

**MIL-M-7298C**

1 November 1970

**SUPERSEDING****MIL-M-7298B**

1 May 1969

**MILITARY SPECIFICATION****MANUALS, TECHNICAL: COMMERCIAL EQUIPMENT**

This specification is mandatory for use by all Departments and Agencies of the Department of Defense.

**1. SCOPE**

1.1 *Scope.* (All) This specification establishes:

1.1.1 (All) The minimum requirements for acceptable commercial manuals for use by all Departments and Agencies of the Department of Defense to install, operate, and maintain commercial equipment.

1.1.2 (All) The requirements for supplementary data if the commercial manual is incomplete or inadequate.

1.2 *Application.* (All) This specification is applicable to equipment designed and manufactured to commercial specifications. It is not applicable to equipment of military design for which technical manuals prepared to other military specifications are required. This specification can be applied, when the procuring activity so requests, where a contractor can meet the military design requirements with, or by modifying, commercial equipment. Application of this specification is primarily for the types of commercial equipment that are used to support military equipment, systems, and facilities. These categories include, but are not limited to, the following general types:

Agricultural  
Air Conditioning  
Cleaning/Polishing  
Communication, Electronic,  
and Meteorological (C-E-M)  
Construction  
Data Processing  
Field and Shop  
Fire-fighting  
Ground Handling  
Ground Photographic  
Heating  
Kitchen

Laundry  
Lawn mowing  
Marine  
Medical  
Office  
Plant Protection  
Printing  
Refrigeration  
Sewing  
Snow Removal  
Time keeping  
Vehicles  
Welding

1.2.1(A) When the parts list requirement herein are applied to a manual for Army use, it will be designated as a "non-authenticated" manual.

1.3 *Further use.* (All) Refer to 6.2 concerning further use of commercial manuals.

1.4 *Paragraphs.* (All) Certain paragraphs in this specification are not applicable to all Departments and Agencies of the Department of Defense. The paragraph text is prefixed with the letters (A) Army, (N) Navy, (MC) Marine Corps, (F) Air Force, (DSA) Defense Supply Agency, as applicable. The word "All" indicates that the paragraph is applicable to all Departments and Agencies of the Department of Defense.

**2. APPLICABLE DOCUMENTS**

2.1 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-P-116	Preservation, Methods of
MIL-M-38784	Manuals, Technical: General Requirements for Preparation of
MIL-P-38790	Printing Production of Technical Manuals: General Requirements for
MIL-M-63000	Manuals, Technical, General Preparation Instructions for Manuscripts and Illustrations

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MIL-M-63001    Manuals, Technical: Basic Issue Items, Repair Parts and Special Tools List, and Consolidated Organizational Repair Parts List

(Copies of documents required by suppliers in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

### 3. REQUIREMENTS

3.1 *Acceptable commercial manual.* (All) An acceptable commercial manual shall contain essentially the data listed in the following subparagraphs in a sequence of arrangement that provides continuity. If a manual covers different models, series, configurations of similar equipment, in the form of difference data sheets, errata or change sheets, the manual may be acceptable. However, acceptance of a manual will not be based on content alone but the convenience of using the manual; for example, legibility and size must be taken into consideration. (Manuals with pages smaller than 4 by 8 inches, or larger than 17 by 11 inches, or with smaller than 8-point type for text, or 6-point type for parts lists, are not practical for military use. Each procurement of commercial equipment and its applicable manuals will be considered on an individual basis by the procuring activity in order to obtain manuals to meet the requirements of personnel for operating and maintaining the equipment.) Printed copies must be clear and legible, and may be bound or loose leaf.

3.1.1 *For relatively simple equipment or items.* (All) The simplicity of the equipment shall determine the amount of data needed. A type-written sheet of assembly instructions will be acceptable for relatively simple articles which are shipped disassembled. A list of repair parts, or a card for cleaning and lubricating are acceptable when this is all the data required to service the item.

3.1.2 *For relatively complex equipment or items.* (All) Such manuals shall contain essentially the following data:

- a. Front matter (cover, table of contents, list of illustrations, introduction, safety precautions).
- b. Preparation for use and installation instructions.

- c. General theory of operation.
- d. Operating instructions.
- e. Maintenance instructions (preventive and corrective).
- f. Preparation for reshipment.
- g. Storage.
- h. Parts list.
- i. Illustrations.
- j. Caution and warning notes.

3.1.2.1 *Front matter.* (All) The manual shall have either a cover, title page, or heading on the first page, showing the date the manual was issued, the manufacturer's name and address, the model designation, and serial or identification numbers for the equipment covered.

3.1.2.1.1 *Table of contents, list of illustrations.* (All) A table of contents and list of illustrations are required for manuals of more than 25 pages.

3.1.2.1.2 *Introduction.* (All) The manual shall contain an introduction, or introductory material, containing descriptive information and details, as follows:

- a. Purpose and function.
- b. Capabilities.
- c. Performance characteristics.
- d. Dimensions, weight, volume, center of gravity.
- e. Power and utility requirements.
- f. Environmental requirements.
- g. List of items furnished.
- h. List of items (including cabling) required.
- i. Storage data.
- j. Tools and test equipment.
- k. Warranty information.

Features and characteristics may be summarized in tabular form, such as a Table of Specifications.

3.1.2.1.3 *Safety Precautions.* (All) Safety precautions shall be specified where safety hazards, such as high voltage, are present during installation, operation, or maintenance of the equipment. Health hazards, such as radio frequency radiation, radio-active materials, the presence of poisonous fumes or explosive gases, and the exhaustion of oxygen from the air, shall be preceded by a warning or caution at the

point in the procedure where the hazard is likely to be encountered.

**3.1.2.2 Preparation for use and installation instructions.** (All) Unusual unpacking and assembling instructions shall be stated. Inspection for in-shipment damage shall be explained. Special installation instructions, such as foundation, ventilation, and clearance requirements, plumbing and electrical connections, mounting details, wiring diagrams, initial lubrication instructions, and alignment procedures, shall be provided.

**3.1.2.3 General theory of operation.** (All) General theory of operation instructions shall be provided to the extent necessary for the understanding by operating and maintenance personnel.

**3.1.2.4 Operating instructions.** (All) Such instructions shall include, but not be limited to:

- a. Explanation of the use and function of each control or instrument.
- b. Initial adjustments and control settings.
- c. Start up.
- d. Normal operation.
- e. Operation under emergency, adverse, or abnormal conditions, when applicable.
- f. Shut down.

**3.1.2.5 Maintenance instructions (preventive and corrective).** (All) The following shall be included: (use of special tools and test equipment shall be cited, including model/type designation, as appropriate).

**3.1.2.5.1 Cleaning and lubrication.** (All) Periodic cleaning and lubrication information, covering types of cleaning agents or lubricants required, lubrication frequency and intervals, (monthly, quarterly, semi-annually, hours of operation, mileage, etc). Application points and capacity (required amounts) shall be adequately identified. Pictorial format for lubrication is desirable. (Cleaning and lubrication that take place during repair, replacement and reassembly, shall be covered during such operations. Refer to 3.1.2.5.5)

**3.1.2.5.2 Troubleshooting.** (All) Malfunctions that might occur during operation of the equip-

ment. Troubleshooting data, and fault isolation techniques, shall state: (a) the indication or symptom of trouble, (b) the instructions necessary, including test hookups, to determine the cause, and (c) restoration of the equipment to operating conditions. Information may be in chart form, logic tree form, or in tabular format with appropriate headings.

**3.1.2.5.3 Inspection.** (All) Instructions, including scheduling, for inspection of equipment for damage and wear. Tabular, or chart, form is preferred with emphasis upon allowable service limits, wear, backlash, end play, balance, length and depth of scoring, etc. (These tolerances are not to be confused with manufacturing tolerances; they are acceptable wear tolerances that will not impair performance.) This information shall be sufficiently comprehensive to serve as standards by which experienced technicians may determine when parts may be continued in use and when they must be replaced.

**3.1.2.5.4 Performance verification.** (All) Requirements for accuracy verification of the equipment measurement devices needed to restore the equipment to its original accuracy. These instructions shall provide complete step-by-step procedures which will enable the user to check the accuracy of the indications or readings. The location of test connections and the values expected at these points shall be included. Adjustment of built-in self test features shall be included.

**3.1.2.5.4.1** (All) Data shall include the recommended frequency of adjustment verification checks required. When appropriate, the data shall permit the accomplishment of these adjustments by utilizing a wiring harness, test points, etc, that are accessible from outside the equipment case. Data shall include a list of the additional equipment, such as: temperature, vacuum, pressure, hydraulic, pneumatic gages; decade boxes; voltmeters; signal generators; required to accomplish the verification. The listing shall show methods of use or application, range of scales, and specific minimum tolerances or percentages of accuracy. Showing this information in tabular format is preferred. Such headings as the following may be used.

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NOMENCLATURE	PART/MODEL NO.	APPLICATION	RANGE	ACCURACY
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3.1.2.5.5 *Disassembly, repair, replacement, and reassembly.* (All) Instructions in proper sequence, for disassembling, repairing, replacing, and reassembling the equipment. Test, adjustment, and checkout data, after reassembly, shall be included. Illustrations, including exploded views, should be used as necessary. Also, refer to 3.1.2.5.1.

3.1.2.6 *Preparation for reshipment.* (All) Instructions shall be included for the disassembly, removal, and separate packaging of sensitive or fragile components; use of reusable shipping cases or containers; special cradles; mounting; securing; covering and preservation; precautions for reshipment, shipment and unloading.

3.1.2.7 *Storage.* (All) Instructions shall be included for indoor and outdoor storage, temperature limitations, storage facilities, dunnage, ventilation, revetting, drainage, staking, grounding, covering, and preservation.

3.1.2.8 *Parts List.* (All) The parts list shall provide positive identification of parts necessary for support of the equipment and shall include sufficient information to enable Government personnel to requisition replacement parts.

3.1.2.8.1 *Parts list illustrations.* (All) Clear and legible illustrations shall be provided to identify component parts and parts' relationships.

3.1.2.8.2 *Listing.* (All) Part numbers and part names may be shown on illustrations or separately listed. When the illustrations omit the part numbers and part names, both the illustrations and separate listings shall show either index, reference, or key numbers which will cross-reference illustrated part to listed part. Parts in the listing shall be grouped by assemblies, subassemblies, and modules, with detail parts identified to the assembly of which they are components.

3.1.2.8.2.1 *Prime contractor's parts.* (All) The prime contractor's part numbers shall be included only for parts for which he has proprietary rights, exercises design control, and for which he is the logical supplier. Prime contractor assigned numbers shall also be included for vendor or commercial parts, if such parts are altered, selected, or source controlled because of special fit, tolerance, weight, or reliability of performance. (Repainting, re-identifying, or

other non-significant operations, are not adequate cause for use of assigned numbers.)

3.1.2.8.2.2 *Vendor's parts.* (All) Vendor components, assemblies, parts, purchased by the prime contractor for which the prime contractor does not have design control, shall be identified by the vendors' part numbers. Detail parts in a prime contractor's assembly, as well as attaching parts, for which the prime contractor does not have design control, shall also be identified by the applicable vendors' part numbers.

3.1.2.8.2.3 *Commercial parts.* (All) Common commercial hardware and bulk items which are not of special design, such as bolts, washers, nuts, screws, fittings, keys, hinges, wire, cable, gasket material, tubing, hose, etc, obtainable from a wide range of sources need show only the notation "Commercial" (or the abbreviation "Com!") instead of a part number. The part name (nomenclature or description) shall be complete enough to facilitate substitution of equivalent items from existing Government stock.

Examples:

Figure and Index No.	Part No.	Part Name (Nomenclature or Description)
2-4	Commercial	NUT, Hex head, plain steel, 1/4-20UNC-3B
2-5	Commercial	WIRE, Electrical, copper, tin plated, No. 14 AWG, 19 strands of No. 27AWG, 0.250 in. dia

3.1.2.9 *Illustrations.* (All) Manuals shall contain a sufficient quantity of illustrations (line drawings and halftones) to locate and identify all components of operational and maintenance significance, and where necessary for clarity, to show configuration, and the removal and disassembly of parts. The following shall be included: schematic diagrams which show the functional physical arrangement of component devices or parts; wiring diagrams which show the physical electrical connections of the circuit arrangement; and schematic piping diagrams which depict the interconnection of components of piping, tubing, or hose, and the direction and sequence of fluid flow.

3.1.2.9.1 *Circuit diagrams.* (All) Circuit diagrams for electronic units or sets shall be provided to support theory, maintenance and troubleshooting.

Circuit diagrams shall depict part reference designations as used in test tables and parts lists, the function name of each stage or circuit, primary signal flow, test points, wave forms with pertinent characteristics, part electrical characteristics in actual values (ohms, microhenrys, etc), functional name of each variable control, input and output connectors/terminals voltages and signals or control function, etc. Voltage and resistance values measured with controls set for normal operation shall be shown for significant points, such as terminal boards, tube sockets, and connectors. The DC resistance of coils, chokes, and transformers shall be shown at the part (one ohm or more only). Interconnecting cable diagrams shall be furnished to show TO-FROM information, including any intermediate connections. Block diagrams shall be provided to support theory, installation instructions, etc, but shall not be substituted for schematic diagrams. Logic diagrams for non-repairable digital circuitry may be substituted for schematic diagrams; however, schematic diagrams for power supplies, relays, transformers, variable controls, tubes (including cathode-ray tube, CRT) and photo cells shall be provided.

3.1.2.10 *Caution and warning notes.* (All) "Caution" notes shall indicate any condition or practices which, if not strictly observed or remedied, could result in damage to, or destruction of the equipment. "Warning" notes shall indicate any conditions or practices which if not strictly observed, could result in personal injury or possible loss of life.

3.2 *Supplemental data.* (All) When the procuring activity determines that the commercial manual is satisfactory, supplemental data shall conform to the following:

3.2.1 *Identifying technical publication sheet.* (N, MC, F, DSA) Regardless whether the commercial manual is wholly or partially acceptable, an identifying technical publication sheet shall be supplied. The identification publication sheet shall be prepared by the contractor and shall identify the commercial manual and any supplemental technical data provided. When the commercial manual is acceptable, as written, and requires no supplemental technical data, the identifying technical publication sheet shall be prepared in accordance with figure 1. When supplemental technical data must be supplied to

make the commercial manual complete or adequate, an identifying technical publication sheet shall be prepared in accordance with figure 2.

3.2.2 *Supplemental technical data.* (All) The procuring activity will inform the contractor those areas in which supplemental technical data are required to comply with the requirements of 3.1. These may be additional instructions, illustrations, parts list data, detail parts of vendor components, cross-reference list of prime contractor's assigned part numbers to vendor's part numbers, warranty statement, etc. Such data shall not consist of "pen-and-ink" corrections to the commercial manual.

3.2.2.1 *Form for supplemental data.* (All)

3.2.2.1.1 *Format and style of contents.* (N, MC, F, DSA) General format and style shall conform to MIL-M-38784. The supplemental data shall:

a. Contain the information that the procuring activity deems essential.

b. Be in the arrangement and format indicated herein.

c. Be without advertising matter; without coverage of other models, accessories, components, not purchased by the procuring activity; without instructions to return the equipment to a dealer or to a factory for repair or replacement, unless this is part of a warranty statement.

d. Furnished in the form (manuscript, reproducible copy suitable for offset printing, photolithographic negatives, desired quantity of printed copies) specified in the contract by the procuring activity.

e. Contain, if necessary, copyrighted information, with the understanding that the requirements of 3.3 apply.

3.2.2.1.2 *Safety precautions.* (All) When the procuring activity so requests, safety precautions shall be listed on a separate "front matter" page.

3.2.2.1.3 *Approval and procurement record page.* (N, DSA) Specific contractual requirements will indicate when this page is required. It shall conform to figure 3 or 4, as applicable. It shall become the last page of the materiel submitted.

3.2.2.1.4 *Letter of promulgation.* (N, MC) The requirements of MIL-M-38784 are applicable.



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3.2.2.1.5 *Activity comment sheet.* (N, DSA). This sheet shall conform to figure 5 or 6, as applicable.

3.2.2.1.6 *Preparation of reproducible copy.* (All) The requirements of MIL-M-38784 are applicable.

3.2.2.1.7 *Preparation of negatives; accomplishment of printing, drilling, binding.* (N, MC, F, DSA). The requirements of MIL-P-38790 are applicable.

3.2.2.1.8 *Changes and revisions.* (All) Changes and revisions for supplemental data are desired when the information therein, or in the commercial manual, is incorrect or out-of-date, or operation or maintenance of the equipment is changed. Changes and revisions shall conform to MIL-M-38784.

3.2.2.2 *Army authentication requirements.* (A) Acceptable commercial manuals to be Army authenticated shall be augmented with the following data elements which shall be prepared as specified in MIL-M-63000 and MIL-M-63001 as determined by the procuring activity.

Warning page.

Maintenance Forms and Records.

Reporting of Errors (DA Form 2028).

Administrative Storage.

Destruction of Army Material to Prevent Enemy Use.

Maintenance Allocation Chart.

Basic Issue Item List.

Repair Parts and Special Tools List (RPSTL).

Publication Number and Date.

3.2.2.2.1 *Defective material.* (A) Instructions on the disposition of defective or damaged material sold under warranty shall be included in the introductory material or added as supplemental data, as determined by the procuring activity.

3.2.3 *Commercial manual additional requirements.* (All)

a. When the procuring activity so specifies, the Federal Item Name, Federal Stock Number, part number, and applicable contract number, shall be overprinted on the cover, or first page,

or inserted by adding a page to be placed beneath the cover or first page.

b. When the contractor advises the contracting officer that separate lubricating instructions or charts are required, the contract will so specify (following special negotiations) and indicate the specification to which such data shall be prepared.

c. The publication number assigned by the procuring activity shall be stamped, printed, or written, by the contractor in the upper right corner of the cover, or first page, (approximately 1/2 inch from the top, one inch from the right edge in characters at least 1/4 inch in height) of all printed copies of the commercial manual.

d. (N) Where the commercial manual is in loose-leaf form, a supplementary List of Effective Pages shall be included. Refer to MIL-M-38784.

3.3 *Copyrights.* (N, MC, F, DSA) A commercial manual and supplemental data may contain copyrighted information. However, the contractor shall agree, and does hereby grant, to the Government a royalty free, nonexclusive and irrevocable license to reproduce all data covered by copyright with the limitation that such data may not be released outside of the Government, in accordance with Armed Services Procurement Regulation (ASPR), Section IX, paragraph 9-203.

3.3.1 *Copyright release.* (A) When required by the procuring activity, the contractor shall furnish an appropriate copyright release giving the Government permission to reproduce and use the copyrighted information. When the contractor uses a manual which covers a vendor's components or portions thereof, and the vendor's manual contains copyrighted material, the contractor shall be responsible for obtaining a copyright release from the vendor and furnishing such release to the Government.

3.4 *New Manuals.* (All) When there is no existing commercial manual or the manufacturer's commercial manual is unacceptable because the volume of supplemental data required to make it meet the necessary requirements would be so extensive that clarity could not be preserved, the contract will specify that the contractor shall prepare a new manual, either to include the requirements of this specification, or in accordance with a designated military specification.

#### 4. QUALITY ASSURANCE PROVISIONS

4.1 *Commercial manual.* (All) The provisions of this specification shall determine to what extent a commercial manual is acceptable.

4.2 *Supplemental data.* (All) The requirements of this specification and MIL-M-38784 and MIL-P-38790 are applicable, as contractually specified.

#### 5. PREPARATION FOR DELIVERY.

5.1 (All) The requirements of MIL-M-38784 and MIL-P-38790 are applicable, as contractually specified.

5.2 (All) Reproduced copies of commercial manuals and supplemental data shall be packed with the commercial equipment, as contractually specified. MIL-P-116, Method IC-3 or Method III, shall be followed when cited in the contract. Extra (bulk) copies will also be supplied as contractually specified.

#### 6. NOTES

6.1 *Intended use.* (All) Commercial manuals and supplemental data are intended for support of commercial equipment used by the military Services. (This specification is not intended to standardize the style, format, size or contents of commercial manuals.)

6.2 *Submission of manuals for examination.* (All) Invitations for bids and requests for proposals for the procurement of commercial equipment will, when applicable, contain a requirement for each bidder to submit a limited number of printed copies of commercial manuals, or supporting data, to the procuring activity. Such procurement documents will also state that bidders who have no manuals will be required to quote on the cost of preparation of a manual. The successful bidder's contract for the equipment will state whether his manual is satisfactory, satisfactory if supplemented, a manual must be prepared, or his original quote for a manual was acceptable. If supplementary data is required, details will be provided as to what information such a publication shall contain.

6.2.1 *Manual evaluation sheet.* (All) Evaluation of a commercial manual can be expedited if each copy of the manual submitted for examination has a completed sheet attached to it, prepared in accordance with figure 7.

6.3 *Ordering data.* (All) Procurement documents should specify:

- a. Title, number, and date of this specification.
- b. Whether only an identifying technical publication sheet, without supplemental data, is required (3.2.1)
- c. Whether manuscript copy only, reproducible copy, original artwork, negatives, or printed copies, are to be furnished (3.2.2.1.1.d)
- d. Whether safety precautions shall be listed on a front matter page. (3.2.2.1.2)
- e. Whether an approval and procurement record page is required. (3.2.2.1.3)
- f. Whether a Letter of Promulgation is required (3.2.2.1.4)
- g. Whether an Activity Comment Sheet is required (3.2.2.1.5)
- h. When changes and revisions are required (3.2.2.1.8)
- i. When Army authentication is required (3.2.2.2, 3.2.2.2.1)
- j. Whether the Federal Item Name, Federal Stock Number, part number, and applicable contract number, shall be overprinted on the cover or first page, or inserted by adding a page to be placed beneath the cover or first page. (3.2.3.a)
- k. Whether separate lubricating instructions are required, and the specification to which they shall be prepared. (3.2.3.b)
- l. Whether a copyright release is required. (3.3.1)
- m. Whether a new manual shall be furnished and the applicable specification (3.4)
- n. What are the packaging requirements (5.2)

#### 6.4 Definitions (All)

6.4.1 *Commercial manuals.* (All) A manufacturer's manual, instructions, or other data, containing technical information concerning assembly, installation, operation, maintenance, and parts identification, in card, looseleaf, or bound manual form, which is normally furnished by a manufacturer to purchasers of his commercial products or sold to repair or service men or repair shops.

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**6.4.2 Supplemental data.** (All) A publication, in the general format of MIL-M-38784, which augments a commercial manual, and consists of:

a. An identifying technical publication sheet that identifies the manufacturer's commercial manual and authorizes it for official use. See figure 1.

b. Additional technical information that makes a commercial manual complete for military use. See figure 2.

c. (A) Additional technical data, such as maintenance allocation chart, basic issue item list, repair parts and special tools list, etc, required to render the manual acceptable for Army authentication.

**6.5 Use of other technical content specifications.** (All) When the procuring activity so decides, and separately negotiates for it, a manual will be prepared to the regular specifications which are used when military equipment is procured. (3.4)

**Custodians:**

Army - TM  
Navy - SH  
Air Force - 16  
Defense Supply Agency - CS

**Preparing Activity:**

Air Force - 16

**Review Activities:**

Army - AT, AV, EL, ME, MI, MU, TM, WC  
Navy - AS, EC, MC, OS, SH, YD  
Air Force - 01, 10, 16  
Defense Supply Agency - GS, CT

**User Activities:**

Army - MD  
Navy - CG  
Air Force - 11, 13, 15, 19, 70, 71, 80, 82, 84  
Defense Supply Agency - IP, CT

Project TMSS - 0215



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PUBLICATION NUMBER  
DATE

## IDENTIFYING TECHNICAL PUBLICATION SHEET

(Supersedure note, or other special notes, if any)

1. PURPOSE: This technical publication is issued for the purpose of identifying and authorizing the following commercial manual for (Navy) (Marine Corps) (Air Force) (Defense Supply Agency) (as appropriate) use.

MANUFACTURER: (Name and address)

PURCHASE ORDER OR CONTRACT NO.

EQUIPMENT: (Type, model, part number, nomenclature, Federal Item Name, serial numbers.)

REQUISITION NO. (If furnished by the procuring activity.)

FEDERAL STOCK NUMBER: (If furnished by the procuring activity.)

TITLE: (Operating Instructions, Maintenance Instructions, Parts List, as appropriate)

ADDITIONAL IDENTIFICATION (if any): Volumes, Parts, etc.

DATE: (If any)

2. ADDITIONAL COPIES: Additional copies are available from \_\_\_\_\_. (Procuring activity will furnish information, but if no information is furnished, this paragraph will be omitted and the following paragraph moved up into its place.)

3. FILE LOCATION: The above described commercial manual is filed in \_\_\_\_\_. (Each library will fill this in if this identifying technical publication sheet is filed separately from the commercial manual.)

(An appropriate statement, such as the following, will be used.)

PUBLISHED BY DIRECTION OF THE COMMANDER, NAVAL \_\_\_\_\_ SYSTEMS COMMAND

REFER TO ATTACHED LETTER OF PROMULGATION (Navy, Marine Corps)

REFER TO ATTACHED APPROVAL AND PROCUREMENT RECORD PAGE (Navy, Defense Supply Agency)

PUBLISHED UNDER AUTHORITY OF THE SECRETARY OF THE AIR FORCE

(For unclassified manuals)

NOTICE: Reproduction for non-military use of the information or illustrations contained in this publication is not permitted. The policy for military use reproduction is established for the Army in AR 380-4, for the Navy and Marine Corps in OPNAVINST 5510.1B, and for the Air Force in AFR 205-1.

(For classified manuals)

NOTICE: This material contains information affecting the national defense of the United States within the meaning of the Espionage Laws, Title 18, U.S.C., Section 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

Figure 1. Sample of Identifying Technical Publication Sheet for a Commercial Manual

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PUBLICATION NUMBER  
DATE

## IDENTIFYING TECHNICAL PUBLICATION SHEET

(Supersedure note, or other special notes, if any)

## I. IDENTIFICATION DATA

1. PURPOSE: This technical publication is issued for the purpose of identifying an authorized commercial manual for (Navy) (Marine Corps) (Air Force) (Defense Supply Agency) (as appropriate) use and for providing supplemental technical information thereto.

MANUFACTURER: (Name and address)

PURCHASE ORDER OR CONTRACT NO.

EQUIPMENT: (Type, model, part number, nomenclature, Federal Item Name, serial numbers)

REQUISITION NO: (If furnished by the procuring activity)

FEDERAL STOCK NUMBER: (If furnished by the procuring activity)

TITLE: (Operating Instructions, Maintenance Instructions, Parts List, as appropriate)

ADDITIONAL IDENTIFICATION (if any): Volumes, Parts, Etc.

DATE: (If any)

2. ADDITIONAL COPIES: Additional copies are available from \_\_\_\_\_.  
(Procuring activity will furnish information, but if no information is furnished, this paragraph will be omitted and the following paragraph moved up into its place.)

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(Each library will fill this in if this identifying technical publication sheet is filed separately from the commercial manual.)

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(For unclassified manuals)

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(For classified manuals)

NOTICE: This material contains information affecting the national defense of the United States within the meaning of the Espionage Laws, Title 18, U.S.C., Section 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

## II SUPPLEMENTAL DATA

1. LIST OF AFFECTED PAGES IN BASIC MANUAL. (This will be a summary of the page numbers changed by additions or deletions by the information that follows.)

2. SUPPLEMENTARY INFORMATION. The information contained in the above identified commercial manual is supplemented as follows:

- a. Introduction/Description
- b. Preparation for Use and Installation Instructions
- c. General Theory of Operation
- d. Operating Instructions
- e. Maintenance Instructions
- f. Parts List

(Data will be inserted by the contractor as required by the procuring activity)

Figure 2. Sample of Identifying Technical Publication Sheet and  
Supplemental Data Provisions for a Commercial Manual.

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## APPROVAL AND PROCUREMENT RECORD PAGE

APPROVAL DATA FOR: .....(Publication Number).....  
 .....(Title of Manual).....

APPROVAL AUTHORITY:

CONTRACT OR PURCHASE ORDER NUMBER	NUMBER OF UNITS	QUANTITY OF MANUALS
-----------------------------------------	-----------------------	---------------------------

REMARKS:

CERTIFICATION: (One of the following certification paragraphs shall be typed in this space, as appropriate.)

(For manuals being furnished for the first time.)

"It is hereby certified that NAVSHIPS \_\_\_\_\_ to be provided under contract number \_\_\_\_\_ has been approved by the approval data shown above."

(For identical manuals procured on follow-on (subsequent) contracts.)

"It is hereby certified that the manuals to be provided under contract number \_\_\_\_\_ are exactly identical to NAVSHIPS \_\_\_\_\_ approved by authority of approval data shown above."

(Signature typed)	(Title)
Contractor's Name	
Contractor's Address	
Federal Code Number (Home Office)	

Figure 3. Approval and Procurement Record Page (Navy)

MIL-M-7298C

## APPROVAL AND PROCUREMENT RECORD PAGE

APPROVAL DATA FOR: Defense Personnel Support Center Technical Manual for X-Ray  
Apparatus, 300 MA R-F, 220 Volt, 60 Cycle, AC.

PUBLICATION/CONTROL NUMBER:

APPROVAL AUTHORITY: Defense Personnel Support Center letter dated ..... 1969

CONTRACT OR ORDER	NUMBER OF UNITS	QUANTITY OF MANUALS
DSA2-10545	4	2 plus 2 per unit Total: 10

REMARKS:

NONE

CERTIFICATION:

DATE: \_\_\_\_\_

It is hereby certified that the DPSC Technical Manual for X-Ray Apparatus,  
300 MA R-F, 220 Volt, 60 cycle, AC, to be provided under Contract DSA2-10545, has  
been approved by the approval data shown above.

\_\_\_\_\_  
(Signature typed) (Title)  
Contractor's Name  
Contractor's Address

Figure 4. Approval and Procurement Record Page (DSA)

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USER ACTIVITY TECHNICAL MANUAL COMMENT SHEET  
NAVSHIPS 5600/2(REV .9/67)  
(Formerly NAVSHIPS 4914)  
(COG I - 11-DIGIT STOCK NUMBER: 0105-503-9850)

NAVSHIPS NO. \_\_\_\_\_  
VOLUME NO. \_\_\_\_\_

(Fold on lines on reverse side, staple, and mail)

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PROBLEM AREA:

(Both sides of this form to be reproduced locally, as required.)

**Figure 5. User Activity Comment Sheet, (Navy) (front)**  
(Sheet 1 of 2)

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WASHINGTON DC 20360  
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DEPARTMENT OF THE NAVY

Officer in Charge  
Naval Ship Engineering Center  
Port Hueneme Division  
Section 6865  
Port Hueneme, Calif 93041

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Figure 5. User Activity Comment Sheet (Navy) (back) (Sheet 2 of 2)



MIL-M-7298C

USER ACTIVITY COMMENT SHEET  
TECHNICAL MANUAL  
for

X-RAY APPARATUS, 300 MA R-F, 220 VOLT, 60 CYCLES AC.

FSN 6525-082-2692

MANUFACTURED BY

CONTRACTOR'S NAME AND ADDRESS

CONTRACT DSA2-10545

(Fold on lines on the reverse side, staple in the corners, and send to:

Defense Personnel Support Center, Directorate of Medical Materiel, Philadelphia,

PA 19101. No postage required.)

PROBLEM AREA: (Component.....; Serial No.....)

Figure 6. User Activity Comment Sheet (DSA) (front) (Sheet 1 of 2)

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Philadelphia, Pa. 19101

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Figure 6. User Activity Comment Sheet (DSA) (back) (Sheet 2 of 2)

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## MANUAL EVALUATION SHEET

(Bidders should prepare and complete a sheet, similar to the following, and attach it to each copy of a manual submitted for examination.)

(Check applicable block)

	MANUAL CONTAINS	*MANUAL PARTIALLY CONTAINS	MANUAL DOES NOT CONTAIN	NOT APPLIC- ABLE
Front Matter				
Cover/Title Page/Heading				
Table of Contents				
List of Illustrations				
Introduction/Preface/Forward				
Safety Precautions				
Preparation for Use				
Installation Instructions				
General Theory of Operation				
Operating Instructions				
Maintenance Instructions				
Cleaning				
Lubrication				
Troubleshooting				
Inspection				
Performance Verification				
Disassembly				
Repair				
Replacement				
Reassembly				
Preparation for Reshipment				
Storage				
Parts List				
Illustrations				
Diagrams				
Caution and Warning Notes				

\* Does not completely satisfy requirements of all subparagraphs of 3.1.2

Bidder's signature and date



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**NOTE:** This form may not be used to request copies of documents, nor to request waivers, deviations, or clarification of specification 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.

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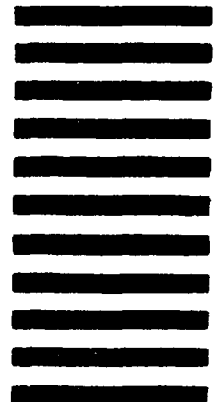
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