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#### MILITARY SPECIFICATION

## DIRECTIVES, TECHNICAL; PREPARATION OF

This specification is approved for use by the Naval Air Systems Command, Department of the Navy, and is available for use by all Departments and Agencies of the Department of Defense.

#### 1. SCOPE

- 1.1 <u>Purpose</u>. This specification identifies the requirements for preparation of formal letter type Technical Directives (TDs) used to direct the accomplishment and recording of modifications to Weapons, Weapon Systems. Support Equipment (SE), including Automatic Test Equipment (ATE), Naval Air Maintenance Trainers (NAMT), Operational Flight Trainers (OFT), related equipment, and companion software system Items procured by or for the Naval Air Systems Command (NAVAIR).
- 1.2 <u>Software System Items</u>. For the purposes of this specification, Software System Items include the following:
  - a. Alrborne Software.
  - b. Automatic Test Equipment (ATE) and Peculiar Support Equipment (PSE) software. (See 3.1.3.)
  - c. Trainer software for:
    - (1) Mission Trainers (MTs)
    - (2) Weapon System Trainers (WSTs)
    - (3) Cockplt Procedures Trainers (CPTs)
    - (4) Operational Flight Trainers (OFTs)
    - (5) Naval Air Maintenance Trainers (NAMTs)

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to the Commanding Officer, Naval Air Warfare Center, Aircraft Division, Systems Requirements Department, Code SR32, Lakehurst, NJ 08733 by using the self-addressed Standardization Document improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC NO. N7039

Distribution Statement A - Approved for public release; Distribution is unlimited.

AREA TMSS

#### APPLICABLE DOCUMENTS

2.1 <u>Issues of Documents</u>. The following documents, of the issue in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein:

## **SPECIFICATIONS**

## **Military**

MiL-M-9868 Microfilming of Engineering Documents, 35MM,

Requirements for

MIL-P-15024 Plates, Identification - Information and Marking for

Identification of Electrical, Electronic and Mechan-

ical Equipment

MIL-P-15024/4 Plate, Identification, Modification

MIL-N-18307 Nomenclature and Identification for Electronic,

Aeronautical, and Aeronautical Support Equipment, Including Ground Support Equipment

MIL-M-38761/1 Microfilm and Tabulating Cards Used for Recording

Engineering Drawings and Associated Data

MiL-P-38790 Printing Production of Technical Manuals: General

Requirements for

MIL-M-81927 Manuals, Technical: General Style and Format of

(Work Package Concept)

MIL-M-81930 Manuals, Technical: 16MM Silver Halide Microfilm;

Requirements for

### **STANDARDS**

#### Military

MIL-STD-100 Engineering Drawing Practices

MIL-STD-12 Abbreviations for Use on Drawings, and in Specifi-

cations, Standards, and Technical Documents

MIL-STD-804 Formats and Coding of Aperture, Copy and Tabulating

Cards for Engineering Data Micro-Reproduction System

MIL-STD-2077 Test Program Sets, General Requirements For

## **DRAWINGS**

## Naval Air Warfare Center - Aircraft Division

28638-5SE00363

**Modification Plates** 

**PUBLICATIONS** 

<u>Department of Defense</u>

DOD 5200.1-R

Information Security Program Regulation

DOD 5220.22-M

Industrial Security Manual for Safeguarding

Classified Information

**DODISS** 

Department of Defense Index of Specifications

and Standards

Department of the Navy

OPNAVINST 4790.2

The Naval Aviation Maintenance Program (NAMP)

OPNAVINST 8600.2

The Naval Alrborne Weapons Maintenance Pro-

gram (NAWMP)

**NAVAIRINST 5215.12** 

The NAVAIR Technical Directive System

MILITARY BULLETIN 544

List of Specifications and Standards (Book Form)

NAVAIR 01-1B-40

Weight and Balance Data Manual

NAVAIR 00-25-300

Management and Procedures Manual, NAVAIR

Technical Directive System

<u>Aeronautical Requirements</u>

**AR-41** 

Technical Directive Development and Acquisition

of Integrated Logistic Support for Aeronautical

Weapon System Changes

(Copies of specifications, standards, drawings, and publications required by contractors in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

2.2 <u>Other Publications</u>. The following documents form a part of this specification to the extent specified herein. Unless otherwise indicated, the latest military-approved issue in effect on date of invitation for bids or request for proposal shall apply.

IEEE STD 200

Reference Designation for Electrical and Electronics Parts and Equipments

(Application for copies should be addressed to the Institute of Technical and Electronic Engineers, Inc., 345 East 47th Street, New York, New York 10017.)

## 3. REQUIREMENTS

- 3.1 <u>Technical Directives.</u> Formal TDs shall contain instructions and information which direct the accomplishment and recording of a material change, repositioning, modification, or alteration in the characteristics of the equipment to which it applies. A TD shall be used to direct that parts or material be added, removed, altered, relocated, or changed from the existing configuration. To ensure complete understanding of the TD, non-common abbreviations and acronyms shall be spelled out.
- 3.1.1 Parts of a Technical Directive. When an Engineering Change Proposal is approved by a NAVAIR Change Control Board (CCB), TDs may be prepared and issued in parts to: (1) accomplish distinct parts of the total directed action or (2) accomplish action on different configurations of affected equipment, as approved detailed instructions or required kits are developed and become available. The basic issuance of a TD will always be assumed to be Part 1, although it will not actually be identified as such in the TD number. Subsequent issuances shall be identified, using arabic numbers, as Part 2, Part 3, etc.; e.g., A-7 AFC-217 Part 2. The category and subject of each TD part will be as established by the Technical Directive Detail Data Sheet (TDDDS). The issue date for each part shall be the date the specific part was issued; the rescission date will be assigned at the same time (see 6.2.1).
- 3.1.2 <u>Categories of Technical Directives.</u> The NAVAIR CCB shall assign each TD a category in accordance with NAVAIR 00-25-300, i.e., Immediate, Urgent, Routine, or Record Purpose. A TD that supersedes an Interim TD shall have the same category, subject and Issue date that was assigned to the interim TD.
- 3.1.2.1 <u>Immediate Category</u>. The first page of Immediate TD's shall display the words "IMMEDIATE ACTION" in 1/4 inch high capital letters at the top center of the page. (See Figure 1.)
- 3.1.2.2 <u>Urgent Category</u>. The first page of Urgent TDs shall display the words "URGENT ACTION" In 1/4 Inch high capital letters at the top center of the page. All other requirements of figure 1 are applicable. (See Figure 1.) SAFETY changes shall have the words "SAFETY" printed diagonally across the first page in a manner not to affect text integrity. (See Figure 2.) The required overlay will be prepared by NAVAIRTECHSERVFAC.
- 3.1.2.3 <u>Routine Category.</u> The first page of Routine TDs shall display at the top center of the page the words "ROUTINE ACTION" printed in 1/4 Inch high capital letters. (See Figure 3.)

- 3.1.2.4 Record Purpose Category. The first page of Record Purpose changes shall display at the top center of the page the words "RECORD PURPOSE" printed in 1/4 inch high capital letters. The Record Purpose category shall be used when a modification has been completely incorporated by the contractor or an in-house activity in all accepted equipment and when retrofit is not required of repairables in the Navy's possession. The TD shall not include detailed instructions; instead it shall include sufficient data to establish what has been modified (type/model/series, part number, etc.) and readily determine that the modification has been accomplished. The five headings under Man-Hours Required is still necessary to show how many people, then skill and how many hours it took to complete.
- 3.1.3 Special Forms. When approved by the procuring activity, a TD may be used to accomplish changes only to test program tapes and test program tape associated software changes. These tape-only changes shall not be related to hardware changes and, where applicable, shall conform to the processing requirements of MIL-STD-2077, otherwise they shall conform to the same processing requirements of hardware. (Changes to test program tapes and test program associated software required as a result of hardware changes shall be addressed as part of the hardware TD.) TDs for companion software configurations shall conform to the requirements of this document and shall be titled "Support Software Change."
- 3.2 <u>Titles of Technical Directives.</u> Each TD shall contain a basic title, number, and corresponding Technical Directive Code assigned by NAVAIR in accordance with NAVAIR 00-25-300. A TD issued to cover a unique modification in support of a country under foreign military sales program shall be identified with appropriate TD title, number, TD code and two letters to identify the applicable country. This identifier will be placed after the TD number in parenthesis, e.g. P-3 Airframe Change No. (GE) (TDC50) for Germany. The TD number used will be unique to each country and shall start with the number 1. Each foreign military sales program shall have its own TD number series. All other issues as appropriate applicable to preparation of a USN TD shall apply to unique FMS TD.
- 3.3 Arrangement of Elements of the Technical Directive. All element headings in a TD or revision must be used. All elements must be capitalized and underlined. If there is no information applicable to a particular element heading, the term "N/A" or "Not Applicable" shall be entered. Amendments shall consist of the complete heading, the subject, and only those elements required to clearly amend the basic directive. A revision shall be a complete reissue of a TD. The figures contained in this document shall be used as examples only for the specific portions referenced and not as examples of an overall TD. TDs and revisions, thereto, shall have the following elements in the order indicated:

ELEMENT	<u>Para. Ref.</u>
HEADING	3.3.1
SUBJECT	3.3.2
REFERENCES .	3.3.3
ENCLOSURES	3.3.4
DOCUMENTATION AFFECTED	3.3.5

PURPOSE OF DIRECTIVE (AMENDMENT/REVISION)	3.3.6
APPLICATION	3.3.7
COMPLIANCE	3.3.8
MAN-HOURS REQUIRED	3.3.9
SUPPLY DATA	3.3.10
REIDENTIFICATION	3.3.11
DETAILED INSTRUCTIONS	3.3.12
WEIGHT AND BALANCE (MOMENT ACCEPTABLE)	3.3.13
RECORDS AFFECTED	3.3.14
INTERIM SUPPORT	3.3.15
SIGNATURE	3.3.16
PREPARED BY	3.3.17
VERIFIED BY	3.3.18

- 3.3.1 <u>Heading of the Technical Directive</u>. The heading of the TD shall consist of the subelement listed in the following paragraphs 3.3.1.1 through 3.3.1.8.
- 3.3.1.1 <u>Category Heading.</u> The category assigned by the procuring activity shall be entered as shown in figures 1, 3, and 5, and in accordance with paragraph 3.1.2.
- 3.3.1.2 <u>Authorizing Activity.</u> The wording "Department of the Navy, Naval Air Systems Command, Washington, D.C. 20361-XXXX" shall be shown in capital letters at the top center of the first page immediately below the category. (See Figures 1, 3, and 5.)
- 3.3.1.3 <u>Cognizant Code.</u> The code of the NAVAIR organization having engineering/ technical responsibility and the code of the organization having logistic/fleet support responsibility and/or the Program Manager Alr (Field) (PMA(F)'s) for the directive shall be shown at the upper right corner of the first page. (See Figures 1, 3, and 5.)
- 3.3.1.4 <u>Issue Date.</u> The issue date shall be shown in the upper right hand corner immediately below the cognizant code and shall be the date the TD will be ready for bulk distribution. This

date shall be the date on which kit deliveries will sustain the incorporation schedule, or the date new configuration can be logistically supported (either by normal or interim support), whichever is determined by the procuring activity to be later. The words, "Issue"; "Date"; and the name of the month shall be initial capital letters (see figures 1 and 3). Interim changes shall be superseded by a formal change within 180 days. The formal change shall reflect the issue date of the interim change. The issue date will be assigned by NAVAIR/PMA(F).

- 3.3.1.5 Rescission Date. The rescission date is the date when it is anticipated that the TD will have been completely incorporated, included in applicable documents, and otherwise served its purpose. Maximum rescission intervals for formal TDs are as follows: Immediate 2 years; Urgent 3 years; Routine 8 years and Record Purpose 3 years. The rescission date shall be stated as 30 June or 31 December and shall appear immediately below the issue date. The words "Rescission"; "Date"; and the name of the month shall be initial capital letters.
- a. Where amendments add or change Instructions, the date of the rescission shall be the same as the amended TD.
- b. Where only a change in rescission date or the assignment of a new rescission date to an existing TD which has passed its rescission date is required, an amendment to the affected TD shall be issued. Such amendments shall clearly indicate the reason for the changed date under "Purpose of Amendment."
- 3.3.1.6 <u>Security Markings</u>. The security classification assigned by the procuring activity shall be shown on the first page, in the upper and lower right hand corners as shown in figures 1 and 5, and in accordance with DOD 5200.1R, 5220.22M and MiL-M-81927(AS).
- 3.3.1.6.1 Special Handling. When specified by the procuring activity, TD's containing classified information which may be liable to inadvertent disclosure to foreign governments or foreign nationals shall bear the following notice: "Special Handling Required Not Releasable to Foreign Nationals." When it is determined the classified TD information may be released to certain foreign governments or foreign nationals, the following notice shall be used: "Special Handling Required Not Releasable to Foreign Nationals Except (insert name of nations to which disclosure is authorized) by authority of \_\_\_\_\_\_\_ date\_\_\_\_\_\_."
- 3.3.1.6.2 <u>Distribution Statement/Destruction Notice</u>. A distribution statement and destruction notice required under DOD Directive 5230.24 shall be included on all TDs above the title, number, and code. The statements shall read as follows:

<u>DISTRIBUTION STATEMENT C.</u> Distribution authorized to U.S. Government agencies and their contractors to protect publications required for official use or for administrative or operational purposes only, (see issue date). Other requests for the document shall be referred to Commanding Officer, Naval Air Technical Services Facility, 700 Robbins Avenue, Philadelphia, PA 19111-5097.

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

3.3.1.6.2.1 <u>Distribution Statements for Foreign Military Sales Directives</u>. Technical directives unique to foreign military sales programs shall include the following distribution statement:

<u>DISTRIBUTION STATEMENT</u>. This information is furnished upon the condition that it or knowledge of its possession will not be released to another nation without specific authority of the Department of the Navy of the United States; and that it will not be used for other than military purposes; that individual or corporate rights originating in the information, whether patented or not, will be respected; that the information will be provided the same degree of security afforded it by the Department of Defense of the United States.

- 3.3.1.7 <u>Title, Number and Code.</u> The title comprises standardized descriptive wording as specified in 3.2, followed by a number to differentiate between directives of the same title series and centered immediately below a TD Code furnished by the procuring activity, e.g., A7 Airframe Change No. 227, Avionics Change No. 534, TF 30 Powerplant Change No. 18, VAST System Change No. 23. The title, number and TD Code shall be located in the upper center of the first page as shown in figures 1, 3, and 5, and the title and number in the top center of each succeeding page. TDs which involve safety of flight shall have the word "SAFETY" added on the top of every page following the title. When TDs are issued in parts, subsequent issuances shall be identified as indicated in 3.1.1. Amended TDs shall include the designation Amendment No. 1, 2 or 3 (use Arabic numerals), and revisions shall be identified by the word "Revision" and an alphabetic identifier.
- 3.3.1.8 <u>Statement of Attention</u>. An appropriate attention-gaining statement shall be placed on the first page below the title when the detailed instructions of the directive affect operational or maintenance procedures in any manner which may concern and require the attention of personnel not normally having an interest in TDs of that particular title. The following note will be placed on the first page below the title:

### NOTE

Commanding Officers will be responsible for bringing this change to the attention of all personnel cleared for operation of the affected equipment/system.

- 3.3.2 <u>Subject of Technical Directive.</u> The subject shall be a brief statement identifying the applicable components in the following order: Standard "AN" nomenclature, nomenclature as identified in the respective Maintenance Instruction Manual (MiM) and Illustrated Parts Breakdown (IPB) and a brief phrase to Indicate the action required, e.g., AN/APM-XXX, TEST SET RADAR, modification of. Standard "AN" designations, military specifications and nomenclature designations in accordance with MIL-N-18307 shall be used where applicable. The subject of the directive shall be on the first page only. NAVAIRTECHSERVFAC will incorporate the work unit code (WUC) into TD subjects. The subject of the technical directive will be as established by the Technical Directive Detail Data Sheet (TDDDS) provided by NAVAIR unless otherwise directed.
- 3.3.3 References. References shall include Engineering Change Proposals (ECPs), Change Control Board (CCB) numbers, previous correspondence and documents used as a source of Information or accomplishing the directive. Manuals or handbooks shall be referenced by number, title, and date. Only those required for accomplishing specific procedures (such as installation, rework, or

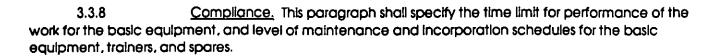
checkout) or as a source of diagrams and Illustrations shall be referenced. Installation data packages (only data package Identification will be listed under references; contents of the installation data package will be listed in Detailed Instructions), when applicable, shall also be cited under this element. Engineering drawings and other design/installation documents shall be referenced by Contractor and Government Entity Code (CAGE) drawing/document number and revision designator. Technical manuals affected are not considered references unless actually used as a source. The contractor may reference contractor documents (Engineering Job Sheet (EJS) or Change Notice (CN) for example) and contract numbers which are relevant and known to USN personnel reviewing and/or using the technical directive. All references must be referred to in the text.

- 3.3.3.1 <u>References in Amendments.</u> The references listed in the basic TD and amendments are not to be repeated. If a new reference is introduced in an amendment, it is to be lettered in continuous sequence from the basic TD or preceding amendment.
  - 3.3.4 Enclosures. All enclosures which are appended shall be identified and listed.
- 3.3.5 <u>Documentation Affected.</u> All documents requiring revision as a result of the TD shall be listed. Drawings, tapes, and Logistic Support Analysis shall be Identified by number; and technical manuals (including Maintenance Requirements Cards) by publication number, title and latest basic/revision/change date that does not include the modified configuration. If sectionalized, the affected section of the manual shall be Identified. When an existing TD is superseded, a statement to this effect shall be included. For tape-only changes (3.1.3) list all affected documents not recorded as kit parts in the supply data paragraph of the TD.
- 3.3.6 <u>Purpose of Directive.</u> Each TD shall include a brief explanation of its purpose. The purpose shall summarize the new features and/or capabilities resulting from the modification, and any conditions such as hazards, failures, or accidents that necessitated the change action. When available, information such as actual and predicted failure rates of the old/unmodified parts and the new/modified parts, respectively, shall be included. The feature heading of an amendment or revision to an existing directive shall be changed to either "Purpose of Amendment" or "Purpose of Revision." In the latter case, both the reason for the original TD and the necessity for publishing the revision shall be specified. For tape-only changes (3.1.3), sufficient information to fully describe corrections or improvements made since the last version of the tape was distributed and a complete explanation of the problems corrected, or improvements provided shall be included.
- 3.3.7 Application Data. This paragraph shall establish the identity and applicability to specific aircraft and models of all Items affected by listing applicable aircraft bureau numbers, trainer serial numbers, engine serial numbers, applicable engine modular serial numbers and if appropriate, equipment/component serial numbers and if assigned, the NSN. For support equipment changes and support software changes the type equipment code (TEC) should be given. When equipment/components have not been identified by serial numbers in the TD, "Not Assigned" will be entered below the SERIAL NO. heading. When serial numbers have been assigned but are unknown; "Unknown" will be entered below the SERIAL NO. heading.
- 3.3.7.1 <u>Dependency Statement</u>. When appropriate, a statement of dependency upon prior, concurrent, or subsequent incorporation of other TDs (AFCs; AACs; ACCs; AVCs; AVCs; AYCs; PPCs; etc.) shall be stated prior to other application data. TDs listed here will include both, TDs which

are required to physically accomplish a change and TDs required to maintain configuration control. For tape-only changes (3.1.3), include dependence on changes to the resident programs which are an integral part of the automatic test equipment (ATE); i.e., Versatile Avionics Shop Test (VAST) operating system tape TPTA1-7000-C6, which is part of UTPR 8012-001.

## 3.3.7.2 <u>Effectivity</u>.

- 3.3.7.2.1 Basic Equipment. This paragraph shall completely identify the major equipment, assembly, or component referenced in the TD title and the modification kit number. With the exception of trainers for ATE Systems, such as the VAST System, basic equipment does not include trainers or spares; trainers for the VAST System and VAST Interface equipment are considered as part of the basic equipment. Test program tapes and test program tape related software in tape-only changes (3.1.3) shall be included in this paragraph. Statements shall be made specifying items requiring (1) modification by service activities, and (2) modifications by contractor (contractor retrofit only, not production incorporated). Aircraft and power plants shall be Identified by type, model, series, contract (when applicable), and serial number; other equipment, such as missiles, SE, and pressure suits, shall be identified by quantity and serial numbers (if assigned), name military type designator (Mark, Mod, Aero, AN, etc.), CAGE, part number and type equipment code. When bureau serial numbers are used, they shall be expressed in definite terms, i.e., "Serial Nos. 123456 thru 123678." In this paragraph only, it is necessary (when showing 123456 thru 123678) that only bureau numbers of one model be included in each of those listings. Bureau numbers of stricken aircraft will be omitted only if omitted on the Technical Directive Detail Data Sheet (TDDDS). Statements such as "Serial Nos. 123456 and subsequent" and "all J79 engines" are not acceptable. TDs, other than airframe or power plant, shall also identify the applicable airframe(s) or power plant(s) by type/model/series. When TDs consist of distinct self-contained parts applicable to different configurations, each configuration shall be listed as Part 1, 2, 3, etc., corresponding to the detailed instructions and kit control numbers within the directive. For tape-only changes (3.1.3), applicability of kits may be specified to a site or an activity, listing the number of kits applicable to each site.
- 3.3.7.2.2 <u>Trainers.</u> Trainer effectivity shall be indicated under the following sub-headings. If trainers are not affected, the term "Not Applicable" shall be entered. This sub-heading is mandatory in all TDs. TDs prepared and issued in parts shall reflect this data in Part 1. For tape-only changes (3.1.3), training sites shall be listed as "Basic Equipment."
- 3.3.7.2.2.1 Operator Trainer (OT). A statement shall be entered if OTs are affected and shall include appropriate serial numbers
- 3.3.7.2.2.2 <u>Naval Air Maintenance Trainer (NAMT)</u>. NAMTs affected will be identified by the complete 12-digit Navy serial number as assigned by Naval Air Maintenance Training Group (NAMTRAGRU), NAS, Memphis, TN. When different configurations are affected, the NAMT 12-digit serial numbers shall be related to the applicable kit identification numbers (KINs).
- 3.3.7.2.3 Spares. All spares affected by the TD shall be identified by quantity (except as indicated in 3.3.10.1.1a and 3.3.10.3), nomenclature, part number, CAGE, and stock number. When different configurations of spares are affected, they shall be cross-referenced to applicable kit numbers. If spares are not affected, the term "Not Applicable" shall be entered. This sub-heading is mandatory in all TDs. (See Figure 3.)



- 3.3.8.1 <u>Time Limit.</u> The time limit for performance of the work, i.e., at next Depot Level Maintenance (DLM)/Modification, at next phase Inspection, prior to next 50 flight hours, etc., shall be shown. The limitations shall be governed by the type and gravity of the uncorrected problem, the operational environment in which the problem is most critical, and the category assigned. The time limit assigned must be compatible with the level of maintenance planned for accomplishing the work.
- 3.3.8.1.1 <u>Immediate Compliance</u>. Immediate TDs shall require discontinuing the use of the affected equipment in the operational environment in which the adverse condition exists, pending completion of the modification.
- 3.3.8.1.2 <u>Urgent Compliance</u>. The compliance requirement for urgent TDs shall specify the incorporation of the instructions no later than the next regularly scheduled rework or overhaul or, for equipment not reworked or overhauled on a regularly scheduled basis, no later than 18 months after issuance of the directive.
- 3.3.8.1.3 <u>Routine Compliance</u>. The compliance requirement for routine TDs shall specify the incorporation of the instructions not later than the next regularly scheduled rework or overhaul, or, for equipment not reworked or overhauled on a regularly scheduled basis, no later than 36 months after Issuance of the directive. In those cases where the accomplishment requires depot maintenance, the compliance may be deferred if it would seriously interfere with operational commitments or schedules. When a TD is prepared for an attrition change, it shall be assigned the Routine Category.
- 3.3.8.1.4 <u>Record Purpose Compliance</u>. This category shall be used when a modification has been completely incorporated in all affected equipment by the contractor or depot maintenance activity prior to issuance of the TD and repairables in the Navy's possession do not require modification or retrofit. A compliance schedule is not required for record purpose TDs but must be mentioned, i.e. compliance: not applicable.
- 3.3.8.2 <u>Level of Maintenance</u>. The level of maintenance required to incorporate the TD shall be shown, i.e., depot, intermediate or organizational. TDs will be designated for accomplishment at the lowest level of maintenance having the required trade skills and facilities. TDs that route the item back to the manufacturer for modification will reflect "contractor" as the level of maintenance.
- 3.3.8.2.1 <u>Dual Maintenance Level</u>. Where the TD indicates accomplishment at one level but permits compliance at a lower level when approved by the type commander, the skill/specialty/rating shall be indicated for each level of accomplishment.
- 3.3.8.3 <u>Incorporation Schedule</u>. A definitive calendar schedule shall be included for basic equipment, trainers and spares. Trainer installation shall be accomplished as soon as practical after receipt of the kit and/or material, but in no case later than the first incorporation in basic equipment. The spares incorporation schedule shall be correlated with the incorporation schedule for basic equipment to provide support for both modified and unmodified configurations. The incorporation

schedule will be shown as reflected in the Technical Directive Detail Data sheet (TDDDS) provided by NAVAIR unless otherwise directed.

- 3.3.9 <u>Man-Hours Required.</u> A tabular list shall be included showing the KIN, kit number, number of personnel, man-hours by skill spelled out and total man-hours required for each kit or non-kit requirement effort. When no kit is supplied KIN and kit number are not applicable (NA). In addition to accomplishing the directed work, consideration shall be given to the work tasks such as gaining access to the work area, reinstallation of parts removed to gain access, and an operational check. Actual figures, determined from experience or trial modifications/verifications, shall be furnished whenever possible. Estimated figures may be used if noted as such. All man-hours shall be indicated by at least two significant figures (e.g., 1.6, 16, 160, 1600). Record purpose TDs are not excluded from this element.
- 3.3.9.1 <u>Multiple Kits.</u> Where more than one kit is included in the application, such as Basic, Spares, and Trainer kits, man-hour information shall be indicated for each type kit. Kit numbers shall always consist of two digits. Example: A1 (Basic), B1 (Spares), E1 (Trainers), P1 (Government Furnished Equipment (GFE)).
- 3.3.9.1.1 <u>Use Code</u>. The first digit is the special use code (always alphabetic) which identifies the specific use for which kits are being procured; i.e., A for basic equipment kits, B for spare kits, C for installation kits, D for special provisions kits, E for NAMT modification kits, K for weapon systems or operator trainer kits, and P for GFE. The second digit, which is numeric or alphabetic, identifies each specific use kit in the TD. When the number of kit configurations procured for a specific use exceeds nine, the letters of the alphabet shall be used except for the letters I, Q, and Z. Kits in excess of 32 will require direction from the Naval Aviation Maintenance Office (NAMO) for kit numbers. Examples of basic equipment kit numbers are: A1 first; AA tenth through AY 32nd, 33rd and up requires direction from NAVAVNMAINTOFF.
- 3.3.9.1.2 <u>Kit Series.</u> Each kit of the same series (1, 2, 3, etc.) will nevertheless have a separate KIN assigned. KINs will be obtained from the Naval Aviation Maintenance Office (NAVAVNMAINTOFF) kit manager, except for FMS peculiar, which will be provided by the respective APML.
- 3.3.9.2 <u>Revision Man-Hours.</u> Revisions shall, in addition to reflecting total man-hours, indicate the number of man-hours required to incorporate the additional requirements of the revision in the event the basic TD and existing amendments have previously been incorporated.
- 3.3.10 <u>Supply Data.</u> All modification kits, parts, materials, and SE required to incorporate the TD shall be identified by quantity, part number, CAGE, nomenciature, Source, Maintenance and Recoverability (SM&R) code, and when available, by National Stock Number (NSN). The data element shall also include a source of supply and a materials disposal listing. The supply information shall be listed in tabular form under sub-headings as indicated below. Only those sub-headings that are applicable shall be listed. If there is no requirement for data under any of the sub-headings, the abbreviation "N/A" shall be entered under the major heading of "Supply Data." Materials conforming to Federal and Military Specifications shall be identified in the Part Number and Nomenciature column in accordance with the number and title contained in the Department of Defense Index of Specifications and Standards (DODISS) or Military Bulletin 544.
- 3.3.10.1 <u>Basic Equipment Requirements.</u> Supply data applicable to the major item, assembly, or component referenced in the TD title shall be indicated under the following sub-headings.

3.3.10.1.1 Kits Required. Materials shall be included as packaged kits of parts unless authorized by NAVAIR to list "Parts Required" in lieu of "Kits Required." Each kit shall contain one copy of the approved TD (except TDs which had been authorized as Interims) and all quantities of kit material required to incorporate the directive. The only Items authorized for omission from the kit are readily available materials such as: paper cups, lockwire, sandpaper, etc., and shelf-life materials with a shelf life of less than two years if kit is to be procured incrementally. All shelf-life materials are authorized to be omitted if total quantity is to be procured in one buy; if material is hazardous requiring extraordinary packaging and handling, and if Items authorized for local fabrication are within the maintenance capability of incorporating activities and complete instructions for their fabrication are included in the TD. When the "Detailed Instructions" require the reidentification of equipment by the installation of a new nameplate, such nameplates shall be included in the modification kit or listed under "Parts Required", as applicable. (Disposition of the old nameplate shall be directed in the "Parts/Material Removed and Disposition" paragraph 3.3.10.5.1) Kits and kit contents shall be described under the following columnar headings:

#### KITS REQUIRED

QTY PART NO. CAGE NOMEN. SM&R NSN SOURCE

- a. The quantity of kits required to accomplish the change in all Items identified by the application paragraph, or the quantity of kits procured prior to submittal of the TD by the contractor to the customer, shall be shown under the QTY heading as directed by the specific program NAVAIR office.
- b. The kit shall be identified, on the first line under the columnar headings, by entry of the KIN in the "Part No." column and shall be described in terms of quantity, kit number (entered in the nomenclature column), size (entered in the "SM&R" column) and weight (entered in the "NSN" column). Should a kit require more than one container, each container will have its size and weight listed in the appropriate columns and identified as container 1 of (total number of containers required for a complete kit), container 2, etc. A code shall be entered in the "Source" column and referenced to the "Source of Supply" paragraph, as explained in 3.3.10.1.4, to Indicate the exact method by which the installing activity shall obtain the kit.
- c. Kit contents shall be listed immediately below the kit entry. Each column shall be complete for every item of kit content except that NSNs are required only when previously assigned and no entry is required in the "Source" column. (If NSNs are not reflected for every item of supply, the following statement shall be entered immediately below the last item: "Subsequent requirements for items of supply, for which no NSN is indicated, shall be requisitioned by part number and CAGE pending publication of the applicable NSN in Navy Stock Lists.") Additionally, for electronics equipment, component part identification shall include circuit symbol reference designators as assigned in accordance with IEEE STD 200. When more than one kit is involved and the contents include common items, the items may be grouped and the quantity column subdivided to reflect quantities in each kit. Where proposed kits differ only in minor content and it is considered economically advantageous, they shall be consolidated and a single kit prescribed.
- 3.3.10.1.1.1 Government Furnished Equipment (P Assigned Kit Numbers). When applicable, GFE (T-purpose) shall be identified by nomenclature/part number and KiN number. NSN is not to be cited.

- 3.3.10.1.2 Government Furnished Material (GFM) and Other Material Required. All material required to comply with the directive, but not included in kits, shall be identified under this sub-heading in the same format required for kit contents in 3.3.10.1.1. Special materials (such as sealants, paint, oil) no included in the overhaul or service manual, shall have the Federal or military specification number reflected in the nomenclature column. Raw stock (such as sheet metal, plexiglass, fabric) shall have the dimensions (not area) indicated in the quantity column in addition to the number of pieces required. Quantities of materials listed shall be the amount required to install one kit. In TDs that identify multiple kits, the quantity listed shall be that which is the largest amount required to accomplish the installation of any of the kits listed.
- 3.3.10.1.3 <u>Support Equipment Required.</u> All SE required to accomplish the modification (other than common or standard tools, i.e. drill motors, standard size drills and reamers, hand tools, etc., and equipment, i.e. air hoses, work stands, meters, etc., normally available at the maintenance level prescribed) shall be listed with applicable data under group 1 or group 2 as described below.
- a. Codes shall be entered in the "Source" column and referenced to the "Source of Supply" paragraph as explained in 3.3.10.1.4 to indicate the exact method by which the change-installing activity shall obtain the items. If items of SE are to be fabricated or if new test program information and tapes are required for automated test equipment, complete instructions/drawings/information shall be furnished as part of the TD.
- b. The "Disposition" column shall be completed, or keyed to notes, to indicate the appropriate disposition of the Items after full compliance with the TD.
- 3.3.10.1.3.1 One-Time-Use Support Equipment. One-time-use items of SE such as special installation tools, fixtures, templates, etc., shall be listed under group 1. These items are required for installation only and are not needed for continuing maintenance after the modification has been fully incorporated. The items may be furnished in kit form or individually, as appropriate. If a kit is being furnished, it shall be identified by KIN (in the "Part No." column) on the first line under the columnar headings and described in terms of quantity procured, kit number, size and weight (entered in the "Nomenclature" column). Kit contents shall be listed immediately below the kit entry. If no kit is furnished, the items shall be listed directly.

#### - GROUP 1 -

#### ONE-TIME-USE SUPPORT EQUIPMENT

<u>QTY</u> <u>PART NO.</u> <u>CAGE</u> <u>NOMENCLATURE</u> <u>SOURCE</u> <u>DISPOSITION</u>

3.3.10.1.3.2 <u>Continuing-Use Support Equipment</u>. Continuing-use Items of SE, such as those defined in OPNAVINST 4790.2 and including Consolidated Automated Support System (CASS), Versatile Avionics Shop Test (VAST), Semi-Automatic Checkout Equipment (SACE), and Basic Automatic Checkout Equipment (BACE), shall be listed under group 2. These Items are required for installation and for continuing maintenance subsequent to full incorporation of the modification. The Items shall have been ascertained to be available at the user level, in the inventory, through supply sources, or as being furnished through new procurement of modification action.

#### - GROUP 2 -

#### CONTINUING-USE SUPPORT EQUIPMENT

NSN

SM&R

SOURCE

NOMENCLATURE

DISPOSITION

3.3.10.1.4	Source of Supply. This paragraph shall contain a cross reference to explain the
codes entered under th	e "Source" columns for the kits, parts, GFM, other materials, and SE listed in prior
paragraphs (3.3.10.1.1,	3.3.10.1.2, and 3.3.10.1.3) Listed below are typical of the types of statements re-
quired. Numbers should	be used for source codes to differentiate from disposition codes that are alpha.

a. Available through normal supply channels.

CAGE

b. Manufacture locally.

PART NO.

QTY

- c. Requisition via channels and procedures established by the NAVAVNMAINTOFF.
- d. Will be furnished by contractor upon notification.
- 3.3.10.1.5 <u>Parts/Materials Removed and Disposition</u>. All parts and materials removed, except low cost hardware (for example: "O" rings, seals, gaskets, etc.), as a result of accomplishing the TD shall be listed. The "Disposition" column shall be completed, or keyed to notes, to indicate the appropriate disposition of the Items. The following format shall be used in listing parts and materials removed.

## PARTS/MATERIALS REMOVED AND DISPOSITION

<u>QTY</u>	PART NO.	<b>NOMENCLATURE</b>	<u>NSN</u>	<u>DISPOSITION</u>

The following are typical of the types of statements required either by direct entry in the "Disposition" column or keyed to notes.

- a. Dispose of through the local Property Disposal Officer.
- b. Rework in accordance with detailed instructions and return to stock.
- c. Return to stock if serviceable.
- d. Return to supply if repairable.
- e. Forward to Contract Administrative Services Component (CASC) for accounting and contractor rework (see note below).

f. Other appropriate phrases to clarify unusual conditions for disposal.

#### NOTE

If material is returned to the CASC for contractor rework or modification required by the directive, a note shall be entered to explain the circumstances; e.g., "Material turnaround will be coordinated by the AMPL, and the Fund Code and Contract Number for rework shall be cited."

- 3.3.10.2 <u>Trainer Requirements.</u> Supply Data applicable to Maintenance trainers shall be specified in the same manner as in 3.3.10.1. If material required for trainers is the same as used for basic equipment, a detailed listing shall not be included; the following statement shall be inserted: "All sub-elements of data are the same as for basic equipment except that the kit identification number is (specify trainer KIN) and the quantity of kits is (specify number of kits required)." Where material differences are minor, the same statement may be used and the exception specified. The use of this reference method is acceptable for other sub-headings.
- 3.3.10.3 Spare Requirements. Supply Data applicable to spares shall be specified in the same manner as in 3.3.10.1. If material required for spares is the same as that used for basic equipment, a detailed listing shall not be included; the following statement shall be inserted: "All sub-elements of data are the same as for basic equipment, except that the kit identification number is (specify spare's KIN) and the quantity of kits is (specify number of kits required)." Where material differences are minor, the same statement may be used and the exception specified. The use of this reference method is acceptable for other sub-headings.
- 3.3.11 <u>Reldentification</u>. Items of supply which are to be modified by the Incorporation of TDs shall require superseding part numbers and superseding National Stock Numbers (NSN) and shall be physically remarked in accordance with 3.3.12.2. If superseding NSN is not available at the time of submission, the ACN is acceptable. Previous and superseding identification shall be reflected as follows:

PREVIOUS	PREVIOUS		SUPERSEDING	SUPERSEDING
<u>P/N</u>	<u>NSN</u>	<b>NOMENCLATURE</b>	P/N	<u>NSN</u>

AN nomenclature shall be used if unchanged. No item of supply shall be listed if the superseding NSN/ACN is not available. Items that require reidentification but have not been assigned a NSN shall be identified in the detailed instructions.

3.3.12 <u>Detailed Instructions.</u> This paragraph shall contain text and illustrations, as necessary, giving step-by-step instructions for accomplishing the modification required by the TD. The instruction shall be concise and clear, with logical continuity. The step-by-step instructions, with essential references to existing NAVAIR technical manuals, engineering drawings, design documents, or to other text and illustrations within the TD, shall be used to define the chronological accomplishment of the work by the simplest and most direct manner. All unusual and critical steps shall be covered in detail. Any procedures used that involve safety of personnel or equipment shall be clearly identified by appropriate notes, cautions, and warnings. Reference to parts or assemblies shall be by both nomenciature and part number. When required, suitable wiring diagram illustrations shall be included. Graphic and

mechanical symbols and reference designations shall be in accordance with MIL-M-81927. If the TD affects NAMTs and spares, the instructions for accomplishing the work should be included in this paragraph. If the instructions are the same, it shall be so stated. If instructions are different, separate subparagraphs shall be used to provide the different data. Nomenclature arrangement shall be in accordance with DOD-STD-100. If items require reidentification, but have not been assigned both a before and after NSN; the reidentification instructions shall be included in this paragraph.

- 3.3.12.1 <u>Grouping of Instructions.</u> When advantageous, detailed instructions shall be individually grouped and identified as Part 1, 2, 3, etc., corresponding to the applicable groups of affected equipment, or corresponding to separate parts of a total modification. The following conditions shall be the criteria for grouping of the instructions:
- a. The directive comprises more than one distinct, self-contained part for which separate detailed instructions and kits of parts are required, and which can be accomplished progressively without compromising the structural integrity or operational use of the equipment.
- b. The TD comprises distinct, self-contained parts applicable to different configurations of affected equipment for which separate installation instructions and kits of parts are required. Reference may be made to previous or subsequent subparagraphs as necessary to preclude unnecessary duplication of identical detailed instructions.
- 3.3.12.2 <u>Marking of Equipment</u>. The remarking of equipment or component parts is mandatory when reidentification is required by 3.3.11, and shall be in accordance with MilL-N-18307. The detailed instructions paragraph shall contain specific instructions for either (1) the remarking of the existing identification plate to reflect the new identification, or (2) the removal of the old plate and installation of a new identification plate. Equipment or components that are not identified by identification plates shall be remarked using the same type and means of marking as the original markings.
- 3.3.12.2.1 <u>Modification Plates for Support Equipment</u>. MIL-P-15024 details the materials and physical characteristics used for identification of equipment. MIL-P-15024/4 specifies the format information requirements for SE modification plates. NAVAIRENGCEN Drawing Number 28638-5SE00363 provides details for the three most common sizes of modification plates. Modification plates not part of a kit must be listed separately in the supply data paragraph of the TD.
- 3.3.12.3 Local Stock/Manufacture. The use of local stock or local manufacture of parts shall be specified only when considered practicable to expedite incorporation of the TD and prior approval has been obtained from the procuring activity. When local manufacture of parts is specified and the lowest level of maintenance capable of incorporation has been indicated as Organizational-or Intermediate-level, the directive shall contain all information, in the form of text and/or illustrations, necessary for those activities to make the parts; i.e., material, dimensions, tolerances, finish etc. Illustrations may be reproductions of engineering drawings when appropriate. When local manufacture of parts is specified, and such manufacture is to be accomplished by depot-level activities only, information necessary for manufacture shall be omitted from the technical directive and reference made to the engineering drawings, and documents referenced thereon, which contain such information.
- 3.3.12.4 <u>Check/Test</u>. Operational checks shall be specified, as necessary, to assure proper operation of the affected parts and systems. When the TD concerns changes to systems,

circuits, etc., an explanation of the change shall be made and the sequence of system or circuit operation shall be clearly outlined.

- 3.3.12.5 <u>Illustrations</u>. The detailed instructions shall include the necessary illustrations to show all modifications and the accomplishment of each major step of the instruction in the proper sequence. The lilustration shall comprise perspective drawings, line drawings, charts, diagrams, etc., whichever affords the clearest presentation. The use of foldout pages shall be limited to the criteria established in paragraph 3.5.5. Illustrations and diagrams shall be in accordance with MIL-M-81927.
- 3.3.12.6 <u>Installation Data Packages.</u> When determined to be economically and/or technically advantageous and when authorized by NAVAIR, installation data packages shall be developed in lieu of complete detalled instructions for complex technical changes which require incorporation by depot maintenance or commercial equivalent (see 6.2.1).
- 3.3.12.6.1 <u>Modification Description</u>. The detailed instructions paragraph of TD's containing installation data package information (as applicable to depot/commercial incorporation) in this category shall describe the modification in brief terms, but in sufficient detail to enable service personnel to determine that the specific modification has been accomplished. The detailed instructions shall also specify the identification, distribution, and ordering source of the installation data package.
- 3.3.12.6.2 <u>Data Package Content.</u> Installation data packages shall be comprised of production or rework drawings, drawing specifications supplemented by narrative instructions and illustrations, and a parts list, as required. The narrative instructions shall contain a list of all drawings supplied in the package and each page of the narrative shall reference the applicable TD title and number. The installation data package shall be furnished to Naval Air Technical Services Facility (NAVAIRTECH-SERVFAC) and each activity authorized to install the TD as directed by the contract authorization or formal correspondence from the contracting officer. Installation data packages shall not be included in kits or technical directives. Data package contents shall not be corrected by TD amendment.
- 3.3.13 <u>Weight and Balance</u>. TDs directing modification of any alrcraft, missile, or airborne equipment for which a maintained weight and balance system is required, shall contain a statement reflecting the effect on weight and balance. The format for the effect of the change shall be consistent with the format used in the original weight and balance data. When a TD is comprised of parts with different effectivities or material differences, the effect on weight and balance shall be listed separately for each part.
- 3.3.13.1 <u>Format Used</u>. The format to be used for aircraft shall be compatible with NAVAIR 01-1B-40, as outlined below.
- 3.3.13.1.1 <u>No Effect on Center of Gravity.</u> If the weight difference is less than one pound, and the center of gravity and Chart A Basic Weight Checklist are not affected by relocation of items, the statement "No Effect on Weight and Balance" shall be used.
- 3.3.13.1.2 <u>Center of Gravity Affected.</u> If the center of gravity is affected, or the weight change is one pound or greater, weight and balance data shall be as indicated in 3.3.13.1.3 or 3.3.13.1.4. The figure for moment constant used in NAVAIR 01-1B-40 for the model concerned shall be

entered in the columnar heading MOMENT/———— and the data required under the indicated columnar heading shall be completed.

3.3.13.1.3 Changes in Basic Weight Check List. If the directive involves deletion, addition, or relocation of Chart A - Basic Weight Check List equipment items, the breakdown of weight change shall be listed under "items removed" and "items added" and the "net change" shall be indicated. Items affecting Chart A shall be identified with a double asterisk. The statement and columnar format shall be as follows:

This TD affects the basic weight and moment as follows:

TEMS REMOVED	POUNDS <u>WEIGHT</u>	INCHES AFT OF REF DATUM	MOMENT/
**	<u></u>	·	
	·	***************************************	
ITEMS ADDED			
••	******		
		***************************************	
		<del></del>	
*NET <u>CHANGE</u>			
	(INCREASE) (DECREASE)		(INCREASE) (DECREASE)

<sup>\*</sup>Enter on Chart C of NAVAIR 01-18-40 Weight and Balance Data Manual.

3.3.13.1.4 <u>Listing of Variable or Expendable Items</u>. If the TD makes provision for variable or expendable Items, such as external auxiliary fuel tanks and fuel, bombs, etc., such Items shall be listed as follows, adding "\*" and "\*\*" to each Item as applicable. Weight and moment/constant shall be listed to one decimal place.

<sup>\*\* (</sup>Delete from) and (add to) Chart A of NAVAIR 01-18-40 Weight and Balance Data Manual.

		***************************************	
·· ··· <u></u>			
<u>ITEMS</u>	POUNDS <u>WEIGHT</u>	INCHES AFT OF REF DATUM	MOMENT/

- 3.3.13.1.5 Special Revisions to Loading Data Chart. Appropriate notes shall be included to cover any special revison to Chart E Loading Data for deletion or relocation of variable load items, modified tank or compartment capacities, substitution of a completely revised Chart E furnished in the parts list, etc.
- 3.3.13.1.6 New Moment Arm Away From Changes. Changes in structure, plumbing, bracketry, etc., need not be given in detail. However, in cases where weight is removed at one location and added at another, resulting in a new moment arm far removed from the proximity of the physical changes, list suitable breakdown under "items removed" and "items added" to clarify the source of the net arm and moment change.
- 3.3.14 Records Affected. TDs shall contain instructions specifying action to be taken on records affected by accomplishment of the directive. (See Figure 3.)
- 3.3.14.1 <u>Record of Compliance</u>. A statement shall be included directing the recording of the accomplishment of the directive in applicable equipment records. The statement shall specifically identify the record involved in accordance with OPNAVINST 4790.2 or OPNAV 8600.2 as applicable. The TD shall contain one of the following statements for reporting compliance:
- a. Use for AFCs and PPCs Record accomplishment of this TD in the aircraft logbook, Technical Directive Section, OPNAV Form 4790/24A and ATDR list No. 2 and 4 as applicable. Compliance shall be reported through VIDS/MAF OPNAV Form 4790/60 and through the Technical Directive Status Accounting System.
- b. Use for AVCs, AYC, AACs, ASCs, etc. Compliance shall be reported through ViDS/MAF OPNAV Form 4790/60 and through the Technical Directive Status Accounting System.
- c. Use for SECs and SSCs Make appropriate entry in support equipment custody and maintenance on OPNAV Form 4790/51. Compliance shall be reported through VIDS/MAF OPNAV Form 4790/60 and through the Technical Directive Status Accounting System.
- 3.3.14.2 <u>Replacement and Expiration Dates.</u> TDs affecting replacement intervals shall direct entry of the new requirement of OPNAV Form 4790/28A, Scheduled Removal Component Card

<sup>\*\* (</sup>Delete from) and (add to) Chart A of NAVAIR 01-18-40 Weight and Balance Data Manual.

<sup>\*\*\*</sup> Enter on Chart E of NAVAIR 01-18-40 Weight and Balance Data Manual.

when such record is maintained for the item involved. Directives affecting installed explosive safety device expiration dates shall direct annotation of OPNAV Form 4790/26A, installed Explosive Devices.

- 3.3.14.3 <u>Aircraft Inventory Record.</u> When applicable, a statement shall be included in the TD specifying that a record entry is required on OPNAV Form 4790/112, Aircraft Inventory Record, in accordance with provisions outlined in current instructions, upon compliance with the TD. A list of inventorial equipment removed or added by the TD shall be included and the quantity, nomenclature, and location in the aircraft specified. Selection of inventorial items shall be in accordance with the criteria established in OPNAVINST 4790.2.
- 3.3.15 Interim Support. The support required to maintain the new configuration, pending establishment of complete Navy support, shall be identified and described. Data shall include (1) the logistic elements involved (documentation, training, spares, and/or repair parts), (2) the activity furnishing interim support, and, (3) the beginning and ending dates of the Interim support.
- 3.3.16 <u>Signature</u>. TDs shall be signed by NAVAIR HQ Logistics Manager Division Director or as specifically delegated by NAVAIR HQ to cognizant field activities and PMA(F)s. Formal TDs are issued by NAVAIRTECHSERVFAC (signature authority, however, remains in NAVAIR).
- 3.3.17 <u>Prepared By.</u> Each directive shall include the name of the preparing organization and code, if applicable.
- 3.3.18 <u>Verified By.</u> Each directive shall include the name of the verifying organization, code and work center, or Indicate "Not Required" in the case of Record Purpose directives, also includes the bureau number of the alreaft of the activity that performed the verification. If, during a critical or urgent operational condition, it is determined that verification of a directive (not categorized as Record Purpose) will not be accomplished, the words "Not Required" shall be entered. This shall be followed by a statement that NAVAIR AIR-04 waived the verification requirements. Include the reference authorizing the waiver of verification e.g. message, itr., etc. Directives shall be verified by the same maintenance level activity as is designated to install the change. Receipt of a TDDDS that designates the APML as the verifying activity means that the actual verifying activity has not yet been designated. The APML will provide the designated verifying activity when known, but the APML shall not be reflected on the TD as the verifying activity.

#### 3.4 <u>Content Development.</u>

- 3.4.1 <u>Uniformity.</u> TDs shall be prepared in the form prescribed herein for uniformity in style and appearance. Figure 3 is an example of a typical TD.
- 3.4.2 <u>Writing Style.</u> Statements shall be terse and simple. The third person indicative mood shall be used for descriptive text and discussion. The second person imperative mood shall be used for instructions. Instructions shall be written as commands, clearly stating what is to be accomplished; e.g., "Install fuel by-pass line between fuel tube and reducer." Normally, articles shall be

omitted; however, articles may be used when required to prevent ambiguity or to facilitate understanding of the instruction. The provisions of MiL-M-81927 shall apply in the use of "shall", "will", "should", "may", and preferred verbs.

3.4.2.1	Symbols and Reference Designations.	Graphic symbols and reference designa-
tions shall be in accorda		

- 3.4.2.2 <u>Text References</u>. TDs shall present, in text and Illustrations, all Information necessary to effect the change. However, lengthy disassembly/assembly/test instructions that are contained in current technical manuals shall be omitted and reference made to the applicable manual by publication number, date of publication, (followed by the words "or latest Issue"), subject matter and Work Package number if applicable. In referring to text matter elsewhere in the TD, the reference shall be to the main titled heading, paragraph, and subparagraph, if deemed necessary.
- 3.4.2.3 <u>Numbers.</u> Numbers can either be shown as numerals or spelled out, provided the method is clear. Double statement of numbers (a number spelled out followed by a numeral in parentheses) shall not be used. Decimal numbers less than unity shall begin with a zero before the decimal point.
- 3.4.3 <u>Security Classification.</u> The security classification of the title and content of TDs shall be identified in accordance with DOD 5200.1-R and DOD 5220.22-M. The overall classification assigned to a TD shall be the highest classification assigned to any material therein. Security markings on the first page shall be shown as indicated 3.3.1.6. Security markings on other pages, including foldout pages, shall be in accordance with MIL-M-81927. Security Classification is only shown on classified TDs.
- 3.5 <u>Reproducible (Camera Ready) Copy</u>. Except as indicated herein, reproducible copy and artwork shall be in accordance with MiL-M-81927. In addition, reproducible material shall be compatible for use in the production of 16 mm microfilm in accordance with MiL-M-81930.
- 3.5.1 Page Size. Text and art material for a reproducible copy page which will require no reduction photographically shall have an image area of 7 x 10 inches for reproduction on a 8 1/2 x 11 inch size page. Oversize sheets may be used with the actual overall area utilized to be of such size that when the sheet is photographically reduced to the prescribed size, the reproduction area and type sizes are in accordance with MiL-M-81927.
- 3.5.2 <u>Typeset Copy.</u> If the TD is typeset, type faces, type sizes, and arrangement of headings, notes, titles, text, authority line, etc., shall be as indicated in figure 5, except that other type faces of equivalent weight, boldness, and plainness of style may be substituted for those specified.
- 3.5.3 <u>Non-Typeset Copy.</u> (See Figure 4.) For those TDs that are not typeset, any other mechanical means for producing comparable type faces may be used, provided that the copy is clean, sharp, and without strike-overs.

Typeset copy

3.5.4 Numbering.

Office composing machine copy

3.5.4.1 <u>Paragraphs</u>. Paragraphs shall be numbered as follows:

#### 1. ١. a. a. (1) (1)(a) (a) 1. (Italics) (Italics) <u>a</u>. a. (Italics) (1)(a) (Italics) (a)

- 3.5.4.2 <u>Pages</u>. Pages shall be numbered with Arabic numerals in the lower-outer corner within the 7 x 10 inch image area. Pages which will not be backed up, when printed, shall also contain the number of the reverse blank page separated by a diagonal, thus: 3/(4 blank).
- 3.5.4.3 Figure numbers shall consist of a single Arabic numeral. Figures shall be numbered consecutively throughout the TD in order of appearance and the number shall be centered at the bottom of each page. Full page illustrations, placed sidewise on a page, shall be turned 90 degrees counterclockwise with the figure title beneath the illustration at the right edge of the page.
- 3.5.5 Foldout Pages. Foldout pages shall be used only for diagrams or charts which cannot be reduced for satisfactory presentation on single pages. Before deciding to use foldout pages, the layout of the diagrams or charts intended for inclusion shall be reviewed to determine whether improved presentation would result if charts and diagrams were simplified into more usable units for reproduction in less extended space. When used, foldout pages shall be prepared in accordance with MIL-M-81927, except that 11 x 44 inches shall be the maximum dimensional limitation.
- 3.5.6 <u>Illustration Preparation</u>. Illustrations shall be prepared in accordance with MIL-M-81927. The use of illustrations in Record Purpose TDs shall be held to a minimum; however, they shall be sufficient to enable service personnel to determine that the specific modifications have been accomplished.
- 3.6 <u>Updating Technical Directives.</u> Updating of TDs shall be accomplished by amendments and revisions.
- 3.6.1 Amendment. An amendment to a TD should contain Information which clarifies, corrects, adds to, deletes from, makes minor changes to, or cancels an existing TD. An amendment shall supplement an existing TD and not be a complete TD in itself. Amendments shall not be issued to one- or two- page TDs. If the size of the amendment approximates the size of the TD, a revision shall be prepared in lieu of an amendment. Where only a change in the rescission date, or the assignment of a new rescission date to an existing TD which has passed its rescission date is required, an amendment to the affected TD shall be issued. A maximum of three amendments may be applied to a TD. The only

exception to the requirement of no more than three amendments to a TD is a fourth amendment may be used when the action is to cancel a TD. Amendments shall include, title, number, subject (identical to the TD), only those elements needed to clearly amend the basic directive, and the same rescisson date as the basic TD, unless the purpose is to show that the rescission date is to be extended or reinstated. Amendments are not authorized to be used in parts; such as, Part 2, Part 3, etc.

- 3.6.1.1 <u>Cancellation Amendment</u>. A cancellation amendment shall be issued when it is determined that a previously issued TD is not to continue to be incorporated. The cancellation amendment shall explicitly state the required configuration of each article initially specified for modification; i.e., whether installed modifications are to remain installed or are to be removed.
- 3.6.2 Revision. A revision shall be a completely new edition of an existing TD. It shall supersede the basic TD or revision and all existing amendments.

### 4. QUALITY ASSURANCE PROVISIONS

- 4.1 Responsibility for Inspection. Unless otherwise specified in the contract, the contractor is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements (see 6.2.1).
- 4.2 <u>Validation.</u> The contractor shall validate all the instructions by accomplishing all the tasks on the system/equipment for which the TD is written. The contractor, when authorized, may accomplish validation simultaneously with verification (Validation/Verification).

#### 5. PREPARATION FOR DELIVERY

5.1 <u>Packaging.</u> Packaging, packing, and marking for shipment shall be in accordance with MIL-M-81927, MIL-P-38790 and MIL-M-81930.

#### NOTES

- 6.1 <u>Intended Use.</u> TDs are used to direct the accomplishment and recording of modifications to weapons, weapon systems, support equipment, trainers, and related equipment procured by or for NAVAIRSYSCOM.
  - 6.2 <u>Ordering Data.</u>
  - 6.2.1 <u>Procurement Requirements.</u> Procurement documents should specify.
  - a. Title, number, and date of this specification.

#### Downloaded from http://www.everyspec.com MIL-D-81992B(AS)

- c. Whether an installation data package is required (see 3.3.12.6).
- d. Responsibility for inspection (see 4.1).
- 6.2.2 <u>Data Requirements.</u> When this specification is used in a procurement which incorporates a DD Form 1423 and invokes the provisions of 7-104.9(n) of the Defense Acquisition Regulations, the following data requirements will be developed as specified by an approved Data Item Description (DD Form 1664) and prepared in accordance with the approved Contract Data Requirements List (DD Form 1423) incorporated into the contract. When the provisions of DAR-7-104.9(n) are not invoked, the following specified data will be prepared by the contractor in accordance with the contract requirements. Data required by this specification is cited in the following paragraphs:

<u>Paragraph</u>	<u>Data Requirement</u>	Applicable DID
3.1	Formal TDs	DI-CMAN-81269A

- 6.3 <u>Supersedure Information.</u> This specification supersedes in whole or in part, specifications or other documents used to express technical content requirements for technical directives that are covered within the scope of this specification.
- 6.4 <u>Changes from Previous Issues.</u> Asterisks are not used in this revision to identify changes with respect to the previous issue, due to the extensiveness of the changes.
  - 6.5 Subject Term (Key Words).

Data Package
Installation Data Package
Kits
Notification
Reldentification
Rescission Date
Support Equipment
Trainers

Preparing Activity:

Navy (AS)

(Project TMSS-N239)



(3.1.2.1) (3.1.2.2)

(3.3.1.1)

DEPARTMENT OF THE NAVY NAVAL AIR SYSTEMS COMMAND WASHINGTON, D.C. 2036 1-4 100 (3.3. 1.2)

> AIR-510XX/410XX (3.3.1.3) Issue Date: 1 July 1976 (3.3.1.4) Rescission Date: 30 June 1978 (3.3.1.5)

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

(TITLE and NUMBER) (3.3.1.7) (TECHNICAL DIRECTIVE CODE) (3.3.1.7) (STATEMENT OF ATTENTION) (3.3.1.8)

**SUBJECT: (3.3.2)** 

REFERENCES: (3.3.3)

ENCLOSURES: (3.3.4)

**DOCUMENTATION AFFECTED: (3.3.5)** 

PURPOSE OF DIRECTIVE: (3.3.6)

APPLICATION: (3.3.7)

COMPLIANCE: (3.3.8)

MAN-HOURS REQUIRED: (3.3.9)

SUPPLY DATA: (3.3.10)

REIDENTIFICATION: (3.3.11)

**DETAILED INSTRUCTIONS: (3.3.12)** 

WEIGHT AND BALANCE: (3.3.13)

RECORDS AFFECTED: (3.3.14)

INTERIM SUPPORT: (3.3.15)

PREPARED BY: (3.3.17)

**VERIFIED BY: (3.3.18)** 

Signature (3.3.16)

Figure 1. Example of immediate and urgent action technical directives.

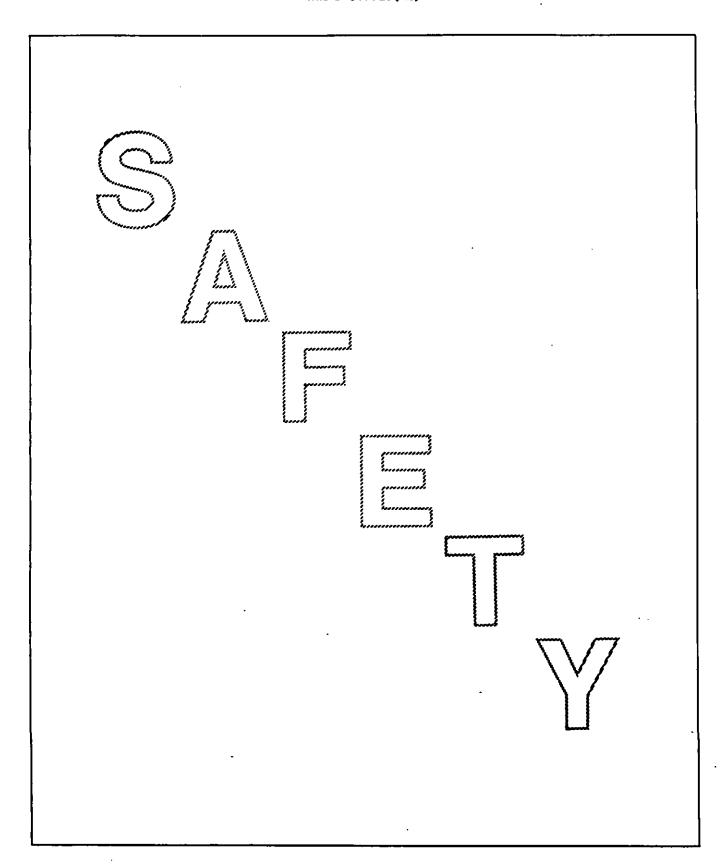


Figure 2. Example of safety overlay.

# **ROUTINE ACTION**

DEPARTMENT OF THE NAVY NAVAL AIR SYSTEMS COMMAND WASHINGTON, D.C. 20361-4100

> AIR-41053H/AIR-5116F4 Issue Date: 30 July 1992 Rescission Date: 31 December 2000

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## F/A-18 AIRFRAME CHANGE NO. 136

(TDC 50)

#### NOTE

Commanding Officers will be responsible for bringing this change to the attention of all personnel cleared for operation of the affected system.

SUBJECT:	CP-1330/ASE-44 Integrated Flight Controls, Roll-Pitch-Yaw Computer, Removal and Installation of
	(WIIC 57D9100)

REFERENCES: (a) McDonnell Alrcraft Company ECP MDA-F/A-18-00324 dated 09 October 1989 (b) NAVAIR ACCB 901-241 dated 09 August 1990

(c) A1-F18AC-LMM-000 Organizational Maintenance Manual - Line Maintenance Procedures, dated 15 August 1983 or subsequent.

(d) A1-F18AC-PCM-000 Organizational Maintenance Manual - Plane Captain, dated 15 September 1983 or subsequent.

(e) NAVAIRSYSCOM Itr AIR-4101C2 PEP Ser: 0587, dated 05 April 1983 (F/A-18 Age Exploration Program Plan)

(f) A1-F18AC-570-300 Organizational Maintenance Manual - System Maintenance with IPB Integrated Right Controls, dated 15 July 1983 or subsequent.

#### **ENCLOSURES:** Process Evaluation Procedures Job List

## **DOCUMENTATION AFFECTED:**

1. A1-F18AC-IP8-450 Parts Ust Index-Volume 1 01 July 1991

2. A1-F18AC-NFM-000 NATOPS Right Manual 15 January 1991

3. A 1-F18AC-NFM-500 NATOPS Flight Manual Pocket Checklist 15 January 1991

4. A1-F18AC-SCM-000 Software Configuration Manual 01 June 1991

5. A1-F18AC-570-100 Integrated Flight Controls-Principles of Operation 01 November 1990

Figure 3. Example of routine action technical directive.

## F/A-18 AIRFRAME CHANGE NO. 136

#### **DOCUMENTATION AFFECTED:**

6. A1-F18AC-570-200 Integrated Flight Controls-Testing & Troubleshooting
 7. A1-F18AC-570-300 Integrated Flight Controls-System Maintenance with IPB

8. A1-F18AC-570-500 Integrated Flight Controls-System Schematics

15 May 1991

<u>PURPOSE OF DIRECTIVE</u>: The purpose of this change is to install an improved roll-pitch-yaw computer. This change was proposed by reference (a). Authority for the accomplishment of this change is contained in reference (b).

## APPLICATION:

#### 1. BASIC EQUIPMENT:

a. The following aircraft shall be modified by service activities:

TYPE/MODEL/SERIES	CONTRACT	SERIAL NO.	KIT REQUIRED
F/A-18A	N00019-78-C-0526	161213 thru 161216, 161248, 161250, 161251	None
F/A-18A	N00019-80-C-0173	161353, 161358, 161359, 161361, 161362, 161364 thru 161367, 161519, 161520, 161521, 161523, 161525	·None
F/A-18A	N00019-80-C-0173	161526, 161527, 161528	None
F/A-18A	N00019-81-C-0157	161702, 161703, 161705, 161706, 161708 thru 161710, 161712, 161713, 161715 thru 161718, 161720 thru 161722, 161724 thru 161726, 161728 thru 161730, 161732, 161734 thru 161739, 161742 thru 161745, 161747 thru 161753 and 161755 thru 161761	None
F/A-18A	N00019-82-C-0501	16 1925 thru 16 1931. 16 1934 thru 16 1937. 16 1939 thru 16 1942. 16 1944 thru 16 1946. 16 1948 thru 16 1965. 16 1967 thru 16 1970. 16 1981 thru 16 1986	None
F/A-18A	N00019-83-C-0272	162394 thru 162398, 162400, 162401, 162403, 162405 thru 162407, 162409, 162410, 162411, 162412,	None

Figure 3. Example of routine action technical directive. - Continued

	F/A-18 AIRFR	AME CHANGE NO. 136	
TYPE/MODEL/SERIES	CONTRACT	SERIAL NO.	KIT REQUIRED
F/A-18A	N00019-83-C-0272	162414 thru 162418, 162420 thru 162426, 162428 thru 162446, 162448, 162449, 162451 thru 162475, 162826 thru 162835, 162837 thru 162841, 162843 thru 162846, 162848, 162849, 162851 thru 162854, 162856, 162859, 162860 thru 162863, 162865 thru 162869, 162871 thru 162884, 162886 thru 162884, 162886	None
F/A-18A	N00019-84-C-0063	163092 thru 163103, 163105 thru 163108, 163111, 163113, 163114, 163116 thru 163122, 163124 thru 163135, 163137 thru 163169, 163171 thru 163175	None
F/A-18B	N00019-78-C-0526	161217, 161249	None
F/A-18B	N00019-80-C-0173	161354 thru 161357. 161360	None
F/A-18B	N00019-81-C-0157	161704, 161707, 161711, 161714, 161719, 161723, 161733, 161740, 161746, 161924	None
F/A-18B	N00019-82-C-0501	161932, 161938, 161943, 161947	None .
F/A-18B	N00019-83-C-0272	162402, 162408, 162419, 162427, 162836, 162842, 162850, 162857, 162864, 162870, 162876, 162885	None
F/A-18B	N00019-84-C-0063	163104, 163110. 163115, 163123	None .
F/A-18C	N00019-84-C-0270	163429 thru 163433, 163435, 163474 thru 163440, 163442 thru 163444, 163446, 163448 thru 163451, 163453, 163455, 163456, 163458,	None

Figure 3. Example of routine action technical directive. - Continued

F/A-18 AIRFRAME CHANGE NO. 136														
TYPE/MODEL/SERIE	S CONTRACT				SERL	ALNO	2.					ļ	KIT RE	QUIRED
F/A-18C	N00019-84-C-0	270			1634 1634 thru 1634 1634 thru thru 1634	163, 16 167, 16 171, 16 1634; 181, 16 1634; 1634; 1634;	53461 53465 53469 51473, 78, 163 53487, 71, 163 76, 163 53502 53508,	thru thru , 1634 3480, thru , 1634 3493 3498, thru	89				No	one
F/A-18D	N00019-84-C-0	270			1634 1634 1634 1634 1634	145, 16 154, 16 164, 16 174, 16 186, 16	53436 53447 53457 53468 53479 53488 53500 53510	. 1634 . 1634 . 1634 . 1634 . 1635	52 <i>.</i> 60, 72, 82, 92,				N	one
AF/A-18A	N00019-83-C-0	431			A21-	-1 thru	1A21-	21					N	enc
AF/A-18A	N00019-85-C-00	<b>0</b> 01			A21-22 thru A21-36				None					
AF/A-18A	N00019-85-C-00	009			A21-37 thru A21-49					N	one			
AF/A-18A	N00019-85-C-03	323			A21	-50 th	ru <b>A2</b> 1	1-57					N	enc
AF/A-18B	N00019-83-C-0	431			A21	-101 f	hru A2	21-114	ļ				N	enc
AF/A-18B	N00019-85-C-00	<b>0</b> 01			A21-	-115 c	ind A2	21-116	<b>,</b>				N	one
AF/A-18B	N00019-85-C-00	009			A21	-117 c	ind A2	21-118	3				N	one
2. TRAINERS: Not applicable.  3. SPARES: Not applicable.  COMPLIANCE: This change shall be incorporated in all affected aircraft not later than the next organizational level induction. Incorporation shall be per the following schedule:														
<u>Equipment</u>	Maintenance Level	CY	į	E	<u>M</u>	A	М	Ĩ	ī	A	<u>s</u>	Q	N	D
Basic	Organizational	92	I	_	121		40	¥ 40	<u>¥</u> 40	40	<u>4</u> 0	40	40	<u>2</u> 40
Trainers	Not applicable	93	40	40	40	18								
Spares	Not applicable													

Figure 3. Example of routine action technical directive. - Continued

#### F/A-18 AIRFRAME CHANGE NO. 136

#### MAN-HOURS REQUIRED:

1. BASIC EQUIPMENT:

KIT IDENT, NO.	<u>KIT NO</u> .	NO. OF MEN	<u>skilt</u>	IOIAL MAN-HOURS
N/A	N/A	1	Avionics Technician	1.0

- 2. TRAINERS: Not applicable.
- 3. SPARES: Not applicable.

#### SUPPLY DATA:

- REQUIREMENTS FOR BASIC EQUIPMENT:
  - a. Government Furnished Material (GFM) and Other Material Required:

<u>QTY</u>	PART NO.	CAGE	NOMENCLATURE	<u>SM&amp;R</u>	<u>NSN</u>	SOURCE
2	897E518G310	89954	Roll-Pitch-Yaw Computer	PAOGD		(1)

- b. Source of Supply:
  - (1) Regulation via channels and procedures established by NAVAVNIMAINTOFF.
- c. Parts/Materials Removed and Disposition:

QTY	PARTNO.	NOMENCLATURE	<u>NSN</u>	<u>DISPOSITION</u>
2	897E518G309	Roll-Pitch-Yaw Computer	66 15-01-186-3822	(A)

Disposition: (A) Modify in accordance with Avionics Change No 4212.

- 2. REQUIREMENTS FOR TRAINERS: Not applicable.
- 3. REQUIREMENTS FOR SPARES: Not applicable.

REIDENTIFICATION: Not applicable.

<u>DETAILED INSTRUCTIONS</u>: This change consists of removing the 897E518G309 Roll-Pitch-Yaw Computers and replacing them with an improved 897E518G310 Roll-Pitch-Yaw Computer. Work required shall be accomplished as follows:

- 1. Basic Equipment:
  - a. Preparatory Work.
    - (1) Remove electrical and hydraulic power per reference (c), WP004 00 and WP009 00.
  - · (2) Install applicable safety and protective devices per reference (d) WP022 00, WP023 00, and WP024 00.

Figure 3. Example of routine action technical directive. - Continued

#### F/A-18 AIRFRAME CHANGE NO. 136

- (3) Do a zonal inspection per reference (e). The inspection will be made of equipment, structure, hydraulic/fuel/fluids, fasteners, avionic/electric/wiring, and general conditions. Complete enclosure (1) of this directive and mail to Commander, Naval Air Systems Command, Attn: 41053H, Washington, DC 20361-4100 immediately upon compilance.
- (4) Remove both 897E518G309 Roll-Pitch-Yaw Computers per reference (f) WP003 00.
- (5) Induct removed units into intermediate level.
- (6) Install reprogrammed 89E518G310 Roll-Pitch-Yaw Computers per reference (f) WP003 00.
- (7) Secure alicraft and return to flight status or as directed by flight control.
- Trainers: Not applicable.
- Spares: Not applicable.

WEIGHT AND BALANCE: No effect on weight and balance.

#### RECORDS AFFECTED:

 Record accomplishment of this TD in the aircraft logbook, Technical Directive Section, OPNAV Form 4790/24A and ATDR list No. 2 and 4 as applicable. Compliance shall be reported through VIDS/MAF OPNAV Form 4790/60 and through the Technical Directive Status Accounting System.

INTERIM SUPPORT: Not applicable.

By Direction of the Commander Naval Air Systems Command

PREPARED BY:

McDonnel Aircraft Company

St. Louis, Missouri (76301)

**VERIFIED BY**:

Not required.

Figure 3. Example of routine action technical directive. - Continued

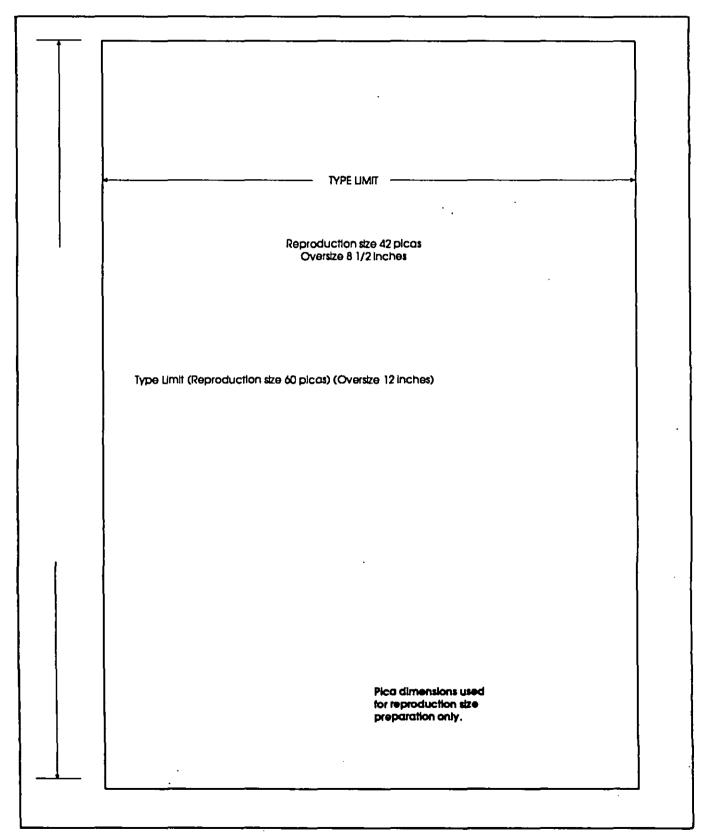


Figure 4. Example of typing guide NAVAIR FORM 5602/1.

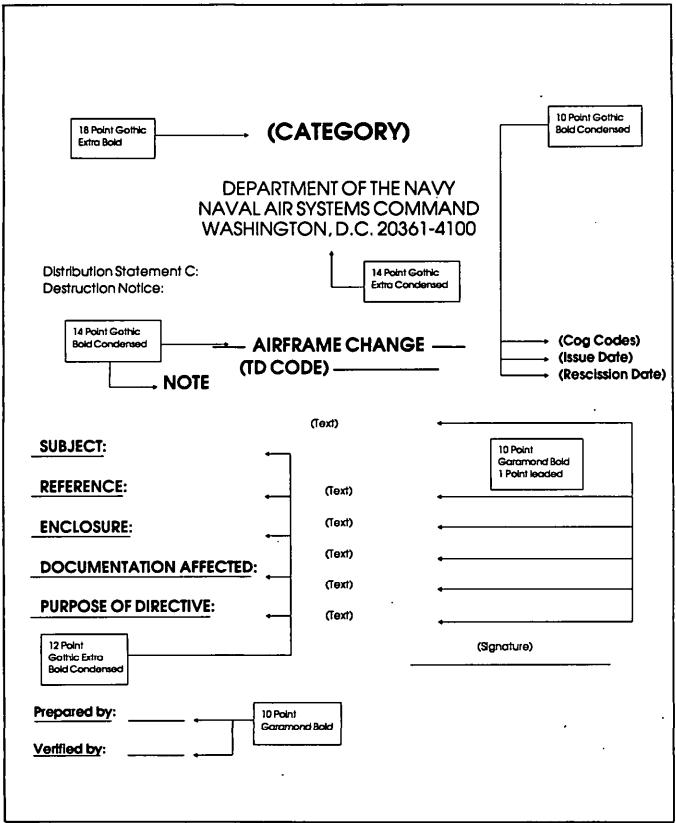


Figure 5. Example of mechanical specifications for typeset copy.

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## STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

#### **INSTRUCTIONS**

- 1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
- 2. The submitter of this form must complete blocks 4, 5, 6, and 7.
- 3. The preparing activity must provide a reply within 30 days from receipt of the form.
  NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

## I RECOMMEND A CHANGE:

1. DOCUMENT NUMBER

2. DOCUMENT DATE
(YYMMDD)

MIL-D-81992B(AS)

940727

3. DOCUMENT TITLE

DIRECTIVES, TECHNICAL: PREPARATION OF

4. NATURE OF CHANGE (Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.)

- 5. REASON FOR RECOMMENDATION
- 6. SUBMITTER
- a. NAME (Last, First, Middle Initial) b. ORGANIZATION
- c. ADDRESS (Include Zip Code)

d. TELEPHONE (Include Area Code)

7. DATE SUBMITTED (YYMMDD)

- (1) Commercial:
- (2) DSN:

- 8. PREPARING ACTIVITY
- a. NAME COMMANDER NAVAL AIR WARFARE CENTER

b. TELEPHONE NUMBER (Include Area Code) (1) Commercial (908) 323-7488

(2) DSN 624-7488

c. ADDRESS (Include Zip Code) CODE 4.1.11 HIGHWAY 547, M/S 120/3 LAKEHURST, NJ 08733-5100 F YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT: Defense Quality and Standardization Office, 5203 Leesburg Pike, Suite 1403, Falta Church, VA 22041-3466 Telephone (703) 756-2340 DSN 289-2340