

GENERAL REQUIREMENTS FOR TECHNICAL PUBLICATION PREPARATION

1. SCOPE

1.1 Intent. This specification establishes requirements for the uniform preparation and delivery of technical manuals/publications using various referenced standards. The terms “manuals” and “publications” are interchangeable.

2. REFERENCES

COAST GUARD DRAWINGS

None.

COAST GUARD PUBLICATIONS

Coast Guard Commandant Instruction (COMDTINST) M5260.0, Management of Scientific and Technical Information (STINFO)

OTHER REFERENCES

Federal Acquisition Regulation (FAR) 17 U.S.C. 401 or 402

MIL-PRF-32216A: Evaluation of Commercial off the Shelf (COTS) Manuals and Preparation of Supplemental Data

MIL-STD-38784A: Standard Practice for Manuals, Technical: General Style and Format Requirements

NOTE

In the event of a conflict between the information or options presented in any other specification or standard, the information provided within this Standard Specification shall take precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 Data rights. Special emphasis shall be placed on obtaining and documenting Government rights to the technical data, and appropriately marking the data so the nature of the rights are clearly identified, particularly when Government rights differ from the rights available to the general public. The manual shall include the appropriate copyright release or rights in data statements. The copyright release shall apply to both the manual and any supplemental data and shall be as specified in the copyright release letter. The copyright release letter shall be placed in the technical publication. When acquiring technical publications that were not developed specifically for the USCG under a major acquisition contract, a copyright is claimed in accordance with Federal Acquisition Regulations, 17 U.S.C. 401 or 402, the contractor/vendor is required to acquire on the USCG's behalf, a paid-up, nonexclusive, irrevocable worldwide license in such copyrighted data for the use of the USCG to reproduce and prepare derivative works by or on behalf of the USCG.

NOTE

Technical publications shall be developed as standalone documents. The grouping of different publication types to form one technical publication shall be avoided.

3.2 Types of technical manuals/ publications.

3.2.1 Commercial Off The Shelf (COTS). These technical publications are available off-the-shelf from a commercial source and include operation, maintenance, and other instructions for commercial equipment. Commercial manuals are prepared to support the equipment in the commercial market.

3.2.2 Other government agencies (OGA). These technical publications have been developed by and are currently in use by OGAs and shall be used as Government Furnished Information (GFI) when Government Furnished Equipment (GFE) is being installed onboard USCG assets.

3.2.3 Contractor developed publications. These technical publications will be developed by the contractor when no other documentation exists for a system or equipment that is being installed onboard a USCG asset.

3.3 Technical publication number assignment. Technical publications numbers will be assigned by the Technical Information Management Branch (TIMB) Publication Production Distribution Section (PPDS) once the publication is accepted for use and is ready to be published in the NE-TIMS repository. OGA publications that will be used by the USCG will retain the number that was assigned by the authoring agency.

3.4 STINFO assignment. Scientific and Technical Information (STINFO) markings will be placed on the publication in accordance with COMDINST M5260.6, Management of Scientific and Technical Information (STINFO). TIMB-PPDS will be responsible for assigning the proper STINFO markings before publishing to the NE-TIMS repository. STINFO that has been assigned to OGA publications by the authoring agency will be used by the USCG.

3.5 Content. The technical publication shall provide, at a minimum, the necessary information and instructions to operate and maintain the equipment at the organizational level. The following sections, at a minimum, shall be included:

3.5.1 General information and safety precautions. An introduction to identify the equipment, equipment description, location, associated equipment, general safety instructions, and drawings or diagrams showing general arrangements.

3.5.2 Theory of operation. Identify and describe the theory of operation of the equipment/ system and all components.

3.5.3 System description. Identify and describe the purpose, interconnection, and functional operation of the equipment/system and all components.

3.5.4 Component description. Include sufficient information to identify and describe all major system components.

3.5.5 Functional description. Discuss the control philosophy used by the system design and provide a detailed description of the controls used.

3.5.6 Installation. Include general information sufficient to install or remove the equipment, including handling procedures, special tools, access clearances and supporting services (crane, welding, etc.) required. The locations of lifting eyes and special rigging shall be discussed.

SFLC STANDARD SPECIFICATION 0860

3.5.7 Operating procedures. Identify all normal system operations and evolutions, which involve personnel. Detailed step-by-step operating procedures for these operations and evolutions shall be provided. This shall include a description of normal system start-up, operation, and shutdown as well as safety procedures.

3.5.8 Maintenance procedures. Identify all preventive and corrective maintenance operations and evolutions, which involve personnel. Detailed step-by-step procedures, including disassembly and reassembly procedures, for maintaining the equipment/system and all components shall be provided. Information shall include checkout, inspection, preventive and corrective maintenance, calibration, adjustment, troubleshooting, replacement of parts, repair, as well as use of tools and test equipment in accordance with the maintenance concept.

3.5.9 Emergency procedures. Identify conditions requiring emergency operations and provide procedures to be followed in the event of their occurrence. Emergency operation is defined as operation under conditions of system malfunction or failure such as loss of power, component failure, physical damage, or fire. Detailed step-by-step procedures for dealing with emergencies shall be provided.

3.5.10 Troubleshooting guide/aid and procedures. Identify and provide detailed step-by-step troubleshooting procedures for determining causes of equipment/system malfunction or failure.

3.5.11 System limitations, precautions, set points. Identify all system operational limitations. State all precautions to be taken during normal operation to preclude potentially unsafe conditions. List system operation and safety set points, which represent the normal operation of the system.

3.5.12 Illustrated parts list. Identify parts associated with the equipment/system. An exploded illustration shall show the location of the parts. The parts list shall identify the piece part number of the illustration, quantity installed, nomenclature, designation, original manufacturer, and part number.

3.5.13 Spare parts. The recommended spare parts list developed shall be included in the publication.

3.5.14 Appendices/ supplemental data (as necessary). Any technical data that augments or completes a publication to address missing information that is required.

3.6 COTS manuals

3.6.1 Style and formatting.

3.6.1.1 These manuals shall meet the style and format requirements that are defined within MIL-STD-38784A, Standard Practice for Manuals, Technical: General Style and Format Requirements.

3.6.1.2 Manuals shall be delivered to the USCG in an unlocked, Portable Document Format (PDF) format in a version compatible with the current approved version of Adobe Reader.

3.6.1.3 Electronic manuals shall be in format that allows for searchable text.

3.6.1.4 When available from the vendor, a copy of all source documents used to prepare the publication shall be provided to the USCG in their native editable format (Word, XML, XLS, etc.)

3.6.1.5 The complete COTS manual shall be provided in its entirety with no information extracted before delivery to the USCG.

3.6.1.6 These manuals shall be reviewed against MIL-PRF-32216A, Evaluation of Commercial Off-the-Shelf (COTS) Manuals and Preparation of Supplemental Data. Supplemental data shall be developed for any missing elements that must be addressed.

SFLC STANDARD SPECIFICATION 0860

3.6.2 Arrangement. COTS publications may contain items required for front matter. Duplication of this information is not required for COTS publications. The information of the publication shall be arranged in the following order:

- Front Matter
- Cover/Title Page (include model number where applicable)
- USCG Validation/Acceptance Letter
- Copyrights Release Page (not required if contained within the COTS manual)
- Table of Contents (not required if contained within the COTS manual)
- List of Illustrations/Figures (not required if contained within the COTS manual)
- List of Tables (not required if contained within the COTS manual)
- Forward (not required if contained within the COTS manual)
- Safety Summary (not required if contained within the COTS manual)
- Content of the Technical Publication (COTS manual)
- Supplemental Data (when required as defined in MIL-PRF-32216A)

3.7 OGA manuals.

3.7.1 Style and formatting.

3.7.1.1 These manuals will be accepted in their current style and formatting since they have been vetted, approved, and published by the authoring agency.

3.7.1.2 Manuals shall be delivered to the USCG in an unlocked, PDF format in a version compatible with the current approved version of Adobe Reader.

3.7.1.3 Electronic manuals shall be in format that allows for searchable text.

3.7.1.4 When available from the OGA, a copy of all source documents used to prepare the publication shall be provided to the USCG in their native editable format (Word, XML, XLS, etc.)

3.7.2 Arrangement. These manuals will be accepted in the current arrangement that was developed and published by the authoring agency.

3.8 Contractor developed manuals.

3.8.1 Style and formatting.

3.8.1.1 Technical publications shall be developed in accordance with MIL-STD-38784A, Standard Practice for Manuals, Technical: General Style and Format Requirements.

3.8.1.2 Format. Contractor developed technical publications shall be developed in Microsoft Word format. The version of Microsoft Word used to develop the publication shall be compatible with the current version that is approved for use by the USCG.

3.8.1.3 Delivery. A copy of all source documents used to prepare the publication shall be provided to the USCG in their native editable format, such as Microsoft Office (DOC, XLS, other). In addition, a final, published version shall also be delivered. This version shall be in an unlocked PDF that is clearly legible and with searchable text shall be provided to the USCG. PDFs provided must be compatible with the current version of Adobe Reader that is approved for use by the USCG.

SFLC STANDARD SPECIFICATION 0860

3.8.1.4 Language. Technical content shall be presented in language free of vague and ambiguous terms, using the simplest words and phrases which will convey the intended meaning. All publications that are developed for the USCG shall be written in English.

3.8.1.5 Text. Text shall be single-column and single-spaced, with one-inch left-hand margins and unjustified right-hand margins. Text size shall be 12 point in a standard, easily readable font. Titles and headers shall be formatted with heading styles based on a multilevel (hierarchical) list. Footnotes, notes and other side information shall be 8 point or larger.

3.8.1.6 Electronic Page Size. Page size shall be 8.50 inches by 11.00 inches. For drawings and parts lists, the maximum electronic page size within the technical publication shall be ANSI size B, 11.00 x 17.00 inches. Blank pages inserted within the manual shall be marked as, "THIS PAGE INTENTIONALLY LEFT BLANK".

3.8.1.7 Front Matter. The publication shall have a title/cover page showing the publication title; hull applicability; the manufacturer's name; the system or equipment designation and model number. The front matter shall also contain USCG Validation/Acceptance Letter, Copyrights Release Page, Table of Contents, List of Illustrations/Figures, List of Tables, Forward, and Safety Summary. See Section 3.8.2.3 for arrangement.

3.8.1.8 Page Numbers. Pages shall be numbered sequentially within a publication. Page numbers shall be shown at the bottom center. The bottom unbound corner shall be reserved for a change identifier. For 11.00 x 17.00, the page number shall be shown at the bottom right hand corner.

3.8.1.9 Drawings. Drawings and parts lists shall be included in the manuals. The maximum drawing size within the technical publication shall be ANSI size B, 11.00 x 17.00. Prints of larger drawing sizes shall be reduced, as necessary, to fit the 17-inch wide format and remain legible. USCG approved drawings shall not be inserted into the technical publication; however those drawings may be referenced.

3.8.1.10 Hyperlinks. Hyperlinks found within the publication shall be embedded and fully functional. All hyperlinks will be blue in color.

3.8.1.11 Graphics. Graphics provided shall be clear and legible when viewed electronically or printed in black and white. Source files shall be provided for contractor developed graphics, images and photographs.

3.8.1.11.1 Graphic illustrations shall be saved in one of the following formats: .ai, .jpeg, .tif, .png. An alternate method of creating graphic illustrations is to capture content using high resolution photography.

3.8.1.11.2 Color is permitted only in photographs. Color shall not be used in illustrations except when necessary to illustrate the multiple colors of instrument displays, color test patterns, etc.

3.8.1.11.3 Line stroke shall have sufficient weight and size to ensure good reproduction when the illustration is converted, published and printed.

3.8.2 Arrangement.

3.8.2.1 Technical publications shall be assembled in accordance with MIL-STD-38784A, Standard Practice for Manuals, Technical: General Style and Format Requirements.

3.8.2.2 Contractor developed manuals shall be delivered to the USCG with all revised information incorporated.

3.8.2.3 The information of the publication shall be arranged in the following order:

- Front Matter
- Cover/Title Page

SFLC STANDARD SPECIFICATION 0860

- Validation/Acceptance Letter
- Copyrights Release Page
- Table of Contents
- List of Illustrations/Figures
- List of Tables
- Forward
- Safety Summary
- Content of the Technical Publication
- Appendices

4. NOTES

This section is not applicable.