([WP 019 00](#))

2 Automatic Distribution: Submit ADRL files via email to adrl@navair.navy.mil. ADRL files may also be submitted by mail to NATEC at the address shown. You may contact the ADRL desk at DSN 735-2570/2561/2593 or at Commercial (619) 545-XXXX.

3 Publication research may be requested from NATEC by letter to the address shown; Attention Research, or email, distribution@navair.navy.mil, or DSN 735-2550.

4 Technical directives research may be requested from NATEC by email to, techdirectives@navair.navy.mil, or DSN 735-2287.

(b) Direct liaison with the NATEC Technical Publications Specialists (TPS) is available. TPS locations and phone numbers are listed in [WP 006 00](#).

(c) When unable to contact a TPS, fleet users may also contact the Fleet Liaison Division listed in [WP 006 00](#).

b. Receiving, storage, and shipment of technical publications are the supply responsibility of the Commanding Officer, DDDSP.

c. NAVICP-Philadelphia Customer Services are outlined on their Internet web page. The address for the web page is www.navicp.navy.mil.

(1) The services listed include:

- (a) Customer Support, requisition status: DSN 442-2626 or Commercial (215) 697-2626
- (b) Ordering Procedures,
- (c) Stock Number Information,
- (d) Product Description,
- (e) COG I Bulletin,
- (f) CD-ROM Disposal Information,
- (g) Other Publication Links.

d. The management of technical publications and dissemination of data at the user level is the responsibility of the user activity.

3. TYPES OF MATERIAL STOCKED AT DDDSP. COG I material is printed matter carried in the Navy supply system under the inventory management of NAVICP-Philadelphia. COG I material is divided into two major groups:

a. COG 0I: Includes Technical Publications, NAVAIR technical directives, Training Manuals, Ships Manuals of all types, Instructions and Repair Manuals for all types of equipment.

(1) Stock Lists, Indexes, Administrative Manuals, Navy Recruiting Aids, Rate Training manuals, Personnel Qualification Standards,

(2) Navy Directives/Instructions issued by Washington, DC Headquarters organizations,

(3) Cog 0I material is issued without charge,

(4) Publications are assigned a 13 character stock number used for ordering purposes with a unique LP appearing in the "country code" field,

(5) Navy Departmental Directives/Instructions (including NAVAIR technical directives) stocked at DDDSP are assigned a 13 character stock number for ordering purposes with LD appearing in the "country code" field.

b. COG 1I: Includes Forms, Laminated Placards, Labels, Decals, Lithographs, and TQL training material such as videotapes.

(1) Cog 1I material is chargeable and requisitions must have Fund Codes or Accounting Data assigned.

(2) Forms are all assigned a 13 character stock number used for ordering purposes with LF appearing in the "country code" field.

4. PROCUREMENT OF NAVAIRSYSCOM PUBLICATIONS AND DIRECTIVES.

a. CONSOLIDATED SUBJECT INDEX, OPNAV NOTE 5215.

(1) The Consolidated Subject Index is a listing of instructions issued by headquarters

organizations. The instructions are also available on the Internet website, <http://ned.s.nebt.daps.mil>.

b. UNCLASSIFIED SECNAV & OPNAV DIRECTIVES. This is a set of CD-ROMs issued to provide a source for unclassified OPNAV and SECNAV instructions and forms. The NAVICP-Philadelphia no longer stocks or issues paper copies of these instructions. There may still be some unclassified instructions available from NAVICP-Philadelphia, however, they will not be replenished as they are exhausted

(1) The CLASSIFIED instructions will continue to be stocked at NAVICP-Philadelphia.

(2) This CD-ROM set of 5 disks is issued quarterly.

(3) It is sponsored by the SECNAV/OPNAV Directives Control Office, Chief of Naval Operations (N09B35).

(4) The CD-ROM set is published by the Defense Automated Printing Service Office Philadelphia.

(5) Automatic distribution of one set (5 CD-ROMs) is made to the Navy activities listed in SNDL Part 1 and Part 2. Currently distribution is not made to Marine Corps activities. Marine Corps activities may request distribution of the CD-ROMs or distribution of paper copies of specific instructions. HQMC will assist activities in either option.

(6) Activities desiring a second set of the CD-ROMS may purchase them from DAPS Philadelphia. For assistance in ordering contact DAPS Philadelphia at DSN 442-2569.

5. REQUEST FORMS AND ORDERING PROCEDURES.

a. LETTER. A letter or fax may be used to request assistance from NAVICP Philadelphia in ordering non-stock numbered departmental directives.

b. However, those which have stock numbers, (see NAVSUP P2003), must be ordered from NAVICP Philadelphia in MILSTRIP via DAAS.

c. As already shown the unclassified SECNAV and OPNAV directives are on the CD-ROM set issued by OPNAV or at the website, < <http://ned.s.nebt.daps.mil> >.

d. NAVAIR instructions are listed on the web page, www.nalda.navy.mil/instructions/default.cfm.

e. MILITARY SPECIFICATIONS AND STANDARDS. The primary procedure for ordering all military and federal specifications and standards is to access the Web page www.dodssp.daps.mil. The procedures for viewing or downloading Military Specifications and Standards are contained in WP 016 00.

f. DD FORM 1348. This form is the standard MILSTRIP requisition form used throughout the Navy supply system.

(1) The form is used to initiate a one-time (supply action) request for NAVAIRSYSCOM technical manuals, technical directives and departmental directives. It is used only by activities submitting requisitions with exception data (i.e. no stock number).

(2) Complete instructions for use of DD Form 1348 are contained in NAVSUP PUBs 409, 437 and 485. Additional reference material on the use of MILSTRIP may be found in NAVSUPINST 4235.3.

g. DEFENSE AUTOMATIC ADDRESSING SYSTEM (DAAS).

(1) Use of DAAS is the required, fastest, most reliable and least expensive method of submitting MILSTRIP requisitions.

(2) NAVSUP Pubs 437 and 485 contain detailed guidance on the use of DAAS.

(3) DAAS REQUISITION TRANSMISSION.

(a) WEB Requisitioning (WEBREQ) is a DAASC Web product that provides customers a means to input materiel requisitions, cancellations, follow-ups, modifications, and Material Obligation Validation (MOV) documents. WEBREQ also provides status and response documents back to the user.

1 Requisitions submitted via WEBREQ reach DAASC almost immediately. The requisitioner can either order publications by entering individual records following the format of the DD FORM 1348 or by uploading a file created within the TPL Program and saved to a floppy disc.

2 Requisitioners must obtain a User Id and Password from DAASC before they can use the WEBREQ. The procedures are explained on the DAASC Home Page, www.daas.dla.mil.

3 Requisitioners can also check the status of publications and forms requisitions by calling NAVICP-P Customer Service at DSN 442-2626 or Commercial (215) 697-2626.

(b) Additional programs available to activities are:

1 DIELOG. DAAS Integrated Email Logistics System.

2 DAMES. DAAS Automated Message Exchange System.

3 DARS. DAAS AUTODIN Replacement System.

4 DDN. Defense Data Network

5 NLL. Naval Logistics Library

(c) Additional information and assistance with these programs can be obtained from the DAASC web page, www.daas.dla.mil.

h. REQUISITION FOLLOW-UP PROCEDURES.

(1) If an activity has not received any communications, i.e., status from NAVICP- Philadelphia, concerning its requisitions for publications within 45 days of the original request for CONUS based activities and 60 days for activities based outside of CONUS, they should submit a follow-up requisition via DAAS.

(2) Follow-up requisitions are submitted with the identical information as the original document with one exception. In the Document Identifier Card column 2 enter a "T". For example, if you originally submitted an "A05" document, the tracer should be an "AT5" document. This function is automatically performed by the TPL program each time you perform the MILSTRIP function when a requisition is over 45 days old or the last follow-up (tracer) was submitted over 45 days ago.

(3) Reordering without researching the current status of the initial requisition only causes duplicate publications to be received by the requester

i. EXPLANATION OF "STATUS" FROM NAVICP-PHILADELPHIA, FORMS AND PUBS BRANCH.

(1) Refer to the NAVSUP PUB 409, NAVSUP PUB 437, and NAVSUP PUB 485.

(2) Depending upon code selected, NAVICP Philadelphia will notify the requisitioning activity and/or the ship-to activity of the status of its requisition.

(3) Customers can also obtain status of their requisitions by obtaining a UserID and password for an account with DAASC named WEBVLIPS. The information for this account is available from www.daas.dla.mil. Assistance may be obtained from the Fleet Liaison TSPs with this program.

(4) Central Technical Publications Librarians must have a basic understanding of how to review status information on publication requisitions.

(5) For more specific answers to problems encountered with requisitions, refer to your local Supply Customer Service Facility or the cognizant NATEC Fleet Liaison Division Technical Publications Specialist (WP 006 00).

j. MATERIAL OBLIGATION VALIDATION (MOV) REPORT

(1) Each quarter on the 20th of January, April, July, and October the Naval Supply System (NAVICP-Philadelphia) reviews all requisition that are “aged, over 45 days”, that have been assigned the status codes of either BB or NB. This review is sent to the Customer Service Facility of your local supply activity.

(2) The CTPL must screen the MOV to determine the appropriate response to be made or the requisitions being reviewed will be cancelled by the supply system for failure to respond.

(3) The local Customer Service Facility will distribute and collect the responses and return them to NAVICP. The response procedures are included with the MOV.

(4) If you are not receiving the MOV, contact your Material Control Division. If they are not receiving it, contact your local Supply Customer Service Facility. You may also contact any NATEC Fleet Liaison Technical Publications Specialist for assistance. (WP 006 00).

k. REQUISITION FILE.

(1) Those activities not using the NATEC TPL program should contact the local Technical Publications Specialist for their area for assistance in establishing and maintaining the appropriate records of accountability for their requisitions.

(2) Each CTPL is responsible for ordering publications and will establish a local requisition log.

(a) At those activities using the NATEC TPL program, the order log prepared by the NATEC TPL program may be used.

(3) Local requisition logs may be discarded when the information has been entered into the TPL program database.

6. UNLISTED DOCUMENTATION.

a. Occasionally even after researching the NAVAIR indexes, i.e. NA 00-500A or NALDA, the user will be unable to identify technical documentation for a given weapon system or equipment. This situation will normally exist because of any of the following reasons:

(1) Manual release subsequent to index update.

(2) The document in question does not fall within the COG I Series.

(3) It may be an unnumbered commercial manual.

(4) It may be a publication under issue control of another DOD element.

b. **REQUESTS FOR ASSISTANCE WITH UNLISTED PUBLICATIONS** should be submitted by letter to the Commanding Officer, NATEC, Attn: Research Bldg. 90, P.O. Box 357031, San Diego, CA 92135-7031 or by email to distribution@navair.navy.mil. To assist the research personnel, all information available should be provided. Examples of the type of information to be provided are:

(1) Nomenclature or noun name.

(2) Type/Model/Series.

- (3) Serial number.
- (4) Manufacturer's name or identification code number, Commercial and Government Entity (CAGE).
- (5) Part number.
- (6) National stock number.
- (7) Identification to next higher assembly.
- (8) Aircraft or system application.

c. To enable the researcher to contact you for additional information, provide detailed point of contact (POC) information

- (1) Name
- (2) Rate/rank/grade
- (3) Activity name
- (4) Department/workcenter
- (5) Level of maintenance
- (6) Commercial phone number
- (7) DSN telephone number
- (8) Email address

d. Urgent requests will be accepted by telephone DSN 735-2570 or (619) 545-2570 or FAX DSN 735-2682 or (619) 545-2682.

7. ACTION TO BE TAKEN UPON RECEIPT OF WRONG PUBLICATIONS FROM NAVICP PHILADELPHIA.

- a. Review the requisition to determine if the material shipped agrees with the shipping document.
- b. Check to determine that the correct information was entered to requisition the material.
- c. If the requisition data is incorrect, take the following steps:
 - (1) If the requisition was created from within the CTPL program, verify that the stock number is in agreement with the NAVSUP P2003.
 - (2) Resubmit the requisition with the correct stock number information.
- d. If the wrong material is received the second time, contact your local Technical Publications Specialist, [WP 006 00](#).

8. DISPOSITION OF EXCESS PUBLICATIONS.

- a. The cost of postage and the cost of restocking are such that in most cases the publications that are in excess of the activity's requirements will be disposed of locally.
- b. Publications may be passed to any other Navy or Marine Corps activity requiring the publications.

c. DESTRUCTION OF UNCLASSIFIED TECHNICAL MANUALS.

(1) Although most technical manuals are unclassified, they are utilized as operational publications and should not be disposed of in the trash. Some options are:

- (a) large strip (1/2 inch) shredding
- (b) pit burning
- (c) recycling into pulp at a commercial facility (positive military control must be maintained)
- (d) Hand tear (or machine cut) each page into quarters. Maintain quarter page separation with bagging and place out for local refuse pickup. Ensure bags are left for pickup on alternating days.

NOTE

Ensure the Local Commanding Officer's instructions are followed in selecting one or more of the above destruction procedures.

- (2) Classified material. Dispose of as set forth in SECNAVINST 5510.36.

d. NAVAIR TECHNICAL PUBLICATIONS BINDERS. Pass them to another activity or return to NATEC. Contact your Technical Publications Specialist for assistance, [WP 006 00](#).

e. DISPOSITION OF UNCLASSIFIED CD-ROMs.

- (1) The disposition of unclassified CD-ROMs is by a recycling agreement with a civilian contractor.
- (2) If your local ADP has established a disposal program, comply with their procedures. If not, the following procedures are required:
 - (a) Send whole discs only, do not cut up.
 - (b) Scratch the disc on the front and back with a nail or something sharp.
 - (c) Ship discs without any packaging. DO NOT SEND ANY CD SLEEVES, PAPER, COVERS, MAILING ENVELOPES, ETC.
 - (d) Limit package weight to less than 50 lbs.
 - (e) The cost of shipping is charged to the activity.
 - (f) Ship to packages to:
 - NE-SAR Systems
 - 420 Ashwood Road
 - Darlington, PA 16115-9325
 - (g) The reference for this action is found on the NAVICP-Philadelphia web page, www.navicp.navy.mil.
- (3) Disposal of plastic CD-ROM disc at sea shall be per OPNAVINST 5090.1

f. PUBLICATIONS AUTHORIZED FOR TURN-IN. When publications are received in error or in excessive quantities, disposition instructions can be requested from NATEC, Code 3.3. The following procedures shall be adhered to:

- (1) The requisitioner must contact NATEC, Code 3.3 by sending email to

distribution@navair.navy.mil or DSN 735-2357, COM'L (619) 545-2357.

(2) Provide information identifying the revision date, change date and other details.

(3) NATEC will provide additional instructions on what to do with the material held by the activity.

g. MATERIAL NOT AUTHORIZED FOR TURN-IN. The following categories of material will not be sent to NATEC, but will be disposed of by the holding activity in accordance with existing instructions:

(1) Material which is not in all respects ready for issue.

(2) Classified material.

h. PROPER MARKING OF MATERIAL MAILED TO NATEC.

(1) All activities forwarding material to NATEC are requested to provide the following information on the outside of the envelope/carton:

(a) NAVAIR number.

(b) Quantity.

(c) Number of cartons.

(d) Cartons marked 1 of 2, 2 of 2, etc.

ISSUE PRIORITY CODE SYSTEM

NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM

Reference Material

The Uniform Material Movement and Issue Priority System (UMMIPS)..... OPNAVINST 4614.1

Alphabetical Index

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Normal Delivery Time Standards.....	3
Priority Designator	3
Urgency of Need Designator (UND).....	3

Record of Applicable Technical Directives

None

1. GENERAL.

- a. The issue priority code system is established to ensure that requirements are processed in accordance with the importance of the mission of the requesting activity and the urgency of need.
- b. The provisions of this system are applicable to all requisitioners authorized to request supply support from and within any military supply distribution system.
- c. This system establishes criteria for both the requisitioner and the distribution system.
- d. The Force/Activity Designator (FAD) and the Urgency of Need Designator (UND), although not directly applied to requisitions, are the governing factors needed to determine the Issue Priority Code which is applied directly to requisitions.
- e. A general background of the requirements for assigning these priority codes is provided below to afford a more thorough understanding of the issue priority code system.
- f. Refer to OPNAV Instruction 4614.1 for complete coverage.

2. FORCE/ACTIVITY DESIGNATOR (F/AD).

- a. A force/activity designator (Roman numerals I through V) is assigned by the Secretary of Defense, the Joint Chiefs of Staff, the Department of Defense (DOD) staff, or individual DOD components to indicate the mission essentiality of the unit, organization, installation, project, or program to meet national objectives.
- b. The FAD, combined with the Urgency of Need Designator (UND) code (an alphabetic character), selected by the requiring activity, determines the priority designator.
- c. This designator expresses the basic military urgency for material movement and issue transactions. The Force/Activity (F/A) consists of the following:
 - (1) A unit, organization, or installation performing a specific function or mission.
 - (2) A body of troops, ships, aircraft, or a combination thereof.
 - (3) A function, mission, project or program including those under military assistance (grant aid and/or sales).
 - (4) The FAD is assigned in accordance with the mission essentially as follows:
 - (a) Designator I. Primarily assigned only on combat conditions. This designator is assigned, however, during special peacetime missions, such as top national priority or declared emergencies.
 - (b) Designator II. Primarily assigned for combat ready forces maintained to deployed within 24 hours.
 - (c) Designator III. Primarily assigned to combat ready forces maintained to deploy within 30 days in support of those covered in Designator II.
 - (d) Designator IV. Primarily assigned to combat ready forces maintained to deploy within 30 to 90 days.
 - (e) Designator V. Assigned to all other activities, including administrative/staff units not covered in Designators I through IV.

3. URGENCY OF NEED DESIGNATOR (UND).

a. The urgency of need designator is assigned in relationship to the function or mission performed by the activity.

b. These designators (letters A through C) are assigned primarily as shown in [figure 1](#) and as follows:

(1) Designator A: Assigned for emergency and immediate requirements for non-available material without which the force/activity concerned is unable to perform mission or tasks. Assigned for material required to eliminate existing work stoppage.

(2) Designator B: Assigned for immediate/urgent requirements for non-available material without which impairs the capability of the force/activity concerned or the operational capability of aircraft/equipment. Missions can be performed but with decreased operational effectiveness and efficiency.

(3) Designator C: Assigned for material requirements for initial outfitting and filling allowances, scheduled maintenance, routine stock, repair or maintenance of supply support and stocks not immediately required.

4. PRIORITY DESIGNATOR.

a. Combining the assigned FAD and the appropriate UND will enable the requisitioner to determine the appropriate Priority Designator.

b. It should be noted that an assigned FAD normally limits the requisitioner to choosing from three priority designators consistent with the UND.

c. [Figure 1](#) will provide the user with a method of determining the right priority.

5. NORMAL DELIVERY TIME STANDARDS.

a. The following data provides normal delivery time standards:

PRIORITY	CONUS (DAYS)	O'SEAS (DAYS)
01-03	8	12-13
04-08	12	16-17
09-15	31	68-98*

* Provided timely surface transport is available to remote areas

UMMIPS: HOW TO DETERMINE THE RIGHT PRIORITY

		<u>UNGENCY OF NEED DESIGNATORS</u>		
		UNABLE TO PERFORM MISSION	IMPAIRED OPERATIONAL CAPABILTTY	ROUTINE
FORCE/ACTIVITY DESIGNATORS		A	B	C
I	IN COMBAT	1	4	11
II	POSITIONED FOR COMBAT	2	5	12
III	POSITIONED TO DEPLOY/COMBAT	3	6	13
IV	OTHER ACTIVITY & SELECTED RESERVE FORCES	7	9	14
V	ALL OTHERS	8	10	15

Figure 1. Issue Priority Designator Conversion Table

**ESTABLISHING AN AERONAUTICAL TECHNICAL PUBLICATIONS CENTRAL
LIBRARY**

NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM

Reference Material

NATEC Fleet Liaison Division	WP 006 00
Naval Aeronautical Publications Index	WP 009 00
Technical Publications Requisitioning Procedures	WP 017 00
Issue Priority Code System	WP 018 00
Central Technical Publications Library Operating Procedures	WP 020 00
Central Library Audit Procedures	WP 021 00
Dispersed Library Operation	WP 022 00
NATEC Technical Publications Library Program	WP 024 00
Naval Warfare Documentation Guide	NWP 0
Navy Comptroller Manual	Volume II, Chapter 5
Naval Aviation Maintenance Program (NAMM)	OPNAVINST 4790.2
Aircraft Launch and Recovery Equipment Maintenance Program (ALREMP)	OPNAVINST 4790.15
Naval Ordnance Maintenance Management Program (NOMMP)	OPNAVINST 8000.16

Alphabetical Index

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Automatic Distribution Errors	9
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CTPL Required Instructions, Publications and Documents	10
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Termination of Automatic Distribution Requirements	9
Training	3
Types of Libraries	3
Central Library	3
Dispersed Library	3
Naval Warfare Publications Library	4

Record of Applicable Technical Directives
None

1. GENERAL.

a. The technical manual system cannot operate effectively at the user level without a definitive management system. This control revolves around the technical publications library.

b. The aeronautical technical publications library serves two important logistics functions. First, it provides a positive source of up-to-date information for the use of technical personnel in the performance of their work. Second, it is the major source of reference information to facilitate personnel training and individual improvement.

c. To properly perform these functions, the technical library must maintain sufficient copies of applicable publications.

d. OPNAVINST 4790.2 directs all Navy and Marine Corps Aviation activities to the contents of this publication for establishment of an aeronautical technical publications library.

e. This Work Package (WP) provides operating activities with sufficient detail to establish a technical publications library system.

2. LIBRARY RESPONSIBILITY.

a. Activity Commanding Officers are responsible for the development, establishment, and operation of technical library services in support of local operations and maintenance.

b. Activity Commanding Officers shall designate an appropriate officer or Depot Department Head to implement and carry out policies and procedures to effectively maintain an aeronautical technical library.

c. Management of the technical library is a function assigned to the Quality Assurance (QA) Division of Navy and Marine Corps Aviation Units and to an appropriate Department at the Depots.

d. The technical library's responsibilities include functions and tasks as follows:

(1) Maintain a central library which is adequate to complete the assigned functions of the activity. Retention of master copies of publications within the Central Technical Publications Library (CTPL) is optional.

(2) Requisition, receive, screen, review, route, distribute, as necessary, and file all incoming technical publications.

(3) Establish dispersed libraries and necessary control functions.

(4) Establish and maintain a training program for assigned library personnel, including dispersed librarians.

(5) Develop an automatic verification program using the guidance provided in [WP 021 00](#).

(6) Establish and maintain a program to distribute data to dispersed libraries.

(7) Develop and maintain a program for classified technical data receipt, stowage, distribution, inventory, and disposition.

(8) Establish and maintain a program to audit the central library annually ([WP 021 00](#)) and dispersed libraries quarterly ([WP 022 00](#)), as a minimum.

(9) Develop an effective checklist so that discrepancies identified during audits can be identified and corrective action noted. Refer to OPNAVINST 4790.2 Computerized Self Evaluation Checklist (CSEC).

e. Quality Assurance (QA) Officers, Division Officers and key supervisors, i.e., QA Chief, Workcenter

Supervisors and Depot Supervisors, must become involved and knowledgeable of library operations. Of critical importance is the need to ensure that assigned personnel have the necessary supervision and support required to ensure all facets of library management are correctly functioning.

f. Outdated publications, wrong type and quantity of publications on hand, lack of use and lack of command attention are caused primarily by a limited knowledge of the Technical Publications Library (TPL) system. Often, because of the operational tempo and lack of personnel, TPL assignments are given to inexperienced and junior personnel. Because this frequently occurs, senior personnel must be capable of providing the much needed management guidance to the assigned TPL clerk.

g. Technical Publication Specialists (TPS) (WP 006 00) are available to assist the user community in any problem area related to technical publication libraries. The use of the TPS is encouraged, since they are a vital link between NATEC, the supply system and the user community. Problems and difficult situations can be minimized for all concerned through the prompt and effective utilization of the TPS.

3. TRAINING.

a. Personnel assigned to a Central Technical Publications Library (CTPL) must receive indoctrination and continuous training in library operation. Figure 1 is the CTPL billet description/assignment form. Training includes OJT with formal schooling available. The training of dispersed librarians is a responsibility of the Central librarian/command or the appropriate Departments at the Depots. Dispersed librarian training will be provided at least quarterly.

b. Information on formal schools may be obtained from the following:

(1) FLEET AVIATION SPECIALIZED OPERATIONAL TRAINING GROUP PACIFIC (FASOTRAGRUPAC) NAS North Island, San Diego, CA 92135, DSN 735-6336 or Commercial (619) 545-6336.

(2) FLEET AVIATION SPECIALIZED OPERATIONAL TRAINING GROUP ATLANTIC (FASOTRAGRULANT) NAS Norfolk, VA 23511, DSN 564-8967 or Commercial (804) 444-8967.

4. TYPES OF LIBRARIES. To be effective, the technical publication library must be a centrally managed function. Therefore, based on activity organization, there will normally be three types of libraries, a central library, and a number of dispersed libraries, and there may also be a Naval Warfare Publications (NWP) library.

a. CENTRAL LIBRARY.

(1) A central library shall be established to coordinate and manage technical publication functions.

(2) This library shall be solely responsible for the analysis of an activity's requirements, procurement of documents, receipt and local distribution, security compliance, maintenance, and update of all technical publications under their cognizance.

(3) The central library shall act as the activity's single point of contact with NATEC concerning automatic distribution requirements of all NAVAIR manuals including NATOPS/tactical manuals. Inventory control of the NATOPS/tactical manuals will require special management attention with the unit's NATOPS officer (WP 020 00).

(4) Because of the size and unique characteristics of the operating unit, it may be more feasible to establish an additional central library. When this system is elected, each library operation will be considered a central library, responsible for establishing/directing additional controls on dispersed libraries in accordance with WP 020 00.

(5) For continuity, effective operation and adequate training, personnel assigned to a CTPL should be retained in the billet a minimum of 1 year.

b. DISPERSED LIBRARY.

(1) When one central library is designated within the activity, all other libraries shall be subordinate to, and under the management control of the central library.

(2) Workcenter (WC) or Depot supervisors are responsible for informing the central library of additional manual requirements and replacement of damaged manuals.

(3) Dispersed library functions shall be assigned and performed as outlined in [WP 022 00](#).

(4) Dispersed libraries will be responsible for the storage, update, and user availability of the publications issued to them.

(5) Personnel assigned as a dispersed librarian should be retained in the billet a minimum of 6 months.

c. NAVAL WARFARE PUBLICATIONS LIBRARY.

(1) The Naval Warfare Publications Library provides for central administration of Naval Warfare Publications including aircraft tactical manuals (NWP 55 Series).

(2) The guidelines for the organization and administration of the Naval Warfare Publications Library are contained in the NWP 0, Naval Warfare Documentation Guide.

5. AERONAUTICAL PUBLICATIONS INITIAL OUTFITTING ALLOWANCES.

a. TYPES OF LISTS.

(1) General Aeronautical Publications List.

(a) This list consists of publications and directives of a general nature; the publications listed have no application to a specific weapons system.

(2) Aeronautical Publications by Weapons System.

(a) This list consists of publications and directives applicable to a specific weapons system or equipment. These lists can be further divided by levels of maintenance, i.e., organizational, intermediate, and depot level. An explanation of the column headings as follows:

1 PUBLICATION NUMBER. NAVAIR publication number.

2 STOCK NUMBER. Identifies basic publication. All updates will be forwarded with the basic publication.

3 QTY. Set number in NATEC database.

b. OBTAINING INITIAL OUTFITTING LISTS (IOL).

(1) Obtaining the required publications has been made relatively easy. Prior to submitting a request to NATEC distribution, the user is encouraged to update their automatic distribution requirements and contact the area NATEC TPS for assistance ([WP 006 00](#)), if required.

(2) Time frames for obtaining the required publications in a timely manner are essential. The following guidelines will be used in establishing milestones:

(a) The requesting activity shall ensure the publications are in-place prior to receipt of the first aircraft/equipment

(b) Request for IOL shall be submitted 4 months prior to receipt of the first aircraft/equipment.

(c) The requesting activity will ensure NATEC has 3 months lead time to process the tailored IOL. Mailing the IOL file is the least desirable method of submittal. Transmitting electronically is the most effective submittal method.

(d) Use of a priority designator in accordance with [WP 018 00](#) is appropriate. Use of a higher priority on the initial outfitting requisition must be substantiated by statements containing valid reasons for the higher priority requirement.

c. INITIAL OUTFITTING LETTER.

(1) A formal request on official letterhead for initial outfitting is mailed to

Commanding Officer,
ATTN: Distribution Bldg 90 IOL
NATEC
P. O. Box 357031
San Diego, CA 92135-7031

(2) A sample format for requesting an IOL is illustrated in [figure 2](#).

(3) The request must include the following information:

(a) Specific type of IOLs requested; i.e., F-14D, S-3B, and General Listing, etc.

(b) Statement as to the use of NATEC TPS. This identifies for NATEC headquarters personnel an additional point of contact and allows the activity to coordinate with the TPS prior to submission of the request.

(c) Level of maintenance for IOLs requested.

(d) Required date listing is needed by.

(e) The NATEC assigned account number if known. NATEC will assign the account number for a new activity.

(f) Complete mailing address

(g) UIC

(h) Point of contact

(i) Phone number

(j) Email address, if applicable.

(4) A sample format for submitting a tailored IOL back to NATEC for a commissioning is shown in [figure 3](#). Tailored IOL may be returned to NATEC via email (distribution@navair.navy.mil) or by mail. The letter must include the following information:

(a) Specific type of IOLs submitted; i.e., F-14D, S-3B, and General Listing, etc as an enclosure or attachment.

(b) Statement as to the use of NATEC TPS. This identifies for NATEC headquarters personnel an additional point of contact and allows the activity to coordinate with the TPS prior to submission of the request.

Chapter 5. (c) Unit Identification Code (UIC) as listed in the Navy Comptroller Manual, Volume II,

(d) Priority designator as determined in accordance with the requirements in [WP 018 00](#).

(e) Required delivery date for publications.

(f) The NATEC assigned account number if known. NATEC will assign the account number for a new activity.

6. OBTAINING PUBLICATIONS ON CD.

a. STANDARD DISTRIBUTION REQUIREMENTS LIST (SDRL) CD. Send email requesting SDRL CD to distribution@navair.navy.mil. Include organization, platform, UIC, distribution account no. (if known), and correct mailing address on the request. Allow three (3) weeks for processing and mailing lead time.

b. DEPLOYMENT CD. Send request through email to distribution@navair.navy.mil with requesting activity's organization, platform, UIC, distribution account no. (if known), correct mailing address and required date. Send request 3-4 weeks prior to required date. Allow two (2) weeks for mailing.

7. ESTABLISHING A TECHNICAL LIBRARY.

a. Initial outfitting begins with an initial outfitting letter on official letterhead from an activity that is newly commissioned or reactivated and from existing activities' transitioning to a new or different aircraft or missile model.

b. This request is submitted to NATEC distribution. NATEC personnel will prepare a file with the applicable technical manuals and technical directives in a .DBF (database) format and send file to activity via email or regular mail if no email address was provided.

c. The file will be forwarded to the requesting activity.

d. The activity will tailor the IOL for the quantities of each NAVAIR Technical Manual or Technical Directive required and submit the tailored IOL for requisitioning of the publications.

e. CTPL must enter a record into NATEC TPL program database for each copy of a NAVAIR manual requested and submit an ADRL file to NATEC Distribution.

f. On receipt of tailored IOL and ADRL files, NATEC forwards requisitions for appropriate supply action and updates the NATEC ADRL database. The activity will receive files indicating the following information:

(1) Document numbers used for the Commissioning.

(2) NAVAIR numbers that cannot be identified.

(3) NAVAIR numbers that are cancelled.

(4) NAVAIR numbers that are number assignments only.

(5) NAVAIR numbers that are restricted issue.

g. CTPL will note in the NATEC TPL program, and research rejections, where publications will not be received

h. Once the received publications have been recorded, filed and distributed, it is mandatory that a complete requirements analysis be conducted. Indexes should be screened to identify possible new requirements and all

activity publication users consulted to determine total requirements of publications.

i. Additional requirements can be satisfied immediately by submission of one-time MILSTRIP requisitions (WP 017 00).

j. If an activity desires up-to-date information on the status of its publication requisitions you have 3 options:

(1) Go to the DAAS Dayton website (WEBREQ) at www.daas.dla.mil. (NOTE: The DAAS website requires a user ID and password, which may be applied for online).

(2) Go to the NAVICP website at www.nll.navsup.navy.mil (NOTE: The NAVSUP website requires a user ID and password, which may be applied for online).

(3) Call NAVICP Customer Services at (215) 697-2626 (DSN 442-2626).

k. An ADRL file must be submitted to NATEC Distribution whenever automatic distribution requirements are changed, and must be submitted at least once annually. An alternative to submitting an ADRL annually is to update you automatic distribution requirements directly on the NATEC website. Updating your requirements on the NATEC website will NOT satisfy the requirement to submit an ADRL file from the TPL program at least annually.

l. The CTPL shall maintain an accurate ADRL for all manuals used by their unit. The ADRL must include all manuals required regardless of media or whether acquired via NATEC website, Joint Knowledge Caching Server (JKCS), CDROM, or in paper format. Each activity's CTPL shall continuously review and submit current ADRL requirements in order for NAVAIR to accurately assess funding requirement for initial print and distribution of manuals.

8. AUTOMATIC DISTRIBUTION REQUIREMENTS.

a. Automatic Distribution Requirements are those publications and technical directives an activity requires NATEC to distribute automatically when revisions or changes are released or when new publications or technical directives are created and distributed affecting equipment the activity is supporting.

b. Detailed instructions for submitting automatic distribution requirements of NAVAIR publications is contained in the NATEC Technical Publications Library (TPL) Program (WP 024 00).

c. Upon NATEC receipt of the Automatic Distribution Requirements List (ADRL) from an activity, it will normally take only a few days for the new requirements to take effect. However, receipts by the activity may not be visible for at least ninety (90) days, based on the requirements submitted and updating of the publications. Library personnel must ensure that issued/held publications are up-to-date by reviewing the TPL program Audit Report performed against the latest returned ADRL (WP 021 00).

d. NATEC will acknowledge receipt of new distribution requirements by email or letter depending on the method by which it was received. If no response is received by the activity within 30 days after submission, send follow-up by letter, message, email to distribution@navair.navy.mil, or fax to (619) 545-2722 (DSN 735-2722) to NATEC requesting status of ADRL file receipt.

e. NATEC personnel will upload the activity's ADRL file into a master distribution file.

f. Once an activity's ADRL has been entered, all future manual updates will be automatically distributed by NATEC through a mailing label system.

g. When a publication is issued or revised, mailing labels are released to a printer who distributes to activities identified on the mailing labels.

h. When an activity's movement changes their mailing address, NATEC Distribution must be notified by ADRL (90) days prior to their movement.

i. Contractors who elect to go on automatic distribution for publications should be aware that they will be charged, and verification of contract will be required in writing from the Defense command that entered into or manages the contract. For more information concerning cost of publications, contractors can contact NATEC by letter or FAX at Commercial (619) 545-2722 (DSN 735-2722) or by email to distribution@navair.navy.mil. Contractors who are not authorized to be on automatic distribution for NAVAIR publications may purchase from NATEC FOIA/Government/Industry Sales Branch by letter or Fax at Commercial (619) 545-2722 (DSN 735-2722) or by email to natecqualifiedcontractor@navair.mil. Contractors are not authorized to requisition NAVAIR publications from the supply system.

9. AUTOMATIC DISTRIBUTION REQUIREMENTS LIST (ADRL), OBTAINING A CURRENT.

- a. The ADRL is the activity's automatic distribution requirements on the NATEC master distribution file.
- b. A copy of the activity's ADRL is available on the NATEC website for review if the activity is receiving questionable documentation, i.e., receipt of wrong quantities of publications from the automatic distribution system.
- c. Letters, email or telephone calls requesting a copy of the activity's ADRL are accepted by NATEC (See [Figure 6](#)).
- d. Upon receipt of a returned ADRL from NATEC or downloading the file from the NATEC website, an activity should compare the listing with the TPL program ADRL file. This process will identify any discrepancies between the desired quantities as entered in the TPL program and what NATEC carries in the master distribution file. If changes are needed or errors are found, activities must submit corrections utilizing the ADRL function of the TPL program ([WP 024 00](#)) or by making the appropriate changes on their customer account on the NATEC website.
- e. Activities whose libraries contain more than 10 publications are required to submit ADRLs annually to NATEC. ADRLs must also be submitted when requirements change. Activities with 10 or less NAVAIR publications should submit a formal letter to NATEC to update their automatic distribution requirements along with a point of contact.
- f. Activities must place their actual requirements on their ADRLs to ensure receipt of required quantities. This includes requirements for electronic as well as paper publications. When the requirement for a publication is for electronic format only then the pub type in the TPL program must be <E> vice <N>. This will eliminate the distribution of excess paper manuals.

10. AUTOMATIC DISTRIBUTION MAILING LABEL ([Figure 4](#)).

- a. An understanding of the mailing label format is essential for library personnel. With this knowledge, obvious errors can be detected and corrective action taken.
- b. NATEC PSEUDO NUMBER. (Internal NATEC use).
- c. PUBLICATION NUMBER. Allows quick comparison of mailing label to contents of envelope.
- d. NATEC ASSIGNED ACCOUNT NUMBER. Consists of the activity's Standard Navy Distribution List (SNDL) number and a sequential number assigned by NATEC to identify individual activities.
- e. QUANTITY REQUESTED. Identifies quantity enclosed, and should correspond to activity ADRL requirements.
- f. NATEC Type Equipment Code. Aircraft/equipment type equipment code obtained from the master file and included in the TPL program.

11. PUSHED PUBLICATIONS.

- a. As new equipment/weapons systems are developed and procured by NAVAIR, the publications are

sometimes "PUSHED" to the user by NATEC based on the equipment codes submitted on your ADRL file as cited in [WP 024 00](#).

b. The user must be able to readily identify these PUSH publications and determine if:

- (1) The publications are, in fact, required and
- (2) The quantities are sufficient.

c. If these PUSH publications are determined to be required and the quantities require modification, then the user must submit an update to the ADRL. Note that PUSH publications are not automatically added to an activity's ADRL.

d. Prior to discarding the label from received publications, the user should review the label with the TPL database. If the publication is not in the TPL file, the publication could be one that was PUSHED to you based on the equipment codes you selected on your ADRL submission.

12. AUTOMATIC DISTRIBUTION ERRORS.

a. When errors in the automatic distribution system are encountered, the following action should be taken:

b. The cognizant NATEC TPS should be contacted for assistance. Most often, the problem can be resolved with the assistance of the TPS ([WP 006 00](#)).

c. If the problem cannot be resolved, a letter or email should be sent or telephone call made to NATEC.

d. Disposition of material received in excess shall be in accordance with the instructions contained in [WP 017 00](#), Disposition of Excess Publications.

13. TERMINATION OF AUTOMATIC DISTRIBUTION REQUIREMENTS.

a. When an activity no longer has requirements for automatic distribution of NAVAIR publications, a letter requesting cancellation will be submitted to NATEC 120 days prior to the deactivation date (i.e., decommissioning date) and discontinue sending ADRL files to NATEC.

b. A sample letter for terminating an ADRL Account number is contained in [Figure 5](#).

14. CTPL TRANSACTION FILE.

a. The CTPL will maintain the following minimum files (records):

(1) The most recent copy of the ADRL with transmittal form used to forward ADRL file.

(2) The most recent letter from NATEC acknowledging processing of ADRL and copy of the returned ADRL file forwarded on disk.

(3) A copy of all correspondence on automatic distribution requirements for the past year.

(4) Dispersed library audit results shall be retained by the CTPL, in workcenter order, for four consecutive audits (one year) and shall be reviewed for repeat discrepancies. These files will help identify trends.

(5) Annotated Computerized Self Evaluation Checklist (CSEC) (OPNAVINST 4790.2) for the CTPL and DTPL audits.

(6) A publication requisition log consisting of:

- (a) A log identifying all pertinent information on outstanding requisitions ([WP 017 00](#)).

(b) Record of current status information.

(7) A copy of the billet description/assignment form for CTPL and DTPL. And a copy of indoctrination syllabus for each DTPL (WP022 00).

(8) Completed Dispersed Technical Publications Library (DTPL) training attendance forms.

(9) A current copy of the TPL program COMPLETE LISTING of manuals.

(10) A current copy of the TPL program DEAD FILE.

(11) File of outstanding completed CECRs for the past quarter.

(12) IRAC trackers for the past six months (May be in either paper or digital format).

(13) Tech Directive Summary for past six months (May be in either paper or digital format).

15. CTPL REQUIRED INSTRUCTIONS, PUBLICATIONS AND DOCUMENTS.

a. The CTPL requires specific instructions and publications to assist in setting up and operating a library. [Figure 7](#) shows the minimum requirements.

b. Activities are encouraged to increase their files as necessary to properly support maintenance of assigned weapons system/equipment.

From: _____ Quality Assurance Officer
To: _____ (Name/Rate)

Subj: Central Technical Publications Librarian Billet Description/Assignment

Ref: (a) OPNAVINST 4790.2
(b) SECNAVINST 5510.36
(c) NAVAIR 00-25-100
(d) TYCOM TPL Instruction

1. Assignment: You are hereby assigned the billet of Central Technical Publications Librarian (CTPL). You are directly responsible to the Quality Assurance Officer in the performance of this duty. It is recommended you maintain this position a minimum of one year, and shall perform the duties of CTPL as outlined below.

2. Description: The CTPL responsibilities include, but are not limited to :

a. Maintain the activity's Central Technical Publications Library (CTPL) in a complete and current status per references (a) through (d).

b. Requisition, receive, screen, review, route, distribute as necessary and file all incoming technical publications.

c. Establish dispersed libraries and necessary control functions to distribute data.

d. Establish and maintain a training program for assigned library personnel, including dispersed librarians.

e. Develop an automatic verification program using the guidance provided in reference ©.

f. Develop and maintain a program for classified technical data receipt, stowage, distribution, inventory, and disposition in accordance with reference (b).

g. Establish and maintain a program to audit the central library annually, dispersed libraries quarterly, and detachment libraries on return, in accordance with reference ©.

h. Develop an effective check list/audit form to identify discrepancies during audits and corrective action noted in accordance with reference (a), Computerized Self Evaluation Checklist (CSEC).

3. I have read and understand the above listed duties and accept the related responsibilities.

Member's Signature _____

Date _____

CONCURRENCE:

QAO Signature _____

Date _____

Figure 1. Central Technical Publications Librarian Billet Description/Assignment Form

(COMMAND LETTERHEAD ONLY)
Date _____

From: Commanding Officer

To: Commanding Officer, Naval Air Technical Data and Engineering Service Command, Code 3.3A

Subj: Request for Initial Outfitting List

Ref: (a) NAVAIR 00-25-100

1. In accordance with reference (a), request appropriate IOLs be provided. This activity will use the the IOLs to submit requisitions for the listed NAVAIR publications and technical directives.

2. This activity (has been) (has not been) in contact with the area NATEC Fleet Liaison Division Technical Publications Specialist addressed in WP 006 00 of reference (a).

3. The following information is provided:

- (a) Appropriate aircraft/equipment/missile/general listing. _____
- (b) Required date of listings _____.
- (c) Level of maintenance _____.
- (d) NATEC assigned account number _____ NATEC will assign the code for a new activity.

4. Point of contact for this activity is: _____.
DSN _____ Commercial number _____.

5. Forward applicable listings to:

(Mailing Address)

or

Electronic Mail Address: _____

(Authorized signature)
By direction _____

Figure 2. Sample Request Initial Outfitting List

(SAMPLE ONLY)

(COMMAND LETTERHEAD ONLY)

Date

From: Commanding Officer

To: Commanding Officer, Naval Air Technical Data and Engineering Service Command, Code 3.3

Subj: Submission of Tailored Initial Outfitting List

Ref: (a) NAVAIR 00-25-100 dated _____.
(b) Navy Comptroller Manual, Vol II, Chapter 5.

Encl: (1) Tailored Initial Outfitting List (IOL)

1. Enclosure (1) is submitted in accordance with reference (a). Request subject tailored IOL be provided to this activity.
2. This activity (has been) (has not been) in contact with one of the NATEC Fleet Liaison Division Technical Publications Specialist identified in WP 006 00 of reference (a).
3. Requirements for automatic distribution will be/have been submitted in accordance with NATEC TPL program ADRL feature (WP 024 00).
4. The following information is provided:
 - (a) Appropriate aircraft/equipment/missile/general listing _____.
 - (b) Required date of listings _____.
 - © Level of maintenance _____.
 - (d) NATEC assigned account number: _____ NATEC will assign the code for a new activity.
 - (e) Force/Activity Designator _____ as determined in accordance with the requirements in WP 018 00.
 - (f) Unit Identification Code (UIC) _____ as listed in reference (b).
4. Point of contact for this activity is: _____.
DSN _____ Commercial number _____.
5. Forward applicable Commissionings to:

(Complete Mailing Address)

or

Electronic Mail Address:

6. Mail Publications to:

(Authorized signature)
By direction

Figure 3. Sample Submittal of Tailored Initial Outfitting List to NATEC

(SAMPLE ONLY)

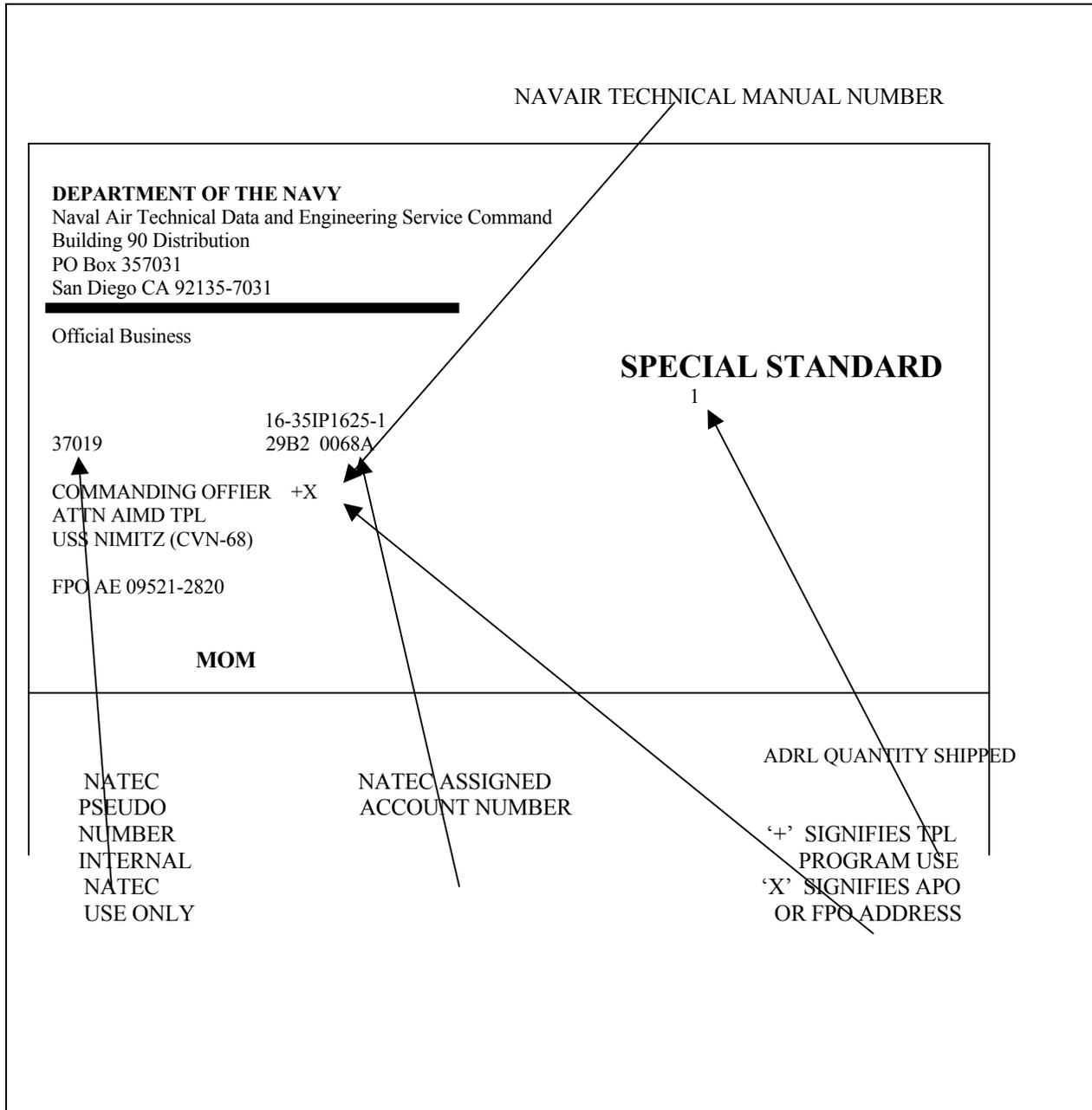


Figure 4. Sample Mailing Label

(COMMAND LETTERHEAD ONLY)

Date _____

From: Commanding Officer, _____
To: Commanding Officer, Naval Air Technical Data and Engineering Service Command
Subj: Termination of Automatic Distribution Requirements List (ADRL) for NATEC assigned Account Nr

Ref: (a) NAVAIR 00-25-100

1. Per reference (a), request cancel automatic distribution of NAVAIR publications under subject NATEC assigned Account number effective _____. The reason for this request is _____.

2. This activity (has been) (has not been) in contact with one of the NATEC Fleet Liaison Division Technical Publications Specialist identified in WP 006 00 of reference (a).

3. Point of contact for this activity is: _____
DSN _____
Commercial Number _____
Email: _____

(Authorized signature)
By direction

**Figure 5. Sample Letter Format Terminating Automatic Distribution Requirements Listing
(SAMPLE ONLY)**

Date

From: Commanding Officer, _____
To: Commanding Officer, Naval Air Technical Data and Engineering Service Command

Subj: Request for Automatic Distribution Requirements Listing

Ref: (a) NAVAIR 00-25-100

1. It is requested that a copy of this activity's Automatic Distribution Requirements Listing be provided in accordance with WP 019 00 of reference (a).

2. This activity (has been) (has not been) in contact with one of the NATEC Fleet Liaison Division Technical Publications Specialist identified in WP 006 00 of reference (a).

3. The following activity information is submitted:

a. NATEC assigned account number for NAVAIR manual distribution: _____

4. Point of contact for this activity is: _____

DSN _____ Commercial Number _____

5. Forward Automatic Distribution Requirements Listing to:

(Mailing Address)

or

Electronic Mail Address:

(Authorized signature)
By direction

Figure 6. Sample Letter Format Requesting Automatic Distribution Requirements Listing

SAMPLE ONLY)

<u>DOCUMENT</u>	<u>TITLE/SUBJECT</u>	<u>REQUIRED/OPTIONAL</u>
SECNAVINST 5510.36	Department of the Navy Information Security Program Regulation	REQUIRED
OPNAVINST 4614.1	Uniform Material Movement and Issue Priority System (UMMIPS)	REQUIRED
OPNAVINST 4790.2	Naval Aviation Maintenance Program	REQUIRED
OPNAVINST 4790.15	Aircraft Launch and Recovery Equipment Maintenance Program	OPTIONAL
OPNAVINST 8000.16	Naval Ordnance Maintenance Management Program	REQUIRED
OPNAVINST 5218.7	Navy Official Mail Management Instructions	REQUIRED
OPNAVINST 5400.2	Standard Navy Distribution List (SNDL)	OPTIONAL
NAVAIRINST 5215.12	Naval Air Systems Command Technical Directive System	OPTIONAL
NAVAIR 00-25-300	Naval Air Systems Command Technical Directives System Management and Procedures Manual	REQUIRED
NAVAIRINST 5600.15	Requests for Copies for Engineering Drawings for Naval Aircraft, Airborne Weapons, Aeronautical Equipment and Related Ground Support Equipment	OPTIONAL
NAVAIRINST 5600.20	Policy and Responsibilities for the Naval Air Systems Command Technical Manual Program	OPTIONAL

Figure 7. Management Control Documents Required for Operation of a Central Technical Publications Library (Sheet 1 of 2)

<u>DOCUMENT</u>	<u>TITLE/SUBJECT</u>	<u>REQUIRED ITEM</u>
NAVAIR 00-25-100	Naval Air Systems Command Technical Manual Program	REQUIRED
NAVAIR 00-25-566	Joint Interest List of Technical Manuals	OPTIONAL
NAVAIR 00-25-601	Management Procedures for Out of Production Category of Aircraft/Equipment Manuals	OPTIONAL
NAVAIR 00-500A	Naval Aeronautical Publications Index, Equipment Applicability List (Available on internet www.natec.navy.mil)	OPTIONAL
NAVAIR 01-700	Airborne Weapons/Stores, Manuals/Checklists Lists/Stores Reliability Cards	REQUIRED
AL-855TM-GYD-000	Technical Manual Quality Assurance Program Guide	OPTIONAL
NAVSUP Publication 409	MILSTRIP/MILSTRAP Desk Guide	REQUIRED
S0005-AA-GYD-030/TMMP	Guide for User Maintenance of NAVSEA Technical Manuals	OPTIONAL
S9086-AA-STM-000	Naval Ship Technical Manual Chapter 001	OPTIONAL
NWP 0	Naval Warfare Documentation Guide	OPTIONAL
IRAC Tracker	Cumulative Interim Rapid Action Change (IRAC) Tracker (Available on internet www.natec.navy.mil)	REQUIRED
TD Summary	Weekly Summary of Issued Technical Directives (Navy message) (Available on internet www.natec.navy.mil)	REQUIRED
COG "I" BULLETIN	Information concerning COG I material (NAVICP)	OPTIONAL

Figure 7. Management Control Documents Required for Operation of a Central Technical Publications Library (Sheet 2 of 2)

CENTRAL TECHNICAL PUBLICATIONS LIBRARY OPERATING PROCEDURES

NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM

Reference Material

NAVAIR Related Documentation Controlled by Other Navy or DOD Elements.....	WP 004 00
Supplementing Technical Manuals, Security and Classification Requirements.....	WP 008 00
NAVAIR Manual Deficiency Reporting Programs.....	WP 014 00
NAVAIR Technical Directives.....	WP 015 00
Establishing an Aeronautical Technical Publications Library.....	WP 019 00
Dispersed Library Operation.....	WP 022 00
Dispersed Library Audit Procedures.....	WP 023 00
NATEC Technical Publications Library Program.....	WP 024 00
Department of the Navy Information Security Program Regulation.....	SECNAVINST 5510.36

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Record of Applicable Technical Directives

None

1. CONTROL OF PUBLICATIONS.

a. A record in the NATEC Technical Publications Library (TPL) program will be used to control all publications managed by Central Technical Publications Libraries (CTPL). The NATEC TPL program is the primary management tool for CTPLs ([WP 024 00](#)).

b. The TPL database arranges the entries alphanumerically for all publications without regard to the originator or the media.

c. A record in the TPL database for technical directives is optional.

d. NAVAIR 17-20 series publications issued on microfiche will require a TPL database record only on the "Cross-Reference Indexes" identified in [WP 004 00](#).

e. DOD publications and commercial manuals not assigned NAVAIR numbers ([WP 003 00](#) and [WP 017 00](#)) may be entered into the TPL program.

f. Commercial manuals, when provided with new equipment, will be delivered to the CTPL for entry in the TPL program.

g. NAVSUP publications do not come under the management control of the activity CTPL unless distribution is controlled by the CTPL. Management control of NAVSUP publications normally falls under the control of the activity Supply/Material Control Officer. NAVICP Philadelphia publications are used by material control for ordering/reference purposes and these publications can be retained as a single copy issue, but only in material control. Automatic distribution, including quantities for NAVICP Philadelphia publications, is provided by way of the Standard Navy Distribution List (SNDL) system. Additional information on how to obtain NAVSUP publications is furnished in [WP 004 00](#), while more information on NAVICP Philadelphia publications is provided in [WP 017 00](#). NAVAIR related publications such as Illustrated Parts Breakdowns (IPBs) held by material control come under the management controls as established by the activity CTPL.

h. NATOPS/Tactical publications normally come under the management control of the activity's NATOPS Officer vice the CTPL.

2. CONTROL OF CLASSIFIED PUBLICATIONS.

a. As directed in Department of the Navy Information Security Program Regulation, SECNAVINST 5510.36, each Commanding Officer will designate a Security Manager to be responsible for the administration of the Information Security Program for the command.

b. Each command shall publish written security procedures specifying how the requirements of SECNAVINST 5510.36 will be accomplished within the command.

c. Close coordination between the CTPL and the command's Security Manager is essential. Procedures will be established for the dissemination of classified material originated or received by the CTPL ([WP 008 00](#)).

3. DESCRIPTION OF NATEC TPL PROGRAM DATABASE.

a. Review the NATEC TPL program documentation referred to in [WP 024 00](#).

4. RETENTION OF TPL PROGRAM FILES.

a. ACTIVE TPL FILE. Maintained on each publication until the publication has been revised or served its purpose. This file shall consist of all publications controlled by the CTPL including manuals received in digital format ([WP 025 00](#)).

b. DEAD FILE. TPL records will be placed in a dead file when the publication has been removed from the CTPL or a revision is incorporated.

(1) The TPL program annotates the reason for removal from the active database as entered by the CTPL clerk, i.e., "CANCELLED," "OBSOLETE," or "NOT REQUIRED."

(2) These records will be retained for a minimum of 1 year.

c. **DECK LOAD CHANGE.** Upon change of publication requirements, active TPL file records affected may be disposed of after workcenter audits have been completed. Ensure that publications are no longer held in the workcenter and ADRL requirements have been updated by the CTPL.

5. CTPL FILES ON AUTOMATED DATA PROCESSING (ADP) SYSTEMS.

a. The NATEC TPL Program is the only approved software for automation of a NAVAIR technical publications library (WP 024 00).

b. Publication information shall be maintained digitally in the TPL program. Storage and handling of classified information shall be accomplished in accordance with the requirements of SECNAVINST 5510.36. Entry of management information into the TPL program on classified manuals is required for tracking purposes the same as for unclassified manuals.

6. INVENTORY CONTROL.

a. All publications and changes including technical directives must be marked for proper inventory control.

b. A locally procured stamp shall be used on each publication. The stamp should include, as a minimum, the following items of identification:

(1) Activity

(2) Copy Number

(3) Location

c. The stamp will be placed on the title page that identifies the date of the publication.

d. For technical directives, the stamp shall be placed on the first page. The copy number is not required on technical directives at Depots. Control and distribution at depot level is maintained by workload control documentation.

e. For IRACs, the stamp shall be placed on the first page.

f. The CTPL will establish a simple numbering system as Copy Numbers for all manuals under CTPL control.

g. The CTPL shall issue a quarterly NATEC TPL program Locator listing for all workcenters. This listing arranges publications in an alphanumeric sequence and should be used by the workcenter as the readily accessible listing of publications and their locations.

7. BINDERS FOR PUBLICATIONS.

a. NAVAIR technical manuals and directives are drilled with three large and two small holes. The three large holes fit the posts of the special NAVAIR publication binders. The two small holes allow for use of the standard three-ring loose-leaf binder.

b. The specially designed NAVAIR binders are available through any Naval Supply stocking point. Stock Numbers for binders are:

(1) 2" Binder - S/N 7510-00-889-3519.

(2) 3" Binder - S/N 7510-00-889-3520.

c. Binders provide a uniform means of protection as well as storage of loose documents.

d. There is no restriction as to the type of binder used, as long as it fits the needs of the user and proper identification can be displayed.

8. STORAGE AND IDENTIFICATION OF PUBLICATIONS HELD BY THE CTPL.

a. Each manual/directive received will be placed in an appropriate binder.

b. When more than one manual or type of directive is placed in the same binder, the lowest NAVAIR manual or type directive number shall appear first on the spine, followed by the term "thru" and ending with the highest manual or directive ([figure 1](#)).

c. Classified Publications shall be stored in accordance with SECNAVINST 5510.36.

d. After filing the above documents the binders are stored on shelves as follows:

(1) Manuals shall be arranged alphanumerically for NAVAIR publications. Manuals should not be in different areas around the CTPL but in NAVAIR number sequence and all together.

(2) Technical directives shall be filed by specific type ([WP 015 00](#)).

(3) Publications other than NAVAIR, may be filed in separate binders under an appropriate general heading.

(4) MRC decks. MRCs shall be stored in appropriate card index containers in alphanumerical order.

(5) Instructions and notices shall be filed in separate binders in standard subject identification code sequence. An additional breakdown by major echelon, i.e., type commander, wing, etc., is also authorized.

(6) Non-standard size manuals should be stored in appropriate containers, conveniently located for ready use and the location noted in the TPL program database.

(7) CD-ROMs shall be arranged alphanumerically in CD-ROM number sequence and stored in an appropriate storage cabinet or container with the CD-ROM end label readily visible.

9. CHANGE ENTRY CERTIFICATION RECORD (CECR).

a. The CECR is used as a record by the CTPL to ensure updates to publications have been issued to and incorporated into dispersed libraries.

b. The CTPL shall establish procedures whereby updates to technical manuals are picked up or delivered on a daily basis.

c. The CECR is generated by the TPL program.

d. The CECR is a receipt for:

(1) The issuance of an update to be incorporated by the holder of a publication.

(2) The CTPL indicating an update has been issued for incorporation to a specific publication held by a designated workcenter.

(3) Ensuring old/discarded pages of a publication are accounted for in accordance with locally established procedures.

e. A CECR is initiated on all updates to publications issued to the dispersed libraries.

f. The CTPL will incorporate the update into the CTPL copy as soon as practical. Use of the CECR by the CTPL is not required on central library copies unless the revision or IRAC is being incorporated by other than the CTPL (i.e. an appropriate QAR). If there are multiple librarians working in the library the use of the CECR is a good way to keep track of who actually incorporated the change.

g. If discrepancies are identified, the update will not be issued to the dispersed libraries. Additional guidance and assistance shall be requested from the QA division supervisor or appropriate Depot Department.

h. The CTPL shall train the dispersed librarian(s) in the use of the CECR and the proper methods of making the various types of changes to publications held (WP 022 00).

10. CHANGE ENTRY CERTIFICATION RECORD (CECR) FILE PART 1.

a. The CTPL shall establish a CECR tickler file containing the following:

(1) A 2 day file of CECR PART 1s for IRACs. Due to the critical nature of the change, IRACs shall be incorporated by the workcenter within 2 working days of receipt from the CTPL. For those programs still issuing formal changes this also applies to Rapid Action Changes (RACs).

(2) A 5 day file of CECR PART 1s for routine revisions/notices. Routine revisions and notices shall be incorporated by the workcenter within 5 working days of receipt from the CTPL.

b. The CTPL training of dispersed librarian(s) shall outline the procedures of when and where to pickup the CECR and publication(s) consistent with the time limitations set forth in the preceding paragraph.

c. This tickler file is a suspense record of CECR PART 1s issued to dispersed libraries along with the appropriate publication change

d. The CTPL should set the CECR file up sequentially by due date to facilitate a daily review of outstanding revisions/changes.

e. The CECR PART 1 is removed from the tickler file and discarded upon receipt of the completed CECR PART 2, indicating applicable action has been completed.

11. CHANGE ENTRY CERTIFICATION RECORD (CECR) FILE PART 2.

a. The CTPL shall establish a file of CECR PART 2s maintained in dispersed library sequence.

b. The CECR PART 2 shall be returned to the CTPL along with cancelled publications or superseded pages, indicating completion of the applicable change or revision to the publication has been completed. Appropriate security measures will be adhered to when returning classified publications to the CTPL.

c. After proper annotation in the TPL program by the CTPL, the CECR PART 2 file shall be maintained in dispersed library sequence. This file may be disposed of after successful completion of the next Quarterly Audit conducted on the dispersed library (WP 023 00).

12. INCORPORATION OF UPDATES TO NAVAIR TECHNICAL PUBLICATIONS.

a. There are currently four approved methods of updating technical publications: Revisions, Interim Rapid Action Changes (IRACs), Notices and Pick-up Revisions. As the electronic age of technical manuals progresses formal changes will be discontinued in favor of complete revisions and IRACs.

b. All other sources of updates to NAVAIR Technical Manuals are unauthorized and must be referred to NATEC via the TPDR system for appropriate action (WP 014 00).

c. REVISIONS.

(1) This is a complete reissue of a manual with all change information incorporated.

d. INTERIM RAPID ACTION CHANGES (IRACs).

(1) In accordance with WP 007 00, there are two types of IRACs (A and B).

(2) The following procedures shall be used when incorporating IRACs:

(a) Insert a copy of the IRAC directly behind the title page and note its existence on the manual page to which it applies.

(b) Mark the specific change area affected with a vertical line, for double-column material, in the center margin if the inner paragraph is affected and the outer margin if the outer paragraph is affected. For single-column material, mark the specific change area affected with a vertical line in the margin opposite the binding edge. The line shall extend the entire length of the material affected. A pencil should be used to enter the IRAC number in the margin in the event of another IRAC affecting the same area.

(c) If the IRAC directs the insertion of a new page into a manual or a new card into an MRC deck then the new page or card shall have the appropriate identifying information across the top and be annotated with the statement "SEE IRAC ##" in the text area of the page or card.

(d) Enter the IRAC number of the IRAC message that effected the change (figure 2) (i.e. "See IRAC 3") in pencil in the margin.

(e) Retain all IRACs, including cancelled IRACs, in the manual until receipt of the next formal update to the manual that includes a reference to each IRAC. Annotate the cancelled IRAC in the appropriate margin, indicating that it has been cancelled and by what authority (i.e. CANCELLED BY IRAC 4).

(3) The following procedures shall be used when incorporating IRACs affecting manuals on CD-ROM: Affix an adhesive label to the CD-ROM case annotated with the applicable NAVAIR publication number and the IRAC number. Maintain the IRAC on file until receipt of the superseding CD-ROM. The information on the adhesive label should be legible and positioned to allow for additional updates as they occur.

e. NAVAIR TECHNICAL MANUAL (TM) NOTICES.

(1) This is the method for correcting minor errors in NAVAIR technical publications that do not require the issuance of a formal change.

(2) NAVAIR TM NOTICES shall not be used to correct and/or change the technical content of a NAVAIR technical manual.

(3) NOTICES shall apply only to unclassified TMs, including periodic maintenance requirements manuals issued as cards, and checklist. NAVAIR NATOPS/Tactical manuals are excluded from this method.

(4) Incorporate TM NOTICES as follows:

(a) Retain NAVAIR TECHNICAL MANUAL (TM) NOTICE sheets (figure 3) directly behind the manual Title Page prior to any IRACs.

(b) Retain NOTICE until incorporated by a revision.

f. PICK-UP REVISIONS.

(1) This is an economical way of putting out a complete manual to alleviate a low stock situation in the warehouse. Before printing a new change the change is collated into the manual and the whole manual is printed for distribution and stock.

(2) A pick-up revision incorporates the basic manual, all previous changes and the new data that would require the issuance of an additional change. Only those changed, revised or added WPs/pages shall have the current change number and date. Other existing WPs/pages shall be reissued without changes to dates, change symbols or other modification. A supersedure notice is placed on the title page as reading:

(a) This manual supersedes A1-XXXXXX/NAVAIR XXXXXX dated _____ with change _____. The latest change information, change _____ dated _____ has been incorporated in this issue.

13. MANAGEMENT OF TECHNICAL DIRECTIVES (TD).

a. Upon receipt of a TD, the CTPL shall apply the control stamp to copies received. Entry into the TPL program is optional.

b. Place all extra copies in a pending file.

c. Route a copy of the TD to the Program Manager/Quality Assurance (QA) supervisor, who shall review the TD for applicability to assigned equipment. This may necessitate use of other workcenters within the activity, i.e., Maintenance Control (M/C), etc.

d. Once the status of the TD has been determined, the CTPL will route applicable copies to M/C for the purpose of requisitioning required material or compliance.

NOTE

A copy of the technical directives and changes related to Aviation Life Support Systems (ALSS) will be maintained in the ALSS workcenter.

e. A master file copy of the TD will be filed in the CTPL. Annotate the filed copy as to location of other issued TD copies.

f. Random duplication of TDs must be avoided. Often TDs will be issued as Amendments, Revisions etc. The CTPL shall obtain and provide additional copies of technical directives as needed to support detachments of the parent unit. Positive control must be maintained by the CTPL.

g. Annotation of page 1 of the TD maintained by the CTPL or use of the NATEC TPL program, as to location of other copies, is considered sufficient control.

h. When TD copies are returned, the CTPL will dispose of them in accordance with local procedures. An appropriate annotation will be made on the master file copy, i.e., "VP-60, 010, returned 11/24/98" (figure 4). The NATEC TPL program record for return copies shall be wiped from the database if the TD had been entered.

i. Upon receipt by the CTPL, the Weekly Summary for Issued Technical Directives should be processed and retained for reference in accordance with [WP 021 00](#).

14. REPRODUCTION OF PUBLICATIONS.

a. Reproduction of publications is authorized under the following conditions:

(1) Source of material for reproduction is an authorized CTPL copy of the publication. A digital publication downloaded from the NATEC website or received from NATEC on a CDROM would be considered an authorized copy.

(2) Requirement for reproduction is to replace missing or damaged portions of an authorized copy of

a publication or a requirement for an additional copy.

b. All reproduced copies will be managed in the same manner as the original by entering them into the TPL program and affixing appropriate library stamps. The copy held by the dispersed library must, as a minimum, be comprised of: the Title Page, all of the List of Effective Pages (LOEPs), and the Work Packages or pages desired by the Work Center Supervisor.

15. CANCELLED PUBLICATIONS.

a. Publications may be cancelled by other, superseding publications. Supersedure notices on title pages of superseding publication identify superseded/cancelled publications.

b. Publications may also be cancelled without being superseded by other publications. Included in this category are publications supporting aircraft or equipment no longer in the NAVAIR inventory.

c. Cancelled publications are listed in the NATEC generated ADRL.

d. NAVAIR publications listed as cancelled in the NATEC generated ADRL should be kept as long as their related equipment continues to be used by the activity. This does not apply to publications that are cancelled and superseded by other manuals.

e. Questions or proposals concerning cancellations of publications should be submitted to NATEC.

f. If you have been authorized by higher authority to operate and maintain equipment no longer in the NAVAIR inventory, you may submit a letter of request, with justification, on official letterhead to NATEC Technical Manual Library/Archives Section by mail or fax, (619) 545-2682, DSN 735-2682, for archival copies of cancelled publications.

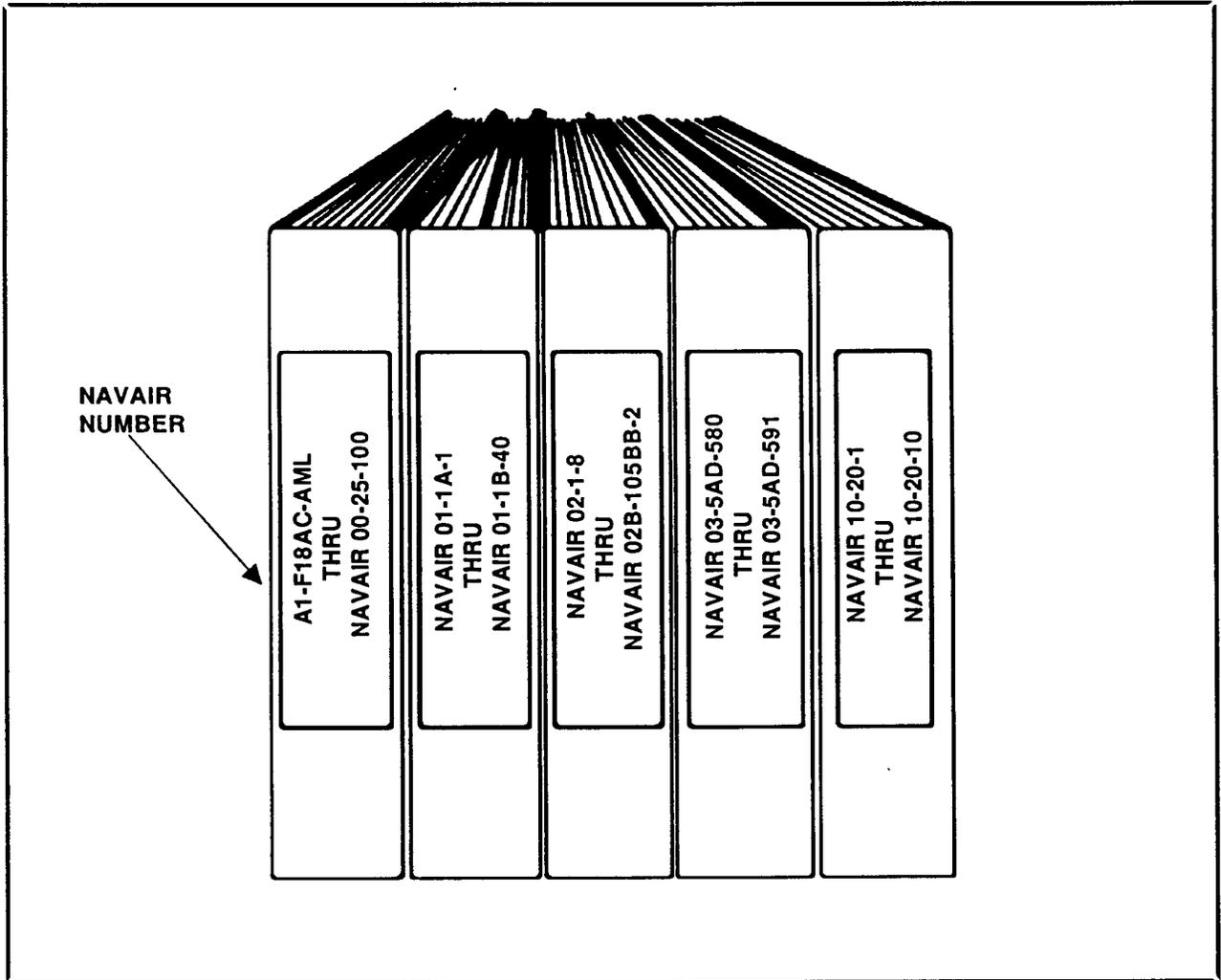


Figure 1. Identification Strip in Looseleaf Spine

SECTION XVI

NAVAIR 01-1A-20

TUBE ASSEMBLY CLEANING

16-1 Cleaning of Tubing.

CAUTION

16.2 Cleaning Solvents. It is imperative that all tubing shall be appropriately cleaned after fabrication to preclude contamination of the particular system in which it will be installed. Cleaning should be accomplished using a suitable compound, preferably Dry Cleaning Solvent, Federal Specification P-D-680 Type II. Should the preferred solvent be unavailable, the following alternates may be used:

- a. O-T-634 Trichloroethylene
- b. O-T-236 Tetrachloroethylene
- c. MIL-T-81533A 1.1.1. Trichloroethane
- d. MIL-C-81302 Trichlorotrifluoroethane

WARNING

The preceding instructions do not apply to tubing assemblies intended for use in oxygen systems. Oxygen tube assemblies shall be cleaned in accordance with the following procedure.

16-3 Cleaning Oxygen System Tubing Assemblies. After the tubing is formed and the ends flared, all oil, grease, and foreign material should be removed from the tubing by the following instructions of paragraph 16-4.

It is dangerous to omit any of the steps specified. The cleaning material to complete all of the steps should be available before starting the cleaning procedures.

16-4 Removing Oil and Grease From Oxygen System Tubing Assemblies. A vapor degreasing method with stabilized trichloroethylene, Federal Specification O-T-634, Type 2, should be used. Proper cleaning is assured by allowing tubing and fitting to remain in the vapor degreaser until the temperature specified in the manufacturer's instructions is reached. Tubing is blown clean and dried with a stream of clean, dry, water-pumped air. Every precaution should be taken to determine if the tubing and fittings are clean. Oil pumped air should not be used as a substitute for water-pumped air because oil would be deposited in the tubing. Oxygen, Federal Specification BB-O-925, or clean, dry water-pumped nitrogen, Federal Specification BB-N-411, may be used in place of water-pumped air. After cleaning, aluminum tubing should be treated with a brush coat of chemical film, Military Specification MIL-C-5541.

SEE IRAC #2

SEE IRAC #2

Figure 2. Interim RAC Identification (Odd Page)
(Sheet 1 of 2)

SECTION XVI
TUBE ASSEMBLY CLEANING

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- d. MIL-C-81302 Trichlorotrifluoroethane

WARNING

The preceding instructions do not apply to tubing assemblies intended for use in oxygen systems. Oxygen tube assemblies shall be cleaned in accordance with the following procedure.

5-3 Cleaning Oxygen System Tubing Assemblies. After the tubing is formed and the ends flared, all oil, grease, and foreign material should be removed from the tubing by the following instructions of paragraph 5-4.

SEE IRAC #2

CAUTION

It is dangerous to omit any of the steps specified. The cleaning material to complete all of the steps should be available before starting the cleaning procedures.

16-4 Removing Oil and Grease From Oxygen System Tubing Assemblies. A vapor degreasing method with stabilized trichloroethylene, Federal Specification O-T-634, Type 2, should be used. Proper cleaning is assured by allowing tubing and fitting to remain in the vapor degreaser until the temperature specified in the manufacturer's instructions is reached. Tubing is blown clean and dried with a stream of clean, dry, water-pumped air. Every precaution should be taken to determine if the tubing and fittings are clean. Oil pumped air should not be used as a substitute for water-pumped air because oil would be deposited in the tubing. Oxygen, Federal Specification BB-O-925, or clean, dry water-pumped nitrogen, Federal Specification BB-N-411, may be used in place of water-pumped air. After cleaning, aluminum tubing should be treated with a brush coat of chemical film, Military Specification MIL-C-5541.

SEE IRAC #2

Figure 2. Interim RAC Identification (Even Page)
(Sheet 2 of 2)

NOTICE

NOTICE

NAVAIR 01-75PAA-3-1
12 NOVEMBER 1991

NAVAIR 01-75PAA-3-1, Rapid Action Change 9, dated 11 November 1991, has errors on the "A" Page, due to printer's error. Remove and discard previously provided "A" page and replace with attached "A" page.

Place this page behind title page after incorporation.

NOTICE

NOTICE

Figure 3. NAVAIR TM NOTICE

<p>Activity VP60</p> <p>PUB NO. MASTER COPY</p> <p>Workcenter 040 110 returned 11/24/98</p>

DEPARTMENT OF THE NAVY
 NAVAL AIR SYSTEMS COMMAND
 BLDG 2272, UNIT IPT
 47123 BUSE ROAD
 PATUXENT RIVER, MD 20670-1547

PMA(F)223
 ISSUE DATE: 31 December 1998
 RESCISSION DATE: 31 December 2006

DISTRIBUTION STATEMENT C. Distribution authorized to U.S. Government agencies and their contractors to protect publications required for official use or for administrative or operational purposes only; effective (See Issue Date). Other request for this document shall be referred to Commanding Officer, Naval Air Technical Data and Engineering Service Command, Bldg 2, P.O. Box 357031, San Diego, CA 92135-7031.

DESTRUCTION NOTICE. For unclassified, limited document, destroy by any method that will prevent disclosure of contents or reconstruction of the document.

P-3 AIRFRAME CHANGE 523

(TDC 50)

SUBJECT: Avionics, OK-620APQ Control-Indicator Group as a replacement for the AN/APS-125 Indicator Group in P-3B aircraft, installation of (WUC 72160)

- REFERENCES: (a) NAVAVNDEPOT Alameda ECP No. AL-772 of OCT 1989
 (b) CNO Washington DC 282325Z Jul 1989
 (c) NAVAIRSYSCOM ACCB No. 901-269R1 approved 23 May 1991
 (d) Installation Data Package – 91030039 (0GCL4)

ENCLOSURES: Not Applicable

DOCUMENTATION EFFECTED:

- | | |
|--|--|
| 1. NAVAIR 01-75PAA-0
1 Nov 1988 | Technical Documentation List, P-3A
P-3B and P-3C Aircraft |
| 2. NAVAIR 01-75PAA-1
15 Nov 1983
Chg 3 15 Jun 1987 | NATOPS Flight Manual, P-3A and P-3B
Aircraft |
| 3. NAVAIR 01-75PAA-1.1
15 Nov 1983
Chg 3 15 Jan 1987 | NATOPS Flight Manual, NFO/AIRCREW, P-3A
and P-3B Aircraft |

Figure 4. Technical Directive with a Control Stamp Affixed

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CENTRAL LIBRARY VERIFICATION/AUDIT REQUIREMENTS

NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM

Reference Material

NAVAIR Related Documentation Controlled by Other Navy or DOD Elements.....	WP 004 00
NATEC Fleet Liaison Division	WP 006 00
Technical Publication Update Methods.....	WP 007 00
Naval Aeronautical Publications Index	WP 009 00
NAVAIR Technical Directives.....	WP 015 00
Technical Publications Requisitioning Procedures.....	WP 017 00
Establishing an Aeronautical Technical Publications Central Library	WP 019 00
Equipment Applicability List.....	NAVAIR 00-500A
Airborne Weapons/Stores Publication Index.....	NAVAIR 01-700
Weekly Summary for Issued Technical Directives	NATEC website/message
Interim Rapid Action Change (IRAC) Tracker	NATEC website/message
Technical Documentation List.....	assigned by aircraft model

Alphabetical Index

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Purpose	2
Verification Requirements.....	2
Automatic Distribution Requirements List (ADRL).....	3
Interim Rapid Action Change (IRAC) Tracker	2
Weekly Summary for Issued Technical Directive (TD).....	2

Record of Applicable Technical Directives

None

1. PURPOSE.

a. Conducting verifications and audits of the Central Technical Publications Library (CTPL) is a responsibility assigned to the Quality Assurance (QA) Division of Naval aviation units and to the responsible Department at the Depots.

b. Verifications as defined in this work package (WP) shall consist of procedures to confirm that all applicable NAVAIR publications and technical directives (WP 015 00) distributed by the NATEC automatic distribution system (WP 019 00) have been received by the CTPL.

c. Audits as defined in this WP shall consist of procedures to ensure that the NAVAIR publications and technical directives (WP 015 00) maintained in the CTPL (WP 019 00) are up to date.

d. Figure 1 lists research/verification reference documents and their frequency of issue, and describes the primary purpose of each listed reference.

(1) Items identified as "RESEARCH" documents enable the CTPL librarian to identify the availability of NAVAIR publications and technical directives on an as-needed basis.

(2) Items identified as "VERIFICATION" documents shall be used to verify and annotate that the applicable and required NAVAIR publications and technical directives have been received by the CTPL.

2. VERIFICATION REQUIREMENTS. As each of the following VERIFICATION documents is received, the CTPL librarian will review the applicable sections of each document and ensure that required publications and technical directives have been received or accounted for.

a. WEEKLY SUMMARY FOR ISSUED TECHNICAL DIRECTIVES (TD) (figure 2). This is a weekly message report released by NATEC to all Type Commanders (TYCOMs) listing TDs that have been released during the previous week. When fleet users fail to receive message TDs, the appropriate TYCOM should be notified. Copies of TD summaries shall be maintained on file by each activity for a period of 6 months. The file of TD summaries may be in either paper or digital format.

(1) Interim TDs are used to dispense urgent action information and are released in Naval message format to a pre-selected distribution.

(2) However, formal TDs may be in the distribution cycle and as yet not received. TDs identified as being applicable but not received shall be annotated on the summary and procured by the CTPL librarian and reviewed by cognizant personnel.

(3) The Weekly Summary for Issued Technical Directives is also available on the NATEC website at www.natec.navy.mil.

b. INTERIM RAPID ACTION CHANGE (IRAC) TRACKER (figure 3). The IRAC tracker is issued weekly and is available on the NATEC website (www.natec.navy.mil). Copies of IRAC trackers shall be maintained on file by each activity for a period of 6 months. The file of IRAC trackers may be in either paper or digital format.

(1) Upon receipt of the IRAC tracker, an appropriate review and annotation shall be conducted by the CTPL librarian to verify that all applicable IRACs have been received.

(2) Applicable IRACs that have not been received shall be obtained by the CTPL librarian and reviewed by cognizant personnel.

(3) Since the IRAC is issued by message, the issue of a missing IRAC can normally be resolved by directing an inquiry to the administrative section or local message center citing the message date-time group. Missing IRACs can also be downloaded from the NATEC website indicated above or requested from the appropriate TYCOM.

(4) A complete listing of all outstanding IRACs is contained on the NATEC website at www.natec.navy.mil.

c. PROCESSED AUTOMATIC DISTRIBUTION REQUIREMENTS LIST (ADRL).

(1) The processed ADRL file is a computer generated listing containing all NAVAIR publications controlled by NATEC that the user currently receives via automatic distribution (WP 019 00).

(2) The processed ADRL will be provided each time an activity submits their requirements (ADRL).

(3) Upon receipt of the processed ADRL file from NATEC the CTPL shall execute the AUDIT Process of the NAVAIR TPL program to compare the listing with their current requirements. (Perform an audit)

(a) Any errors noted shall be corrected by submission of a new ADRL.

(b) Updated requirements which are not the result of error shall be handled in accordance with WP 019 00.

(4) Publications are often "PUSHED" to the user. If this type of publication is received and is not listed on the ADRL, the CTPL will determine if the publication is required and if the quantity is sufficient. If the publication is required and not listed or the quantity is incorrect the TPL program should be corrected and a new ADRL be submitted to NATEC. By updating the ADRL with any new (PUSHED) publication, the user will be placed on distribution for future revisions.

(5) As each piece of official mail is received, the following shall be accomplished:

(a) Verify that the contents of the package agree with the label (figure 4). If contents disagree with the label, send original label (or photostatic copy) with what was actually received (i.e., publication number and quantity received) to Naval Air Technical Data and Engineering Service Command, P.O. Box 357031, San Diego, CA 92135-7031. The correct material will be shipped to the activity without further action.

(b) Verify that the mailing label agrees with the ADRL. If mailing label disagrees with ADRL, make certain that the item is not a "PUSHED" publication such as described in paragraph 7.d.(4). Otherwise, send original label (or photostatic copy) with submittal of what was actually received (i.e., publication number and quantity received) to Naval Air Technical Data and Engineering Service Command, P.O. Box 357031, San Diego, CA 92135-7031 with explanation of what is incorrect.

(c) Compare activity needs from the TPL Program against the quantity listed on the NATEC ADRL. If the quantity received agrees with the mailing label and the ADRL, but is insufficient, submit a revised ADRL and requisition additional requirements.

(6) Additional assistance on any problem related to the user's distribution of NAVAIR technical manuals may be obtained from one of the NATEC TPSs (WP 006 00).

(7) By following day-to-day verification requirements as described in these instructions, currency of the publications in the CTPL is assured.

3. AUDIT REQUIREMENTS.

a. Audits of the central library shall be conducted by a Quality Assurance Representative (QAR) to ensure that the publications and technical directives used by the activity are up-to-date.

b. The central library shall be audited at least annually, and whenever one of the following events occurs:

- (1) Upon any change in mission or deck load/aircraft assignment.
- (2) If the CTPL librarian is replaced.
- (3) When directed by higher authority.

c. Results of an annual audit should determine that:

- (1) All publications held in the central library are current.
- (2) TPL program database is accurate.
- (3) Basic technical publication guidelines are being complied with.
- (4) The automatic distribution system is properly supporting the activities requirements (WP 019 00).
- (5) Deficiencies identified are promptly resolved.

d. As a minimum, the annual audit shall consist of the following:

(1) A complete inventory of all central library publications using the TPL Program Workcenter List as the primary inventory tool. Any discrepancies shall be annotated with the error and corrected as they are detected. Other audit responsibilities should be considered and performed at this time (i.e., all publications are properly stamped, arranged alphanumerically, identification strips in binder spines are properly annotated, etc).

(2) Perform the Audit function in the NATEC TPL program, which compares the TPL program database to the latest ADRL file returned from NATEC. Note any publications, which are not as current as the ADRL file. Requisition any publications/changes necessary to update the CTPL (WP 017 00).

(3) Compare the verified/corrected Workcenter list to the current copy of the activity's ADRL submittal and the NATEC ADRL (WP 019 00).

(4) Prepare and submit a new ADRL if necessary.

(5) Complete Computerized Self Evaluation Checklist (CSEC) (OPNAVINST 4790.2)

e. There are exceptions to the normal audit considerations. Publications not controlled by NATEC but required to support the organization's mission, and under the management control of the CTPL librarian must be accounted for.

(1) NAVSEA/SPAWAR/NAVORD/NWP/CV/CVN/NAVSUP publications (WP 004 00) are some of the technical documentation that the CTPL librarian may have to account for.

(2) The latest issue dates for most of these publications can be found on the NATEC website (www.natec.navy.mil). Regardless of the reference source used, the purpose of the audit is to ensure that each publication in the CTPL is up-to-date.

(3) An additional requirement will be to ensure that each publication is on automatic distribution.

(4) A separate file labeled "Miscellaneous Automatic Distribution Requirements" should be maintained for future reference.

f. Ensure that a complete summary of audit findings (i.e., difference listings, list of pubs/changes requisitioned, annotated ADRL, etc.) and corrective actions is retained in the transaction file for a minimum of 1 year

(WP 019 00).

g. The results of the annual audit will be reviewed by the Quality Assurance Officer and shall be subject to be reviewed by the Maintenance Officer.

h. Activities are encouraged to expand on the annual audit requirements to suit individual needs.

i. Users are requested to contact the cognizant NATEC Logistics Element Manager (LEM) to confirm the validity of NAVAIR technical manuals.

APPLICATION	TITLE	FREQUENCY	PURPOSE
NATEC Processed ADRL file	Processed ADRL	As submitted	Used to perform library audit (WP 009 00).
NAVAIR 00-500A	Equipment Applicability List	Quarterly	RESEARCH. Provides cross-reference of part numbers to publications (WP 009 00).
NAVAIR 01-700	Airborne Weapons/Stores Publication Index	Quarterly	RESEARCH. Provides latest update information on Airborne Weapons/Stores by type/model aircraft (WP 009 00).
Message	Weekly Summary for Issued Technical Directives	Weekly	VERIFICATION. Message report, identifies technical directives issued during the previous week (WP 015 00).
Message	IRAC Tracker	Monthly	VERIFICATION. Message report; identifies latest Interim Rapid Action Changes issued previous month (WP 007 00).
A1-XXXX-AML-000 01-XXXXX-0	Technical Documentation List (commonly referred to as the -0 manual)	Periodic Updates	RESEARCH. Identifies NAVAIR publication applicable to specific aircraft requirements. Provides a part number to publication breakdown.
ADRL	Automatic Distribution Requirements Listing (ADRL)	Periodic Updates	VERIFICATION. Provides list of NAVAIR publications (controlled by NATEC currently on automatic distribution for future issues of changes/ revisions (WP 019 00).
Report	NATOPS Quarterly Status Report	Quarterly	VERIFICATION. Provides latest information on NATOPS publications by type/model aircraft.

Figure 1. Research/Verification Reference Documents

FM NATEC SAN DIEGO CA//3.3A24//
TO AIG ONE ONE ZERO ZERO FOUR
AIG SEVEN SIX FIVE EIGHT
AIG SEVEN SEVEN FIVE NINE
AIG NINE NINE FIVE FOUR
INFO RUWFTBA/NATEC SAN DIEGO CA//3.3A24//
BT
UNCLAS //N13052//
MSGID/GENADMIN/NATEC SAN DIEGO//
SUBJ/WEEKLY SUMMARY FOR ISSUED TECH DIRECTIVES.//
POC/V. LINDSAY, L. SANPEDRO/CIV/3.3A24, 3.3A91/-
/TEL:FAX 619-545-2287 OR 2292/TEL:DSN 735-2287 OR 2292//
RMKS/1. FROM CODE 3.3A24 TECH DIRECTIVES FOR COMNAVAIRLANT
/N85/N421G/COMNAVAIRPAC ACTION CODES N422C/INFO N422/N421.
2. COPIES OF BULLETINS AND RAMECS SHOULD FIRST BE REQUESTED FROM
THE PREPARING ACTIVITY CITED ON EACH INDIVIDUAL TD. THIS WILL
ENSURE YOUR DISRIBUTION FOR FUTURE BULLETINS AND RAMECS. COPIES OF
CHANGES NOT RECEIVED THROUGH NORMAL AUTOMATIC DISTRIBUTION CAN BE
REQUISITIONED THROUGH THE NAVICP USING STOCK NUMBERS CITED ON EACH
ITEM. AFTER COMPLYING WITH THESE PROCEDURES, NATEC CAN BE CONTACTED
IF TDS ARE STILL REQUIRED.
3. THE FOLLOWING TDS DIST FOR THE WEEK ENDING 30 APR 99.
A. AYC-957-A1, NAVAIRSYSCOM, PATUXENT RIVER, MD/AIR-3.1.1C1/
AIR-4.1.1/SV99-66ECM COOLING AIR CONTROL VALVE, MODIFICATION OF.
F/A-18C/D, LOM: D, NSN 0870LD0235210.
B. F/A-18-AFC-48-P2-A2, NAVAIRSYSCOM, PATUXENT RIVER, MD/AIR-
3.1.1C1/AIR-4.1.1/AUTOMATIC AC BUS ISOLATION, INCORPORTATION OF.
F/A/18A/B/C/D, LOM: O/I/D, NSN 0870LD0239580.
C. F/A-18-AFC-100-AE, NAVAIRSYSCOM, PATUXENT RIVER, MD/AIR-
3.1.1C1/AIR-4.1.1/RIGHT HAND AMAD BAY MOTIVE TUB INTERFACE.
MODIFICATION OF. F/A-18A/B, LOM: O/I/D, NSN 0870LD0239550.
D. T-56-PPC-110, NAVAIRSYSCOM, PATUXENT RIVER, MD/PMA-231/T56-A-
427 FUEL ENRICHMENT SYSTEM, REMOVAL OF. T-56, E-2, LOM: O/I/D, NSN
0870LD0241910.
E. H-1-AFB-395 NAVAVNDEPOT CHERRY PT NC/H1-ISST.2/261943Z APR
99/INSPECTION OF AUX CIRCUIT BREAKER PANEL 42565-1 OR 42565-2.
UH-1N, LOM: O.
4. POC EMAIL ADDRESS: techdirectives@navair.navy.mil (ALL LOWER
CASE)
5. LAST WEEKLY SUMMARY 272100Z APR 99.
6. EACH ENTRY CONTAINS LOM FOR LEVEL OF MAINTENANCE.
//

Figure 2. Example of Weekly Summary for Issued Technical Directives

```

FM NATEC SAN DIEGO CA//3.3A//
TO CNO WASHINGTON DC//N881C//
COMNAVAIRSYSCOM PATUXENT RIVER MD//5.0D43/5004M/3.1.2K//
COMNAVAIRLANT NORFOLK VA//N422C//
COMNAVAIRPAC SAN DIEGO CA//N422C//
COMMARFORLANT//ALD//
COMMARFORPAC//ALD//
CMC WASHINGTON DC//APW/ASL//
CNATRA CORPUS CHRISTI TX//N524//
NAVAIRWARCENACDIV DET INDIANAPOLIS IN//3.2.5/MS37//
NAVAVNDEPOT CHERRY PT NC//3.3.3//
NAVSURFWARCENDIV CRANE IN//80213//
PACMISRANFAC HAWAREA BARKING SANDS HI//JJJ//
COMDT COGARD WASHINGTON DC//G-AMR//
DCMC NORTHROP GRUMMAN BETHPAGE NY//RGQE//
DCMC BOEING ST LOUIS MO//RDALC//
AIG SEVEN SEVEN FIVE NINE
AIG ONE ONE THREE FOUR SEVEN
AIG SIX NINE EIGHT FIVE
RC433AA NAVICP PHILADELPHIA PA//OF/LOKU//
FAIRECONRON ONE//N5//
STIKFITRON EIGHT TWO
FLECOMPRON SIX DET//80//
INFO NATEC SAN DIEGO CA//3.3A//
BT
UNCLAS //N05600//
MSGID/GENADMIN/NATEC SAN DIEGO//
SUBJ/JAN 99 IRAC TRACKER REPORT//
POC/EBBIE CROCKETT/3.3A8/-/-/TEL:619-545-2003 DSN 735
/TEL:FAX 619-545-1883//
RMKS/1. THIS IRAC TRACKER LISTS ALL IRACS RCD DUR PERIOD 1 JAN 99
THRU 31 JAN 99.
SYSTEM      NAVAIR/TMINS NO  IRAC REFERENCE      DATE TIME GROUP
AH-1T      03-15-92          1  NADEP CHRPT        211948Z JAN 99
AH-1T      17-15FA-15        1  NADEP CHRPT        131943Z JAN 99
AH-1W      01-H1AAC-2-10.3   3  NADEP CHRPT        201958Z JAN 99
AH-1W      01-H1AAC-2-14.3   1  NADEP CHRPT        071950Z JAN 99
AH-1W      01-H1AAC-2-3.2    8  NADEP CHRPT        081941Z JAN 99
AH-1W      01-H1AAC-2-4      21  NADEP CHRPT        211949Z JAN 99
AH-1W      01-H1AAC-2-5      5  NADEP CHRPT        071938Z JAN 99
AH-1W      01-H1AAC-6-3      52  NADEP CHRPT        201956Z JAN 99
AH-1W      01-H1AAC-6-3      53  NADEP CHRPT        251939Z JAN 99
POC TEL: DSN 451-8811 COML 252-464-8811 FAX 252-464-8810
AV-8       A1-443VB-MIB-010  1  DCMC ST LOUIS      071431Z JAN 99
POC TEL: DSN N/A COML 314-232-0197 FAX 314-233-6269
AV-8       A1-F402B-MMI-210  5  NADEP CHRPT        282000Z JAN 99
POC TEL: DSN 451-8811 COML 252-464-8811 FAX 252-464-8810
AV-8B      A1-AV8BB-MRC-200  64  DCMC ST LOUIS      141431Z JAN 99
POC TEL: DSN N/A COML 314-232-0197 FAX 314-233-6269
C-130     01-75GAA-2-5      14  NAVAIR DET CHRPT   261953Z JAN 99
C-130     01-75GAA-6-2      5  NAVAIR DET CHRPT   201953Z JAN 99
C-130     01-75GAB-6-4      47  NAVAIR DET CHRPT   261952Z JAN 99
    
```

Figure 3. Example of IRAC Tracker (Sheet 1 of 2)

2. THE FOLLOWING ERACS HAVE BEEN ISSUED DURING PERIOD 1 JAN 99 THRU 31 JAN 99 EXCEPT H-60FB WHICH INCLUDES 1 DEC THRU 31 JAN 99:

SYSTEM	NAVAIR NUMBER	IRAC	ERAC	DATE ISSUED
HH-60H	A1-H60CA-150-300	22	27	011199
HH-60H	A1-H60CA-220-200	7	28	012999
HH-60H	A1-H60CA-GAI-010	3	29	012999
SH-60B	A1-H60CA-150-300	22	26	011199
SH-60B	A1-H60CA-220-200	7	27	012999
SH-60B	A1-H60CA-GAI-010	3	28	012999
H-60FB	A1-H60CA-260-300	11	23	120398
H-60FB	A1-H60CA-260-300	12	24	120398

POC ON H-60 ERACS IS MR. WAYNE KENDALL AT SIKORSKY, DSN N/A, COM 203-384-7075, FAX 203-384-6632.

3. THE FOLLOWING IRACS HAVE BEEN CANCELLED.

SYSTEM	NAVAIR/TMINS NO	IRAC REFERENCE	DATE	TIME	GROUP
AV-8B	A1-AV8BB-MRC-200	63 DCMC ST LOUIS	071436Z		DEC 98
EA-6B	01-85ADC-2-1	25 NADEP JAX	111335Z		JAN 99
EA-6B	01-85ADC-2-1	27 NADEP JAX	151333Z		JAN 99
EA-6B	01-85ADC-2-3	27 NADEP JAX	151332Z		JAN 99
EQUIP	11-85-1	75 NAWC LKE	081843Z		JAN 99
EQUIP	AG-420BO-S22-000	1 NAWC LKE	120933Z		JAN 99
H-60	A1-H60CA-MRC-400	22 NADEP CHRPT	071935Z		JAN 99

4. PEN AND INK CHGS TO THE TECH CONTENT OF A MANUAL ARE NOT AUTHORIZED. PHYSICAL ALTERATION OF THE TECH CONTENT IN NAVAIR TMS IS NOT PERMITTED.

5. ORIGINATORS ARE REQD TO FORMALIZE DATA W/I ONE YEAR OR AS OTHERWISE INDICATED IN IRAC.

6. THE POC FOR GENERAL IRAC ISSUES THAT CAN BE ADDRESSED BY THE ORIGINATOR, SUCH AS DISTRIBUTION OR COPIES OF IRACS, IS PROVIDED IN THIS MESSAGE. WHEN TWO OR MORE IRACS HAVE THE SAME POC, THE POC WILL BE LISTED AFTER THE LAST IRAC. THE POC FOR SPECIFIC ISSUES ABOUT THE TECHNICAL CONTENT OF AN IRAC IS PROVIDED IN THE INDIVIDUAL IRAC MESSAGE. FOR FURTHER ASSISTANCE CALL EBBIE CROCKETT, NATEC FLEET LIAISON, AT DSN 735-2003 OR COML 619-545-2003.

7. IRACS ISSUED AGAINST TECH MANUALS WITH DISTRIBUTION STATEMENT F ARE NOT LISTED IN THE IRAC TRACKER.

8. REQST WIDEST DISSEMINATION OF THIS REPORT TO ALL SUBORDINATE/OPERATING COMMANDS UNDER YOUR COGNIZANCE.

9. THE PREVIOUS IRAC TRACKER WAS TRANSMITTED AS NATEC SAN DIEGO CA 152100Z JAN 99.

Figure 3. Example of IRAC Tracker (Sheet 2of 2)

<p>DEPARTMENT OF THE NAVY Naval Air Technical Data And Engineering Service Command PO Box 357031 San Diego CA 92135-7031</p> <hr/> <p>OFFICIAL BUSINESS</p>	
	<p>SPECIAL STANDARD</p>
<p>80913 16-30USM247-2-10 29B1 0001</p>	
<p>COMMANDING OFFICER +X ATTN AIMD CTPL USS CONSTELLATION</p>	<p>2</p>
<p>FPO AE 09560</p>	
	<p>MOM</p>

Figure 4. Mailing Label Used on Military Ordinary Mail

DISPERSED LIBRARY OPERATION

NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM

Reference Material

Central Technical Publications Library Operating Procedures WP 020 00
Department of the Navy Information Security Program Regulation SECNAVINST 5510.36

Alphabetical Index

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Binders.....	2
Classified Publications Storage	2
Library Operation	2
Storage Procedures for Publications.....	2

Record of Applicable Technical Directives

None

1. LIBRARY OPERATION.

a. Dispersed libraries fall under the management control of the Central Technical Publications Library (CTPL) or under the Department they service at the Depots. Dispersed Technical Publication Librarians (DTPLs) shall be recommended jointly by the appropriate workcenter supervisor/division officer and designated in writing by the Quality Assurance (QA) Officer.

b. The CTPL custodian or responsible Depot Department shall be responsible for providing training and assistance to both the workcenter/depot supervisors and the dispersed librarians. Such training will be provided at least quarterly.

c. Workcenter/Depot Data Center Supervisors shall:

(1) Ensure dispersed libraries maintain only the required number of copies of applicable publications on hand.

(2) Avoid excessive "stock piling" and ordering of publications.

(3) Ensure all publication requests (that are part of dispersed library) are submitted to the CTPL for procurement.

(4) Provide the necessary guidance, supervision and support necessary to manage the dispersed library.

(5) Establish procedures within each workcenter to identify the location of all publications held using the Locator Listing option of the TPL program.

(6) Ensure the DTPL is assigned in writing using [figure 1](#) and has completed training requirements prior to assignment ([figure 2](#)).

d. The CTPL uses the NATEC Technical Publications Library (TPL) program to locate publications under its control, dispersed libraries require only a visible, readily accessible list for publications and their location. This listing is provided in the TPL program.

e. Ensure that when publications are no longer required, they are returned to the CTPL with justification for the return of the publication.

(1) The CTPL will dispose of the publication(s), annotate the TPL program, maintain a record of these publications and submit a new ADRL disk.

2. STORAGE PROCEDURES FOR PUBLICATIONS in dispersed libraries will be left to the discretion of the workcenter supervisor. Primary emphasis must be on ready accessibility of the publication to the user.

3. BINDERS similar to those used by the CTPL will also be used by the dispersed libraries. The numbering system for NAVAIR technical manuals and directives contained in binders used by the dispersed libraries will be identical to the CTPL. Manuals shall be arranged alphanumerically by NAVAIR publication number ([WP 020 00](#)).

4. CLASSIFIED PUBLICATIONS STORAGE will be in accordance with SECNAVINST 5510.36 and local procedures established by the command and the CTPL.

From: _____ Workcenter Supervisor
To: _____ (Name/Rate)
Via: Quality Assurance Officer
Subj:
Ref: (a) OPNAVINST 4790.2 (b) SECNAVINST 5510.36 (c) NAVAIR 00-25-100 (d) TYCOM TPL Instruction
1. Assignment: You are hereby assigned the billet of Workcenter _____ (Primary/Alternate Dispersed Technical Publications Librarian (DTPL)). You are directly responsible to the Workcenter Supervisor in the performance of this duty. You shall be required to maintain this position a minimum of six months, and shall perform the duties of DTPL as outlined below.
2. Description: The DTPL responsibilities include, but are not limited to:
a. Maintain the workcenter's library in a complete and current status per references (a) through (d).
b. Maintain an up-to-date, readily accessible listing (Location Listing produced by the TPL program) of all publications held within the workcenter and the location of each.
c. Ensure publication binders are maintained in accordance with reference ©.
d. Incorporate all changes into publications.
e. Surrender to the CTPL any publications received from other sources, including commercial/contractor publications.
f. Identify reason for and correct discrepancies discovered during workcenter quarterly audits within two working days.
g. Attend quarterly training given by the CTPL.
h. Train workcenter personnel on proper use of publications and assist in locating the required technical information.
3. Detachment Publications:
a. Procedures and processes established for DTPLs are applicable to detachment libraries.
b. Ensure detachment libraries are audited in accordance with references (a) and (c)
c. Upon return from detachment, ensure the detachment library is inventoried by the CTPL.
4. I have read and understand the above listed duties and accept the related responsibilities.
Member's Signature _____ Date _____

**Figure 1. Dispersed Technical Publications Librarian Billet Description Assignment Form
(Sheet 1 of 2)**

CONCURRENCE:

W/C Sup Signature _____ Date _____

Div Off Signature _____ Date _____

QAO Signature _____ Date _____

**Figure 1. Dispersed Technical Publications Librarian Billet Description Assignment Form
(Sheet 2 of 2)**

From: Central Technical Publications Librarian (CTPL)
 To: _____ Workcenter Supervisor
 Via: _____ Division Officer

Subj: COMPLETION OF TRAINING FOR QUALIFICATION AS A DISPERSED TECHNICAL PUBLICATIONS LIBRARIAN FOR _____
 (Rate / Name)

1. On-the-job training:	CTPL Signature/Date
a. Review the following references:	
(1) OPNAVINST 4790.2 (Vol 1)	_____
(2) SECNAVINST 5510.36	_____
(3) NAVAIR 00-25-100 (WPs 019, 020, 021, 022, and 023	_____
(4) NATEC TPL Computer Program Reports	_____
b. Discuss each of the following publications:	
(1) MRC	_____
(2) Local MRC	_____
(3) IPB	_____
(4) MIM	_____
(5) PMIC	_____
c. Process CECR parts 1 &2 in accordance with NAVAIR 00-25-100	_____
d. Discuss time limits and procedures for incorporating revisions and Interim Rapid Action Changes.	_____
e. Discuss publication arrangement and labeling within the DTPL.	_____
f. State purpose for Technical Publications Deficiency Report (TPDR)	_____
g. Demonstrate procedures for completion and submission of a TPDR.	_____
h. State the purpose of a DTPL quarterly audit.	_____
i. Discuss viable corrective action for audit results.	_____
j. Discuss procedures for correcting material condition of pubs.	_____
k. Discuss reference information maintained in CTPL transaction file	_____

**Figure 2. Dispersed Technical Publications Librarian Indoctrination Syllabus
 (Sheet 1 of 2)**

2. Reference publications:

- a. NAVSUP P2003
- b. NAVAIR 00-500A
- c. NAVAIR 01-700

3. I have been briefed on the above references/material by the CTPL, and I assume the duties as the DTPL for Workcenter _____.

DTPL _____
(Signature / Date)

**Figure 2. Dispersed Technical Publications Librarian Indoctrination Syllabus
(Sheet 2 of 2)**

DISPERSED LIBRARY AUDIT PROCEDURES

NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM

Reference Material

None

Alphabetical Index

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Audits	2
Procedures	2

Record of Applicable Technical Directives

None

1. AUDITS.

a. The Central Technical Publications Librarian (CTPL) (or Depot Manager), with the assistance of assigned Quality Assurance personnel, will perform a Quarterly Audit on all dispersed library operations. If the CTPL is not available the audit will be performed by Quality Assurance/Depot Manager personnel.

b. Additional audits will be conducted when:

- (1) Directed by competent authority.
- (2) A new workcenter (W/C) supervisor is assigned.
- (3) A new dispersed librarian is assigned.

c. The intent of conducting audits when a new W/C supervisor or W/C dispersed librarian is assigned is to assure that some degree of continuity can be maintained between the CTPL, the W/C Supervisor and the newly assigned dispersed librarian.

d. Local instructions promulgated by the Depots shall ensure compliance with the intent of this WP.

2. PROCEDURES.

a. As a minimum, the following items must be reviewed during dispersed library audits:

- (1) Adequate control of assigned publications, i.e., an effective tickler/locator system.
- (2) Publications properly stored and readily available to the user.
- (3) Review of Part 2 of Change Entry Certification Records to be checked against publication(s).
- (4) Interim Rapid Action Changes (IRACs) properly handled:

(a) Are IRACs properly placed in publications, i.e., directly behind the technical manual title page and in IRAC Number order?

(b) Are reproduced pages properly controlled and disposed of?

(c) Adhesive label to the CD case, annotated with the following information:

1 The NAVAIR publication number to which the IRAC applies.

2 The IRAC number of the IRAC message.

3 Maintain the IRAC on file until receipt of the superseding CD. The information on the adhesive label should be legible and positioned to allow for additional updates as they occur.

(5) Workcenter audit listing.

(6) Page check of Dispersed Library publications. Twenty five (25) percent of publications held are to be page-checked during each quarterly audit. This will ensure that all manuals have been page-checked during any calendar year.

(7) Does the dispersed library hold Technical Directives (TD)?

(a) Are the TDs required in the workcenter?

(b) Are the TDs properly returned to the central library?

(c) Is the control stamp affixed to the TD?

(8) Do publications require reordering? Any damaged missing pages, etc? "Missing changes" should be annotated on the front of the affected manual.

(9) Is the quantity of technical publications sufficient?

(10) Are classified publications properly stored and accounted for?

(11) Complete Computerized Self Evaluation Checklist (CSEC) (OPNAVINST 4790.2)

b. Additional items may be reviewed at the discretion of the CTPL.

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NAVAIR TECHNICAL PUBLICATIONS LIBRARY PROGRAM

NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM

Reference Material

Establishing an Aeronautical Technical Publications Central Library WP 019 00
NAVAIR Technical Directives..... WP 015 00
Technical Manual Quality Assurance Program WP 013 00
Technical Publications Requisitioning Procedures WP 017 00

Alphabetical Index

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TPL Program Installation Instructions.....	2
TPL Program Reports.....	3

Record of Applicable Technical Directives

None

1. NATEC TECHNICAL PUBLICATIONS LIBRARY PROGRAM.

a. The only automated system authorized for use in the management of Navy and Marine Corps technical publication libraries is the NATEC Technical Publications Library (TPL) program. The TPL program is designed to be used on the Windows Operating System (OS) on an IBM compatible Personal Computer (PC). Recommended minimum hardware requirements include 128 megabytes (MB) of RAM, an 20 GB hard drive, a 3-1/2" high-density floppy drive, a 24X CD-ROM drive, and a color monitor. Recommended OS is Windows NT 4.0 or newer, but program will run on all windows operating systems from Windows 98 and newer.

b. Use of the TPL program is required for all activities requiring automatic distribution of more than 10 NAVAIR Technical Manuals. Those activities requiring 10 or less manuals on automatic distribution should write a letter to NATEC listing their technical manual requirements, including quantities. These requirements must be submitted annually. For those activities requiring more than 10 manuals the Automatic Distribution Requirements List (ADRL) shall be prepared using the ADRL option of the TPL program and submitted via email to adrl@navair.navy.mil. If email is not available the file may be mailed to NATEC at the address shown on the ADRL cover letter printed when the disk is prepared.

c. Submission of an ADRL is REQUIRED at least annually to ensure your activity continues to receive required manuals. Your 12 month cutoff date is calculated from the date of your last ADRL submission or the last change you made to your ADRL directly on the NATEC website. For audit purposes a printed copy of your ADRL submission must be retained in your transaction file. ADRL listings received back from NATEC must also be retained in your transaction file.

d. The TPL program contains current direction regarding library management for NAVAIR activities. This direction is located in the "Library Operating Procedures" and "Program Documentation" options on the MAIN menu. Where there is conflicting direction between this manual and the TPL program, the TPL program direction takes precedence.

2. TPL PROGRAM FEATURES.

a. The TPL program is completely menu driven, self contained as delivered, and requires the typing of one word to install. No other software is required to run this program. If earlier versions of the TPL program were previously used, current versions will recognize that and update the database to the latest configuration when installed over the existing version.

b. Context sensitive help is available throughout its operation. To access HELP, move the cursor to the item in question and press <F1>. In addition, no duplicate entries are allowed. A backup option to provide a backup of your data is available and a backup is required at least weekly but should be performed each time you exit the program when a change has been made to the date. It is recommended that a backup be performed for each workday of the week so that you would have more than 1 backup in the event of a hardware failure.

c. The TPL program keeps track of all manuals in the central and dispersed libraries including changes. It also keeps track of all manuals that have been deleted from the active library for a year period from the deletion date. Maintenance of a dead file is required in the event of a possible aircraft accident investigation. The dead file is automatically purged of manuals that have been there for more than a year every time a dead file listing is printed. A dead file listing should be done at least quarterly.

d. A complete listing of features is contained in the TPL program documentation available from the MAIN menu.

3. TPL PROGRAM INSTALLATION INSTRUCTIONS.

a. To download and install the latest version of the NATEC TPL program go to the NATEC website at www.natec.navy.mil and read and save the READxxx.TXT file (xxx is a number representing the version number).

This file explains how to download and install the program.

- b. The complete program documentation may be read or printed from the main menu.
- c. A complete set of library operating procedures may be read or printed from the main menu.

4. TPL PROGRAM BACKUP PROCEDURES.

a. You should run the backup option of the program upon exiting the program if you make changes to the database. Each activity SHOULD maintain five (5) backup disks, one for each working day of the week. You should format these disk at least quarterly to ensure the disks are not bad. A backup MUST be run at least weekly.

5. TPL PROGRAM REPORTS.

a. The Automatic Distribution Requirements List (ADRL) Report from the TPL program is used to output a floppy disk of the activity's NAVAIR technical manual requirements along with a cover letter in the event you must mail in the disk. The ADRL Report is used by NATEC to update the automatic distribution requirements file to identify those publications for which future manual revisions and technical directives will be distributed to your activity (WP 019 00).

(1) The ADRL requires the following information:

(a) Aircraft/equipment supported. If manually entering a code that is not on the pulldown list, be specific and use the five (5) digit Type Equipment codes. These codes are required to identify requirements for technical directives and new manuals that may be required (WP 019 00). When asked to enter aircraft/equipment, press <F1> to access a pick-list. Move to the appropriate item and press <ENTER> or <ESC> to automatically enter the proper code. Follow this procedure until you have entered all supported aircraft/equipment.

(b) Maintenance level. Organizational, Intermediate, Depot, etc. This provides pre-selected minimum quantities of technical manuals and technical directives and is used in conjunction with aircraft/equipment supported.

(c) Distribution Account Code (DAC). This is a 10 character code. The first five (5) are the activity's Standard Navy Distribution List (SNDL) code and the last five (5) are NATEC assigned sequence numbers. The parts of the DAC are not separated by a dash. Do not use UIC numbers or zip codes here. This code is available on mailing labels currently being sent to the CTPL. (Enclose a label if in doubt.) (WP 019 00).

(2) Technical directives will be automatically distributed for the aircraft or equipment applications identified on the ADRL disk. No further action is required (WP 015 00).

(3) New publications associated with the maintenance level and aircraft or equipment applications identified on the ADRL disk will be distributed only once, unless identified on the floppy disk by publication number. If future revisions to the new publication are required by the activity, add it to the TPL program database for subsequent submittal to NATEC. If additional copies of the publication are required now, submit a MILSTRIP requisition to NAVICP Philadelphia (WP 017 00).

b. The report named COMPLETE LIBRARY is used for annotating changes, such as issuance of Change Entry Certification Records (CECRs) and the return of them from the workcenters, return of technical manuals no longer required, and correction of erroneous entries. When the annotated report has sufficient entries, update the TPL program database and obtain a new report, or highlight the changes you have entered and continue using the current listing. The COMPLETE LIBRARY listing should always contain the most current data on each manual in the library.

- c. A description of reports named COMPLETE LIBRARY, PARTIAL LIBRARY, LOCATOR,

WORKCENTER, DIVISION, OUTSTANDING DOCUMENTS, DEAD FILE, CHECKED OUT MANUALS, CLASSIFIED MANUALS, MISCELLANEOUS FIELD, and QUANTITIES BY WORKCENTER is included in the complete program documentation accessible from the MAIN menu. It may be displayed on the screen or printed for further study.

6. TPL PROGRAM DATABASE VALIDATION.

a. When an ADRL is received at NATEC it undergoes a validation and is returned to the originating activity. The distribution file update process at NATEC provides for a computer validation of technical manual numbers on the floppy disk. The numbers must represent active (i.e., not cancelled) NAVAIR technical manuals with distribution controlled by NATEC.

b. Validated technical manual numbers will be added to the distribution file immediately.

c. Technical manual numbers that cannot be computer validated will be identified to the originating activity for resolution. After resolution, the activity should update their TPL program database with corrected numbers, delete extraneous entries, add additional requirements, and resubmit the ADRL to NATEC.

d. Typical reasons that technical manual numbers cannot be computer validated are as follows:

- (1) Too few or too many characters in publication number.
- (2) Wrong character in publication number (i.e., letter "O" vice zero).
- (3) Distribution of manual not controlled by NATEC (i.e., NAVAIR 17-20 Series).
- (4) Cancelled publication. No further distribution will be made.
- (5) Special distribution list approval required for issue controlled publication.
- (6) Possible omission or error in NATEC standard list.

e. Cancelled technical manuals and technical manuals under distribution control of other activities, as well as local data, may be retained in TPL program for control purposes. However, the PUB TYPE code must be any letter other than "N" or "E" in TPL program database to prevent transfer to the ADRL REPORT floppy disk. Cancelled manuals retained must be clearly marked "CANCELLED" on the title page and a pub type other than "N" or "E" must be assigned.

7. TPL PROGRAM AVAILABILITY AND USER FEEDBACK.

a. To obtain a copy of the TPL program, download the program from the NATEC website (www.natec.navy.mil), download the program from the JKCS/TM Server at your site, or contact your local Technical Publications Specialist (WP 006 00) at tps@navair.navy.mil.

8. REQUIRED TPL OPERATIONS. Required TPL program operations include:

- a. Run ADRL option and submit ADRL file whenever requirements change, but at least annually.
- b. Run DEAD FILE report at least quarterly.
- c. Run ERROR listing report at least monthly.
- d. Use to generate CECRs.
- e. Use to generate MILSTRIP data for requisitioning.
- f. Run Daily Routine report each workday.

- g. Maintain a current copy of complete library listing. Always run a new listing on ADRL submission.
- h. Run audit against processed ADRL file downloaded from the NATEC website or returned from NATEC as a result of your ADRL submission. Audit must be run within 30 days of ADRL submission to ensure data is current. [WP 021 00](#).
- i. Run locator listings for each workcenter at least quarterly.
- j. Run workcenter listing for each workcenter at least quarterly for workcenter audit.
- k. Run Backup of data at least weekly.

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ELECTRONIC AND INTERACTIVE ELECTRONIC TECHNICAL MANUALS
NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM

Reference Material

None

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Record of Applicable Technical Directives

None

1. CREATION, STORAGE, AND DISTRIBUTION OF DIGITAL NAVAIR TECHNICAL DATA.

a. NATEC is responsible for defining and enforcing all policies relative to the creation, storage, and distribution of digital technical data for NAVAIR. The driving force behind NAVAIR technical data policy is to ensure standardization, ease of use by the fleet maintainers, and the economical, fast and efficient delivery of technical data to the fleet.

b. To ensure configuration management and control of technical data, NATEC is the designated central repository for all NAVAIR technical manuals, whether they are in paper or digital format. NATEC will distribute all technical manuals in paper, CD-ROM, or any other digital format. This includes all classes of IETMs. Any deviation from this policy will require a written waiver from the Commanding Officer of NATEC.

c. The NATEC website/Joint Knowledge Caching Server (JKCS) are the ONLY official repositories for storage and distribution of NAVAIR technical manuals. As such, third parties shall not distribute NAVAIR technical manuals for maintenance purposes without a written waiver from the Commanding Officer of NATEC.

d. As stated above, it is the policy of NAVAIR and NATEC to standardize digital technical data formats and viewing environments to ensure ease of use and reduce training required for the fleet maintainers. All new digital technical manual projects will be coordinated through NATEC, prior to final design and development, to ensure adherence to standards and minimize potential negative impact on fleet operations. It is NATEC's policy that all IETMs shall be viewable using a standard web browser such as Netscape or Internet Explorer with an appropriate browser plug-in, as required. All digital manuals below class 3 IETMs shall be viewable using a standard web browser. The current standard for low-level digital technical manuals on the NATEC website is Adobe Portable Document Format (PDF). It is understood that technology will evolve and standards may change. However, it is NATEC's policy to follow standard industry web-based practices, which will ensure standardization in the future and reduce the Navy's reliance on costly, proprietary technical data solutions. Any deviation from these policies shall require a written waiver from the Commanding Officer of NATEC.

e. The NAVAIR standard for authoring new technical manuals is SGML. SGML provides data tags and other functionality that increases the value of technical data for re-use and database applications. In authoring technical manuals in SGML, it is critical that standard Document Type Definitions (DTDs) and style sheets be employed to ensure the ability to share and re-use technical data across the NAVAIR team. The NAVAIR 3001 DTD is an evolving standard and will be used in the development of new SGML based technical manuals. Extensible Markup Language (XML) is an evolving standard in the Internet environment and may be used in the future for authoring new technical manuals. HTML is not authorized for authoring technical manuals because of its lack of content and limited re-use capability.

2. NATEC TECHNICAL MANUAL WEBSITE OVERVIEW.

a. The NATEC Technical Manual Website provides distribution of NAVAIR Electronic Technical Manuals via the World Wide Web/Internet. The Website will be the single distribution point for NAVAIR technical manuals authorized for use. The website is operated and maintained by NATEC at NAS North Island in San Diego, California. The website's Universal Resource Locator (URL) address is www.natec.navy.mil.

b. Access to the NATEC website is user-id and password controlled. In order to receive an account, a user must complete the user account request on the NATEC website. All mandatory information must be filled in and military and federal government employees must have a current email address ending in ".mil". Government contractors must complete additional access request forms to ensure continued security of sensitive NAVAIR technical data. Feedback and comments for the website can be provided to NATEC by selecting webmaster feedback on the website.

c. Although NAVAIR technical manuals will be available on the NATEC website, the activity central technical publications librarian (CTPL) will continue to be responsible for local technical library management and control. Local policies and procedures relative to technical library management remain the responsibility of the activity. Downloading of electronic manuals from the NATEC website shall be monitored and controlled by the

CTPL.

d. Activity CTPLs will be provided an Initial Outfitting List (IOL), on CD-ROM, of all the manuals for their weapon platforms, including the general series and common technical manuals. When a technical manual is added or changed on the website, the appropriate CTPLs will be notified via email.

e. The intent of the NATEC Website is to make access to current, accurate technical manuals fast, easy, and economical. Access to the website requires a reasonably fast connection to the Internet, a standard web browser such as Internet Explorer, and the Adobe Portable Data Format (PDF) reader / viewer. The Adobe PDF viewer can be downloaded from the Adobe website on the Internet at no cost. NATEC has chosen PDF (image & hidden text) as the best option for displaying legacy technical manuals on our Website. Conversion to PDF is relatively inexpensive compared to other options. PDF is a commercial standard format for displaying information on the web. PDF is also the chosen format for the other services for their lower class electronic technical manuals. In addition, PDF provides bookmarking and text search capabilities. Other formats such as SGML, HTML, XML, and higher level IETMs will be supported as required for individual NAVAIR programs.

f. Within the next few years, a large majority of the approximately 20,000 NAVAIR technical manuals will be available on the website. Although much of the fleet does not currently have reliable access to the Internet, it is expected that within two years the majority of fleet maintainers will have access and the technical manual website will become a viable method of accessing current technical data for maintenance.

g. Until the fleet has Internet access at all maintenance facilities, afloat and ashore, NATEC will continue to support paper and CD-ROM versions of technical manuals, where required. Manuals issued via CD-ROM are authorized for use only when issued with the approved NAVAIR CD-ROM label affixed. CD-ROMS currently in use are authorized for continued use until their next update. The current supply (MILSTRIP) requisition procedures will continue to be supported and paper technical manuals will be printed and distributed in situations where the maintainer cannot use the web or CD-ROM.

h. The website is designed to make access to the technical manual, work package, chapter, illustration, or figure as fast and easy as possible. The website can be searched by Type Equipment Code (TEC), platform, technical manual number, or title, and supports text searches within the manuals. Activities will be notified via email through their CTPL when a manual is added or changed for the platform they support.

i. It is the maintenance facility's requirement to control manuals downloaded or printed from the Web to ensure obsolete versions of technical manuals are not being used for aviation maintenance.

j. The minimum requirements for a technical manual printed from the web or the Joint Knowledge Caching Server (JKCS) would be: the Title Page, all of the Numerical Index of Effective Work Packages/Pages, and the desired work packages or pages. The "Remarks" field of the TPL Program is to be annotated to reflect the composition of the manual. It would be assigned a copy number, and changes to the manual would be controlled by the issuance of CECRs. (WP 020 00)

k. It should be noted that infrastructure, network communications, and PC workstations, including hardware and software for access to NAVAIR technical data or other websites are the responsibility of the using activity and not the responsibility of NATEC.

3. CD-ROM NUMBERING SYSTEM FOR PDF MANUALS.

a. The numbering system consists of an 13 position code, i.e., A1-Cdxxxxxx-001. Positions one and two indicate a NAVAIR publication and three and four (CD) indicate this is a CD-ROM. Positions one through four will always be a constant A1-CD. Positions five through seven indicate the type of publication. For example:

0TD	Technical Directive
0GS	General Series
COM	Technical Manuals with common applications

0SE Common Support Equipment
F14 F-14 peculiar technical manuals

b. Positions eight through ten are to be used for additional characters to describe the type of publication when 3 digits are insufficient (e.g. F18C/D). When additional characters are not required these digits will be zeros. For instance, the first E-2C CD-ROM would be A1-CDE2C000-001 and the first F/A18A/B/C/D CD-ROM would be A1-CDFA18AD-001.

c. Designations for all other weapon systems peculiar technical manuals will use a three-position code such as used above with the F-14. The zero (0) is used in position five as a placeholder when not used as an identifying character, e.g., 0TD for Technical Directives. Positions eleven through thirteen will be in a sequence beginning at 001 and continuing, as required, to the highest sequence, 999. A fully outfitted CTPL will have several types of technical manuals as indicated in positions five through ten. Each separate type will have a sequence number beginning with 001 and continuing until all required technical manuals are included. The sequence numbers for any specific type of technical manuals, i.e., F-14, will begin with 001. When more than one CD-ROM is required for a specific platform then the sequence numbers will be from 001 through xxx where xxx is the number of CD-ROMs required for that platform. When any CD-ROM is updated it will retain the same CD-ROM number. Sequence numbers are the only portion of the numbering system that will be repeated, but these sequence numbers will apply to different types of technical manuals. For example, the F-14, P-3, and 0TD will all have a sequence number 001 but since they all include different technical manuals it is important to place the proper CD-ROM into the CD-ROM drive when prompted. Using an incorrect CD-ROM to view a technical manual selected from the index will display an error message until the proper CD-ROM is inserted into the drive.

4. VIEWING PDF TECHNICAL MANUALS ON A CD-ROM. Adobe Reader is required to view the manuals contained on the CD-ROMs. A setup wizard for the Adobe Reader program is included on the first CD-ROM of every set. See the README.TXT file on the first CD-ROM of the set for instructions on loading Adobe Reader and viewing the manuals.

5. IETM INTRODUCTION.

a. Several platforms are providing Interactive Electronic Technical Manuals (IETMs) to the CTPL and workcenters for maintenance on aircraft. Each of these platforms have different IETMs and different methods of initial distribution and updating. For more information pertaining to a particular platform or IETM, please contact the NATEC IETM Engineer at ietms@navair.navy.mil.

b. The following platforms currently have IETMs that are being or will be distributed to the fleet:

- (1) H-60 B/F/H.
- (2) F/A-18 E/F.
- (3) V-22.
- (4) E-6B.

c. The following platforms will be fielding IETMs in the near future:

- (1) F-14.
- (2) EA-6B.
- (3) H-1.
- (4) H-53.

(5) H-60 CH/R.

(6) F/A-18 C/D.

6. IETM DEFINITIONS.

Class I – Data is in raster format. Viewer is a page turner.

Class II – Text is in **Portable Document Format (PDF)** format or ASCII tagged with **Standard Generalized Markup Language (SGML)** structure tags.
Graphics are in raster or **Computer Graphics Metafile (CGM)** format.
The data may be hyperlinked if it is in PDF format (source data will be editable).

Class III – Created in accordance with MIL-PRF-28001 with SGML content based tags.
Data is hyperlinked.
Data can be printed.
Graphics are in either raster or CGM format.
Life cycle maintenance is higher than a Class IV.

Class IV – Created in accordance with MIL-PRF-87269.
Graphics are in either raster or CGM content tags.
Text is tagged with SGML format.
Presentation format is created in accordance with MIL-PRF-87268.
Asks questions of the user.
Filters out unnecessary steps.
Presents data one step at a time, asks questions concerning results of steps.
Requires user to interface with IETM.

Class V – Same as Class IV, except with an expert system integrated including:
Computer Based Training (CBT).
Diagnostics.

7. JOINT KNOWLEDGE CACHING SERVER (JKCS).

a. JKCS/TM Server is a local caching server under the Joint Aviation Technical Data Integration (JATDI) program for technical publications and other technical data. TM Server has been installed at several shore stations and CV(N)s. For a complete and updated list of installations, go to www.natec.navy.mil and logon to the web site. Select the **JATDI Stats** link at the bottom of the Table of Contents. Select the **TM Server Site IP Address List** link. This will display a table of all current TM Server sites.

b. TM Servers at shore sites are updated automatically each night. TM Servers aboard CV(N)s will be updated manually via monthly CDs from NATEC. TM Server will be installed on L-Class ships beginning in Late FY02. L-Class TM Servers will also be updated via monthly CDs from NATEC.

c. Manuals on a local TM Server are authorized for maintenance use with the same restrictions as manuals downloaded from the NATEC web site. Reproduction of partial or complete manuals will be handled in accordance with [WP 020 00 paragraph 14](#) of this manual.

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