

INCH-POUND

MIL-DTL-38384E(USAF)  
10 September 2014

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SUPERSEDING  
MIL-PRF-38384D(USAF)  
15 July 1996

# **DETAIL SPECIFICATION MANUALS, TECHNICAL – AIRCRAFT NONNUCLEAR/NUCLEAR WEAPON DELIVERY PROCEDURES**



Comments, suggestions, or questions on this document should be addressed to AFLCMC/HIAM Technical Data Section, 4170 Hebble Creek Road, Bldg. 280, Door 15, Area A, Wright-Patterson AFB, OH 45433-5653 or emailed to [SGMLsupport@us.af.mil](mailto:SGMLsupport@us.af.mil). Since contact information can change, the currency of this address information should be verified using the ASSIST Online database at <https://assist.dla.mil/>.

**AMSC F9479**

**AREA TMSS**

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This specification is approved for use by the Department of the Air Force and is available for use by all Departments and Agencies of the Department of Defense.

**1 SCOPE**

1.1 Scope. This specification covers the preparation, content, and style and format requirements for technical manuals, checklists, and source data packages to be used for aircraft weapon delivery. This specification also provides for digital delivery of data through use of Document Type Definitions (DTDs). Information for utilizing associated DTDs are contained in appendices **A** through **J**.

1.1.1 Nonnuclear weapon delivery manuals and checklists. This document prescribes specific content and style and format requirements for preparation of manuals and checklists that will provide aircrews with those procedures required for planning and executing a nonnuclear weapon delivery mission involving bombs, rockets, guns, missiles, spray tanks, dispenser munitions, and training or special purpose devices related to weapon delivery. See **3.2**.

1.1.2 Nuclear weapon delivery manuals and checklists. This document also covers specific content and style and format requirements for manuals and checklists used in the delivery of nuclear bombs from strategic bomber aircraft and tactical aircraft, and air-to-surface missiles from strategic bomber aircraft. See **3.2**.

**2 APPLICABLE DOCUMENTS**

2.1 General. The documents listed in this section are specified in sections **3** and **4** of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements of documents cited in sections **3** and **4** of this specification, whether or not they are listed.

2.2 Government documents.

2.2.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those cited in the solicitation or contract. See **6.2b**.

## DEPARTMENT OF DEFENSE SPECIFICATIONS

**MIL-DTL-7700** - Flight Manual, Performance Data Appendix, Mission Crew Manual, Supplemental Manual, and Abbreviated Flight Crew Checklist

## DEPARTMENT OF DEFENSE STANDARDS

**MIL-STD-38784** - Manuals, Technical: General Style and Format Requirements

(Copies of these documents are available online at <http://quicksearch.dla.mil/> or from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

2.2.2 Other Government documents, drawings, and publications. The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those cited in the solicitation or contract.

## AIR FORCE TECHNICAL MANUALS

**TO 00-5-3** AF Technical Order Life Cycle Management

(Copies of these documents required by users with "mil" government web address access are available online at <https://www.my.af.mil/etims/ETIMS/index.jsp>. Refer to helpdesk information if obtaining copies without a TO subscription account. Copies of documents required by contractors in connection with specific procurement functions should be obtained from the acquiring activity or as directed by the contracting officer.)

2.3 Order of precedence. In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

**MIL-DTL-38384E(USAF)****3 REQUIREMENTS**

**3.1 Development and preparation.** The general requirements for the preparation of manuals, checklists, and source data packages shall be in accordance with MIL-STD-38784, except as otherwise specified herein.

**3.1.1 Technical Manual (TM) electronic and print-unique functionality/formatting requirements.** As specified by the acquiring activity (see 6.2c), the electronic presentation or print presentation unique functionality/formatting requirements shall apply for the development of all manuals specified herein (see 6.1.2).

**3.1.2 Illustrations.** Illustrations shall be prepared in accordance with MIL-STD-38784, except for the following:

- a. If specified by the acquiring activity (see 6.2d), illustrations shall be used more than once.
- b. References in the text to illustrations shall not state specifically the purpose of the illustration, unless otherwise specified by the acquiring activity (see 6.2e).
- c. If specified by the acquiring activity (see 6.2f), the illustration figure title shall be placed within the illustration and the figure number shall be placed below the illustration.
- d. If an illustration is required for a specific step in a procedure, the step number shall be placed below the lower left corner of the illustration.
- e. Figure numbers and titles shall not be referenced in the aircrew procedures.
- f. Classified markings, if applicable, shall be placed below the illustration.

**Electronic presentation:** If specified by the acquiring activity (see 6.2g), photographs may be used in accordance with MIL-STD-38784 (electronic presentation), otherwise line drawings shall be required. This also applies to TMs published in Portable Document Format (PDF).

**Print presentation:** Line drawings shall be used in lieu of photographs (halftones). Foldout pages shall not be used.

**3.1.2.1 Numbering of figures and tables.** Figure and table numbering shall be in accordance with the requirements of MIL-STD-38784, except for aircrew procedures where figure and table numbers shall only be used to emphasize a specific procedural step.

**3.1.3 Nomenclature.** Nomenclature shall be standardized throughout the manual and, if specified by the acquiring activity (see 6.2h), shortened or abbreviated to its common name or mnemonic. When referring to aircraft components or functions, only flight manual nomenclature shall be used.

**3.1.4 Abbreviations.** Only nonstandard abbreviations shall be explained in the introduction to the manual.

**3.1.5 References.** In general, references shall be in accordance with the requirements of MIL-STD-38784. References shall not be made that require further reference to a third publication.

**Electronic presentation:** All references shall be linked to the data to which they apply (including down to the specific paragraph or procedure, if applicable). These link requirements shall also apply to weapons delivery manuals/checklists published in PDF.

**Print presentation:** Reference to other publications shall be by publication number without reference to specific page, paragraph, or sentence. If the information needed from a reference is less than one printed page, it shall be extracted, modified if necessary, and included in the manual.

**3.1.6 Flagging.** Flagging shall be used in the manuals and checklists to denote items applicable to specific aircraft models, daily checks, crew members, etc. Any flagging used shall be explained in the introduction. Flagging shall normally be a parenthetical entry; e.g., (P), (RO), etc. See MIL-DTL-7700, crew member designators, codes for types of operation, and coordination action procedure checklist, for information about application of Flight Manual related codes.

**3.1.7 Paragraphs.** Paragraphs in the Nuclear Weapon Delivery Manual shall not be numbered and headings shall be as specified in MIL-DTL-7700.

**3.1.8 Introduction.** The introduction shall be prepared in accordance with the requirements of MIL-STD-38784. If specified by the acquiring activity (see 6.2i), a list of applicable reference documents

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shall be included. This list shall be held to a minimum, showing essential documents only. A statement concerning change requests, comments, submission of improvement reports, nuclear safety certification, and technical responsibility for the manual shall also be included.

Electronic presentation: All references shall be linked to the data to which they apply.

Print presentation: The list of applicable reference documents shall be included in volume one if there is a multivolume series.

3.1.9 Lists of tables, illustrations, and Time Compliance Technical Orders (TCTOs). Lists of tables, illustrations, and TCTOs shall be prepared in accordance with the requirements of MIL-STD-38784. Nuclear weapon delivery manuals shall not contain a List of Tables (LOT), List of Illustrations (LOI), or list of TCTOs.

3.1.10 Table of Contents (TOC). The primary TOC for the technical manual shall be prepared in accordance with the requirements of MIL-STD-38784. Each section in the Nuclear Weapon Delivery Manual and Aircrew Nuclear Weapon Delivery Manual shall have a TOC listing the major headings within the section.

Electronic presentation: The section TOC shall be located immediately after the section title. TOC entries shall be linked to the data to which they apply.

Print presentation: Each volume shall contain a TOC per the requirements of MIL-STD-38784. When the TOC is less than one-half page, the introduction or text shall begin immediately below the TOC.

3.1.11 Step numbering of aircrew procedure. For aircrew procedures, steps shall be assigned consecutive Arabic numerals after each heading. Unless otherwise specified by the acquiring activity (see 6.2j), the first step within each subsection shall always start with 1.

3.1.12 Bomb tables. Bomb tables/charts shall not have table numbers.

Electronic presentation: Bomb tables/charts shall be listed in the main TOC. The TOC entries shall be linked to the tables/charts to which they apply. Identification of each bomb table/chart shall be displayed in the screen header area next to the Technical Order (TO) number when each table or chart is displayed. Linking requirements shall also apply to manuals published in PDF.

Print presentation: Reference to bomb tables shall be to page number only. If required, bomb tables shall be tabbed by black bleed tabs, approximately 0.25-inch high. The tables shall be preceded by an index page that identifies the tabs or by a TOC page. Bomb table pages shall be identified by pertinent parameters such as bomb designations and delivery mode; this identification shall be placed below the TO number.

3.1.13 Security classification. The security classification for USAF manuals shall be in accordance with the requirements of MIL-STD-38784. The security classification for non-US manuals shall be specified in the contract.

3.2 Arrangement of weapon delivery procedures. Procedures shall be arranged as follows:

3.2.1 Nonnuclear Weapon Delivery Manual. When specified by the acquiring activity (see 6.2l), the Nonnuclear Weapon Delivery Manual shall consist of the Specific Aircraft Manual, and when items are common to two or more aircraft, the Standard Volume Manuals. These manuals shall be developed according to the specific requirements in 3.3. See appendices A and B for resources available for digital preparation of these TMs.

3.2.2 Aircrew Nuclear Bomb Delivery Manual (Strategic Bomber Aircraft). When specified by the acquiring activity (6.2l), the Nuclear Bomb Delivery Manual shall be prepared and shall consist of two volumes: Volume 1 – Nuclear Bomb Basic Information and Volume 2 – Nuclear Bomb Delivery Basic Information and Operating Procedures. In addition, when specified by the acquiring activity (see 6.2k), Volume 3 – Nuclear Bomb Delivery Ballistics, shall be prepared. These manuals shall be developed according to the specific requirements in 3.4. See appendices C, D, and E for resources available for digital preparation of these TMs.

3.2.3 Aircrew Nuclear Missile Delivery Manual (Strategic Bomber Aircraft). When specified by the acquiring activity (see 6.2l), the Aircrew Nuclear Missile Delivery Manual shall be a multivolume type, consisting of the following manuals: Volume 1 – Aircrew Weapon Delivery, Volume 2 – Aircrew Weapon Delivery, Classified Supplement, and Volume 3 – Aircrew Weapon Delivery, Mission Planning. These

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manuals shall be developed according to the specific requirements in 3.5. See appendices F, G, and H for resources available for digital preparation of these TMs.

3.2.4 Aircrew Nuclear Bomb Delivery Manual (Tactical Aircraft). When specified by the acquiring activity (see 6.2l), the Aircrew Nuclear Bomb Delivery Manual shall consist of two volumes consisting of Volume 1 – Aircrew Nuclear Bomb Delivery Manual and Volume 2 – Aircrew Practice Bomb Delivery Manual and shall be developed according to the specific requirements in 3.6. The acquiring activity shall identify if the manual is to contain classified data and if it shall be published as a separate manual (see 6.2p). See appendices I and J for resources available for digital preparation of these TMs.

3.2.5 Nonnuclear weapon delivery source data packages. When specified by the acquiring activity (see 6.2m), nonnuclear weapon delivery source data packages shall be developed for information pertinent to the procedures and munitions being procured. These procedures shall not repeat information contained in the Specific Aircraft (see 3.3.1) or Standard Volume Manuals (see 3.3.2). The specific requirements in 3.7 shall apply.

3.2.6 Nonnuclear Weapon Delivery Checklist. When specified by the acquiring activity (see 6.2n), the Nonnuclear Weapon Delivery Checklist shall be prepared in accordance with the requirements of MIL-DTL-7700. When specified by the acquiring activity (see 6.2o), the content shall be tailored to cover unique aircraft systems or mission requirements.

3.2.7 Nuclear Weapon Delivery Checklist (Strategic Bomber Aircraft). When specified by the acquiring activity (see 6.2n), the Nuclear Weapon Delivery Checklist shall be prepared in accordance with the requirements of MIL-DTL-7700. Checklist steps shall be based on the Normal and Emergency procedures in Volume 2 (see 3.4.2); steps shall consist of the unclassified demand/response line items from the amplified procedures; emergency data shall include tabular bomb malfunction analysis. This checklist shall be used in conjunction with the specific aircraft aircrew checklists for nuclear missions.

Print presentation: Emergency pages shall be marked in accordance with the requirements of MIL-DTL-7700.

3.2.8 Aircrew Nuclear Bomb Delivery Checklist (Tactical Aircraft). When specified by the acquiring activity (see 6.2n), the Aircrew Nuclear Bomb Delivery Checklist shall be prepared. The checklist shall be based on the aircrew procedures (see 3.6.2.3 and 3.6.2.4) and prepared in accordance with the requirements of MIL-DTL-7700. Separate checklists shall be prepared for each control-monitor.

3.3 Nonnuclear Weapon Delivery Manual specific requirements. The Nonnuclear Weapon Delivery Manual shall contain descriptive data, emergency procedures, planning procedures, aircrew procedures, and supplemental data (see 3.2.1). The acquiring activity (see 6.2p) shall identify if the manual is to contain classified data and published as a separate manual.

3.3.1 Specific Aircraft Manual. The Specific Aircraft Manual shall be arranged as follows:

- a. Front matter (see 3.3.1.1).
- b. Section I – Description (see 3.3.1.2).
- c. Section II – Normal Aircrew Procedures (see 3.3.1.3).
- d. Section III – Emergency Aircrew Procedures (see 3.3.1.4).
- e. Section IV – Supplementary Data (see 3.3.1.5).
- f. Section V – Planning Procedures And Sample Problems (see 3.3.1.6).
- g. Section VI – Planning Charts And Ballistic Tables (see 3.3.1.7).
- h. Alphabetical index (see 3.3.1.8).

Electronic presentation: Volumes do not apply (see MIL-STD-38784).

Print presentation: If the manual will be too large, it shall be divided and published in two volumes as a two-volume set, as specified by the acquiring activity (see 6.2q). Volume 1 shall contain the information in sections I thru IV, data prior to the ballistic tables in section VI, and a cumulative alphabetical index. Volume 2 shall contain sections V and VI. The ballistic tables shall be in section VI. Each volume shall have a TOC and an individual technical order number.

3.3.1.1 Front matter. The front matter shall consist of the following in the order listed:



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- a. Title page/screen (see 3.3.1.1.1).
- b. List of Effective Pages (LEP)/Electronic presentation: List of Changes (LOC) (see 3.3.1.1.1).
- c. TOC (see 3.3.1.1.1).
- d. List of Illustrations (LOI) (see 3.3.1.1.2).
- e. Introduction (see 3.3.1.1.3).
- f. Abbreviations (see 3.3.1.1.4).

3.3.1.1.1 Title page/screen, LEP/LOC, and TOC. The Title page/screen and TOC shall be prepared in accordance with the requirements of MIL-STD-38784.

Electronic presentation: A LOC shall be prepared instead of a LEP, in accordance with MIL-STD-38784. Entries of the LOC and TOC shall be linked to the data being referenced. TOC entries shall be linked to the referenced data in manuals published in PDF.

Print presentation: The LEP shall be prepared in accordance with the requirements of MIL-STD-38784.

3.3.1.1.2 LOI. The LOI shall be in accordance with the requirements of MIL-STD-38784.

3.3.1.1.3 Introduction. The introduction shall be in accordance with the requirements of MIL-STD-38784. In addition, it shall also contain the following items:

- a. A brief explanation of each section of the manual.
- b. Definitions of warnings, cautions, and notes.
- c. Procedures for submitting improvement reports and identifying the agency with technical responsibility for the manuals (see 6.2r).
- d. Definitions of the words "will" and "shall" to identify that the use of these words constitutes a mandatory requirement.
- e. Glossary and references. The glossary shall contain the definitions used in weapons delivery, planning, and mission execution. References shall consist of a list of available publications (not listed in the standard volume references) that provide more comprehensive coverage of the subjects referenced in the manual.

3.3.1.1.4 List of Abbreviations. The List of Abbreviations shall contain a complete listing of all abbreviations and a brief explanation of each, used throughout the manual.

3.3.1.2 Section I – Description. Section I shall be arranged as follows:

- a. TOC (see 3.3.1.1.1).
- b. Mission Description (see 3.3.1.2.1).
- c. Aircraft Weapon Release Systems and Controls (see 3.3.1.2.2).
- d. Weapon Suspension Systems (see 3.3.1.2.3).
- e. Nonnuclear Weapons (combat) (see 3.3.1.2.4).
- f. Nonnuclear Weapon Fuzes (see 3.3.1.2.5).
- g. Nonnuclear Training Weapons and Equipment (see 3.3.1.2.6).

3.3.1.2.1 Mission Description. The Mission Description section shall contain a description of the various delivery modes for all applicable nonnuclear weapons.

3.3.1.2.2 Aircraft Weapon Release Systems and Controls. The Aircraft Weapon Release Systems and Controls Section shall describe the equipment used by the aircrew to perform a specific delivery mission. It shall also contain any necessary illustrations required to describe the aircraft release system and control operations.

3.3.1.2.3 Weapon Suspension Systems. The Weapon Suspension Systems section shall include a brief description of the following: each pylon, launcher, Multiple Ejector Rack (MER), Triple Ejector Rack (TER), Bomb Release Unit (BRU), General Purpose Bomb Module, Cluster Bomb Rack, Heavy Stores

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Adapter Beam, etc., used to carry and release nonnuclear weapons unique to the aircraft and not already covered in the standard volume.

3.3.1.2.4 Nonnuclear Weapons (combat). The Nonnuclear Weapons (combat) section shall contain a general description and illustration of all nonnuclear weapons unique to the aircraft and not already covered in the standard volume. This description shall include dimensions, weight, a list of compatible fuzes and firing order, where applicable, and a brief summary of weapon operation from release to detonation.

3.3.1.2.5 Nonnuclear Weapon Fuzes. The Nonnuclear Weapon Fuzes section shall include a general description of each applicable fuze that is unique to the aircraft and not already covered in the standard volume. This description shall include fuze operation, necessary illustrations, and a list of fuze components, such as clips, that are visible to the user without dismantling the fuze.

3.3.1.2.6 Nonnuclear Training Weapons and Equipment. The Nonnuclear Training Weapons and Equipment section shall include a general description of operation and necessary illustrations of nonnuclear training weapons, adapters, dispensers, launchers, and their associated equipment and controls on those items that are unique to the aircraft and not already covered in the standard volume.

3.3.1.2.6.1 Descriptive data requirements. The weapon and fuze descriptive data requirements listed above shall be aircrew oriented. Appropriate warnings, cautions, and notes shall be included.

3.3.1.3 Section II – Normal Aircrew Procedures. Section II shall contain the normal procedures to be followed from the time the aircrew arrives at the aircraft until they depart from the aircraft. The text for each procedural step shall consist of a demand/response line for the step in the checklist supplement. Repetition shall be kept to a minimum. All critical safety-of-flight items in the checklist shall be flagged. This section shall be arranged as follows:

- a. TOC (see 3.3.1.1.1).
- b. Scope (see 3.3.1.3.1).
- c. Preflight Procedures (see 3.3.1.3.2).
- d. In-flight Procedures (see 3.3.1.3.3).
- e. Post-flight Procedures (see 3.3.1.3.4).

3.3.1.3.1 Scope. The Scope shall contain a brief description of the section and explanations of any flagging and coding used in this section.

3.3.1.3.2 Preflight Procedures. The Preflight Procedures section shall include procedures and illustrations required to ensure the correct loading and configuration of all nonnuclear weapons certified on this aircraft.

3.3.1.3.3 In-flight Procedures. The In-flight Procedures section shall include all procedures concerning nonnuclear weapons that must be performed by the aircrew from takeoff through landing.

3.3.1.3.4 Post-flight Procedures. The Post-flight Procedures section shall include all procedures concerning nonnuclear weapons that must be performed by the aircrew from the time the aircraft lands until the aircrew departs from the aircraft.

3.3.1.4 Section III – Emergency Aircrew Procedures. Section III shall contain emergency procedures. Each step shall consist of a demand/response line, followed by necessary amplification. Section III shall be arranged as follows:

- a. TOC (see 3.3.1.1.1).
- b. Emergency Release Procedures (see 3.3.1.4.1).
- c. Fire Fighting Criteria (see 3.3.1.4.2).

3.3.1.4.1 Emergency Release Procedures. The Emergency Release Procedures shall include those procedures required for the following: emergency release of nonnuclear stores, emergency jettison of nonnuclear stores, and suspension equipment certified on the aircraft. Illustrations required to clearly describe these procedures shall be included.

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Electronic presentation: MIL-STD-38784 electronic presentation requirements for markings of emergency procedures apply.

3.3.1.4.2 Fire Fighting Criteria. Fire Fighting Criteria shall include procedures to be followed if nonnuclear weapons are involved in a fire.

3.3.1.5 Section IV – Supplementary Data. Section IV shall include the following and any other pertinent information not covered in the other sections of the Specific Aircraft Manual or Standard Volume Manual:

- a. Error Analysis.
- b. Harmonization.
- c. Safe Escape and Fuze Arming Time Data.
- d. Conversion Values.
- e. Ballistic Equations.
- f. Automated Systems Error Analysis.

3.3.1.6 Section V – Planning Procedures and Sample Problems. Section V, Planning Procedures and Sample Problems shall be arranged as follows:

- a. TOC (see 3.3.1.1.1).
- b. Scope (see 3.3.1.6.1).
- c. Description of Charts and Tables (see 3.3.1.6.2).
- d. Delivery Modes Sample Problems (see 3.3.1.6.3).

3.3.1.6.1 Scope. The Scope shall discuss the basis for the charts and tables and assumptions used with respect to temperature, pressure atmospheric density, etc. It shall also include appropriate reference line illustrations and definitions. This section shall identify the approved mission planning program version for the applicable aircraft.

3.3.1.6.2 Description of Charts and Tables. The Description of Charts and Tables shall include complete descriptions of the planning methods for all types of delivery modes. The description of the planning methods for each type of delivery mode shall be complete without the need to refer to the description of any of the other modes. Description with illustrations shall cover safe escape charts, conversion tables, and other charts used in the mission planning. Details for the successful planning of a mission shall be illustrated in diagrams that are related to the step described.

3.3.1.6.3 Delivery Modes Sample Problems. Sample problems shall be provided for each type of delivery mode.

3.3.1.7 Section VI – Planning Charts and Ballistic Tables. All delivery planning charts not included in the standard volume shall be included in Section VI, Planning Charts and Ballistic Tables. The ballistics tables shall be broken out into sections or sections for each munition. Section VI shall be arranged as follows:

- a. TOC (see 3.3.1.7.1).
- b. Safe Escape Charts.
- c. Fuze Arming Time Charts.
- d. Angle of Attack Charts.
- e. Sight Depression Angle Charts.
- f. Airspeed and Altimeter Position Error Chart (if applicable).
- g. Dive Recovery Chart.
- h. Conversion Tables.
- i. Forms.
- j. Tables necessary for planning all types of releases.



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Print presentation: Pages shall be numbered 1-1, 1-2, 2-1, 2-2, etc. This requirement is designed to facilitate changes and additions to the ballistic table section of the manual.

3.3.1.7.1 TOC. In addition to the requirements of MIL-STD-38784, the TOC for section VI shall list all of the tables and charts required to safely and accurately plan and execute each type of nonnuclear weapon delivery mission applicable to this aircraft.

Electronic presentation: Linked TOC entries shall also include tables and charts. TOC linking requirements shall apply to manuals published in PDF.

3.3.1.7.2 Weapons designation and delivery mode headings. Electronic presentation: If more than one weapon or delivery mode is included in the manual, the weapon designation and delivery mode shall be placed, when required, in the header area next to the TO number.

Print presentation: If more than one weapon or delivery mode is included in the manual, the page content heading for the ballistic tables in section VI shall include the weapon designation and delivery mode.

3.3.1.8 Alphabetical index. An alphabetical index shall be prepared in accordance with the requirements of MIL-STD-38784.

Electronic presentation: If specified by the acquiring activity (see 6.2s), search functionality shall be substituted for an alphabetical index.

3.3.1.9 Classified supplements. Unless otherwise specified by the acquiring activity (see 6.2t), the format and makeup of the classified supplements shall be identical to the Specific Aircraft Manual. The arrangement and presentation of data shall be in accordance with the requirements established for the Flight Manual classified supplement, as specified in MIL-DTL-7700.

3.3.2 Standard Volume Manual. The Standard Volume Manual shall be arranged as follows:

- a. Front matter (see 3.3.2.1).
- b. Section I – Description (see 3.3.2.2).
- c. Section II – Air-to-Surface Munitions (see 3.3.2.3).
- d. Section III – Fuzes (see 3.3.2.4).
- e. Section IV – Special Equipment (see 3.3.2.5).
- f. Section V – Air-to-Air Missiles (see 3.3.2.6).
- g. Section VI – Suspension Systems (see 3.3.2.7).
- h. Section VII – Safe Escape/Safe Separation (see 3.3.2.8).
- i. Section VIII – Supplementary Data Error Analysis (see 3.3.2.9).
- j. Section IX – Mission Planning (see 3.3.2.10).
- k. Alphabetical index (see 3.3.2.11).

3.3.2.1 Front matter. (See 3.3.1.1.)

3.3.2.2 Section I – Description. Section I, Description, shall contain all system descriptions except for those items which are common for two or more aircraft (see 3.3.1.2).

3.3.2.3 Section II – Air-to-Surface Munitions. Section II shall be arranged as follows:

- a. TOC (see 3.3.1.1.1).
- b. Physical and functional descriptive data for air-to-surface nonnuclear munitions.

3.3.2.4 Section III – Fuzes. Section III shall be arranged as follows:

- a. TOC (see 3.3.1.1.1).
- b. Physical and functional descriptive data for all fuzes used with nonnuclear munitions described in section III.

3.3.2.4.1 Descriptive data requirements. The weapon and fuze descriptive data requirements listed above shall be aircrew oriented. Appropriate warnings, cautions, and notes shall be included.

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- 3.3.2.5 Section IV – Special Equipment. Section IV shall be arranged as follows:
- a. TOC (see [3.3.1.1.1](#)).
  - b. Descriptive data for special equipment used with stores covered in the standard volume.
- 3.3.2.6 Section V – Air-to-Air Missiles. Section V shall be arranged as follows:
- a. TOC (see [3.3.1.1.1](#)).
  - b. General discussion of missiles, type, and classification.
  - c. Descriptive data for air-to-air missiles.
- 3.3.2.7 Section VI - Suspension Systems. Section VI shall be arranged as follows:
- a. TOC (see [3.3.1.1.1](#)).
  - b. Descriptive data for suspension systems used with stores covered in the standard volume.
- 3.3.2.8 Section VII – Safe Escape/Safe Separation. Section VII shall be arranged as follows:
- a. TOC (see [3.3.1.1.1](#)).
  - b. Safe escape/safe separation.
    1. Safe escape.
    2. Safe separation.
    3. Safe escape maneuvers.
  - c. Explanation of safe escape/safe separation charts.
  - d. Minimum release altitude for fuze arming.
  - e. Fragment deconfliction for formation flights.
    1. Maximum bomb fragment travel.
    2. Fragment deconfliction.
- 3.3.2.9 Section VIII – Supplementary Data Error Analysis. Section VIII shall include supplementary data for error analysis data. Section VIII shall be arranged as follows:
- a. TOC (see [3.3.1.1.1](#)).
  - b. Weapon delivery.
    1. Armament reference lines.
    2. Bombing geometry.
  - c. Error analysis.
    1. Bombs.
    2. Errors affecting ordnance impact.
    3. Trajectory error.
    4. Release altitude error.
    5. Dive angle error.
    6. Airspeed error.
    7. Miss distance attributed to delivery error.
    8. Effect of true airspeed (TAS) error.
    9. Effect of release altitude error.
    10. Effect of dive angle error.
    11. Error analysis chart.
    12. Rockets/guns.

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13. Other delivery errors.

14. Miscellaneous supplementary data.

3.3.2.10 Section IX – Mission Planning. Section IX shall consist of the following:

- a. TOC (see [3.3.1.1.1](#)).
- b. Charts and tables.
- c. Mission planning.
  1. Mission planning form use.
  2. Microcomputer weapons delivery software.
  3. Ballistics tables.
  4. Safe escape/safe separation/fuze arming.
- d. Chart and table description.
  1. Fuze compatibility table.
  2. Altitude conversion.
  3. Relative wind vector.
  4. Airspeed conversion.
  5. Vertical drop required for fuze arming.
  6. Dive recovery.
  7. Trigonometric functions.
  8. Safe escape and fuze arming tables.
  9. Minimum release altitude for fuze arming.
  10. Impact spacing.
  11. Altitude loss during ripple release.
  12. Zero sight line angle of attack.
  13. Sight depression angle.
  14. Aim off distance.
  15. Dive angle versus distance.
  16. Altimeter lag.
  17. Altimeter position error table.
  18. Cluster bomb release envelope tables.
- e. Pop-up attack planning.
- f. Pop-up planning chart use.
- g. Mission planning example.
- h. Mission planning form.
- i. Pop-up planning worksheet
- j. Charts and tables.
  1. Stores weight table.
  2. Aircraft weights table.
  3. Altitude conversion chart.
  4. Relative wind vector chart.
  5. Airspeed conversion chart.

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6. Dive recovery chart.
7. Minimum release altitude for fuze arming charts.
8. Impact spacing tables.
9. Altitude loss during ripple release table.
10. Sight depression angle chart.
11. Zero sight line angle of attack milliradian (MIL) tables.
12. Aim off distance chart.
13. Dive angle versus distance chart.
14. Altitude lag chart.
15. Fixed range mark nautical miles (nmi), ground range in feet (ft), conversion table.
16. Pop-up planning chart.
17. Trigonometric functions table.
18. Conversion values chart.

■ 3.3.2.11 Alphabetical index. See 3.3.1.8.

■ 3.4 Nuclear Weapon Delivery Manual (strategic bomber aircraft) specific requirements. The Nuclear Weapon Delivery Manual shall contain the following: descriptive material for aircrew procedures, emergency procedures, monitor & control systems, suspension & release systems, nuclear effects, and ballistic procedures (see 3.2.2). The acquiring activity (see 6.2p) shall identify if the manual is to contain classified data and if it shall be published as a separate manual. These manuals shall be arranged as follows:

- a. Volume 1 – Nuclear Bomb Basic Information (see 3.4.1)
- b. Volume 2 – Nuclear Bomb Delivery Basic Information and Operating Procedures (see 3.4.2)
- c. Volume 3 – Nuclear Bomb Delivery Ballistics (see 3.4.3)

3.4.1 Volume 1 – Nuclear Bomb Basic Information. The Nuclear Bomb Basic Information volume is a classified manual and shall be arranged as follows:

- a. Front matter (see 3.4.1.1).
- b. Section I – Bomb Description (see 3.4.1.2).
- c. Section II – Nuclear Bomb Effects (see 3.4.1.3).
- d. Section III – Bomb Limitations (see 3.4.1.4).
- e. Section IV – Escape Data (see 3.4.1.5).
- f. Section V – Supplementary Data (see 3.4.1.6).
- g. Glossary (see 3.4.1.7).
- h. Alphabetical index (see 3.4.1.8).

■ 3.4.1.1 Front matter. The title page/screen, LEP/LOC, TOC, and introduction shall be prepared in accordance with the requirements of MIL-STD-38784.

3.4.1.2 Section I – Bomb Description. The Bomb Description section shall contain nuclear bomb descriptions and schematics. Data shall be presented separately for each bomb except when the descriptions are so much alike they can be combined. Data shall be arranged as follows for each bomb:

- a. Information to functionally describe the nuclear bomb and locate and identify bomb components of direct interest to the aircrew.
- b. Simplified drop sequence diagrams.
- c. Simplified fusing and firing schematics.

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Electronic presentation: The applicable bomb designation shall be displayed adjacent to the TO number in the persistent data window, e.g., header, while bomb description information is contained/displayed within the scrollable view.

Print presentation: The bomb designation shall be placed immediately below the TO number on each bomb designation page.

3.4.1.3 Section II – Nuclear Bomb Effects. The Nuclear Bomb Effects section shall contain information to acquaint aircrew members with the nuclear radiation, thermal radiation, and shockwave phenomena resulting from the detonation of a nuclear bomb.

3.4.1.4 Section III – Bomb Limitations. The nuclear Bomb Limitations section shall contain delivery limitations imposed by bomb design, which may adversely degrade bomb performance. Each bomb shall be presented separately.

3.4.1.5 Section IV – Escape Data. The Escape Data section shall contain safe operation information based on no-damage criteria for mission planning and aircrew use. This information shall be presented in chart or table format. Minimum release altitude tables shall be included to provide aircrews information on minimum release altitude, airspeed, and optimum heading changes for nuclear bombs using flyover and breakaway turn maneuvers.

3.4.1.6 Section V – Supplementary Data. The Supplementary Data section shall include information not directly related to the accomplishment of a strike mission. Information on in-flight safety, transportation of hazardous materials, fire fighting, evacuation, and unscheduled landings with nuclear bombs aboard the aircraft shall also be included. If specified by the acquiring activity (see 6.2u), additional data, not specifically covered in sections I or II, shall also be included.

3.4.1.7 Glossary. A glossary shall be prepared in accordance with MIL-STD-38784.

3.4.1.8 Alphabetical index. See 3.3.1.8.

3.4.2 Volume 2 – Nuclear Bomb Delivery Basic Information and Operating Procedures. The Nuclear Bomb Delivery Basic Information and Operating Procedures volume shall be an unclassified manual. This volume shall be arranged as follows:

- a. Front matter (see 3.4.2.1).
- b. Section I – Description (see 3.4.2.2).
- c. Section II – Normal Aircrew Procedures (see 3.4.2.3).
- d. Section III – Emergency Procedures (see 3.4.2.4).
- e. Section IV – Nuclear Practice Bomb Description (see 3.4.2.5).
- f. Glossary (see 3.4.2.6).

3.4.2.1 Front matter. The title page/screen, LEP/LOC, TOC, and introduction shall be prepared in accordance with the requirements of MIL-STD-38784.

3.4.2.2 Section I – Description. The Description section shall include information of direct concern to the aircrew to be able to locate, identify, and functionally describe the bomb monitor and control system components and the bomb suspension and release system. Alternate and emergency release systems, if applicable, shall also be described. Simplified schematics shall be included.

3.4.2.3 Section II – Normal Aircrew Procedures. The Normal Aircrew Procedures section shall be prepared as an illustrated checklist and shall include procedures for the performance of all functions from the time the aircrew reports to a loaded aircraft through post landing. These procedures shall cover strike, non-strike, re-strike, abort, and ferry missions for all bombs. If applicable, recovery procedures shall be included. Each step shall consist of an unclassified demand/response line, followed by amplification, if needed. Repetition shall be avoided. If possible, each demand/response shall be placed on one line. Steps shall not be illustrated unless necessary for clarification. Amplified checklists shall be included for, but not limited to, the following categories:

- a. Preflight procedures.

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- b. Bomb preflight.
- c. Interior inspection.
- d. Pre-takeoff procedures.
- e. In-flight procedures.
- f. Descent and landing procedures.
- g. Ground safing procedures.

3.4.2.3.1 Aircrew procedural headings. If required, aircrew procedural headings, listed above, shall be combined or augmented based on system requirements and alignment with applicable Flight Manual procedures (see 6.2v). Each major heading shall be centered. Horizontal lines shall be used to separate blocks of procedures. Two lines shall separate major headings from the preceding steps and one line shall separate subheadings within a major heading.

3.4.2.3.2 Bomb preflight procedures. Bomb preflight procedures shall be prepared for each bomb carried on the aircraft.

Electronic presentation: When bomb preflight procedures are contained/displayed in the scrollable view, the bomb designation shall be displayed in the header area adjacent to the TO number. When Normal aircrew procedures are contained/displayed in the scrollable view, the appropriate subsection title shall be displayed in the header area adjacent to (or below) the TO number.

Print presentation: Pages containing the bomb preflight procedures shall have the bomb designation printed immediately below the TO number. Normal aircrew procedure pages shall have the appropriate subsection title printed immediately below the TO number.

3.4.2.3.3 Illustrations. Illustrations shall be keyed to the applicable step designation number.

Electronic presentation: Illustration dimensioning, size, and legibility shall be designed for optimum viewing in conjunction with display and use of procedural steps.

Print presentation: If specified by the acquiring activity (see 6.2w), illustrations in this section shall be prepared as small as practical, consistent with effective use of space and all essential detail legible. Illustrations shall be no more than 20 picas wide. Excess white space shall be avoided in the layout of illustrations.

3.4.2.3.4 Use of flags. If required, flags shall be used in this section to identify aircraft models, bomb types, and equipment types.

3.4.2.4 Section III – Emergency Procedures. The Emergency Procedures section shall include emergency procedures involving nuclear bombs and aircraft with nuclear bombs aboard. These procedures shall contain aircrew malfunction analysis and corrective actions to take in the event an emergency occurs. Emergency procedures shall be in checklist form. Unless otherwise specified by the acquiring activity, the following areas shall be presented separately for each bomb: nuclear bomb safe jettison, emergency bomb release (if applicable), command disable procedures, and permissive action disable (see 6.2x). Emergency procedures shall be marked in accordance with the requirements of MIL-STD-38784.

3.4.2.5 Section IV – Nuclear Practice Bomb Description. The Nuclear Practice Bomb Description section shall include information of direct concern to the aircrew to be able to identify and functionally describe the practice bombs and practice bomb simulators. Appropriate warnings, cautions, and notes as required to ensure safe operations, shall be included. If this section is not required, it shall be omitted and succeeding sections renumbered, as specified by the acquiring activity (see 6.2y).

3.4.2.6 Glossary. See 3.4.1.7.

3.4.3 Volume 3 – Nuclear Bomb Delivery Ballistics. The Nuclear Bomb Delivery Ballistics volume shall be arranged as follows:

- a. Front matter (see 3.4.3.1).
- b. Section I – Definition of Terms (see 3.4.3.2).
- c. Section II – Bombing Data (see 3.4.3.3).



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## d. Section III – Bombing Data Forms (see 3.4.3.4).

3.4.3.1 Front matter. The title page/screen, LEP/LOC, TOC, and introduction shall be prepared in accordance with the requirements of MIL-STD-38784.

3.4.3.2 Section I – Definition of Terms. The Definition of Terms section shall include definitions of abbreviations and terms related to the bombing system and tactics covered in the manual.

3.4.3.3 Section II – Bombing Data. The Bombing Data section shall include ballistic data used to develop bombing missions, and computation procedures with illustrated sample problems to be used as a guide for mission planning. Ballistic graphs, bomb tables, and trigonometric tables shall be included, if required. Ballistic graphs shall be in the format required by the applicable aircraft/bomb combination. Error analysis shall be included, if applicable. The computation procedures shall include normal and alternate bomb method solutions, if required. If a particular section is not applicable because of aircraft equipment, that section shall be omitted and succeeding sections renumbered.

Electronic presentation: Instructions for using each ballistics graph shall be linked to the ballistics graph (also applies to manuals displayed in PDF).

Print presentation: Instructions for using each ballistics graph shall be placed either on the same or facing page.

3.4.3.4 Section III – Bombing Data Forms. The Bombing Data Forms section shall contain instructions for preparation of bombing data forms for all applicable mission types. Sample fill-in forms shall be included.

Electronic presentation: If specified by the acquiring activity (see 6.2z), electronic bombing data forms shall be developed containing the functionality to enable the input, retention, and extraction of data, as specified by the acquiring activity.

3.5 Aircrew Nuclear Missile Delivery Manual (strategic bomber aircraft). The Aircrew Nuclear Missile Delivery Manual shall contain the following: descriptive material for aircrew procedures, mission planning, systems operation, operating limitations, and supplemental data (see 3.2.3). The manual shall be unclassified. Classified data shall be presented in a separate manual. Information contained in the unclassified manual shall not be duplicated in the classified manual. Each manual shall reference the other when necessary. The manual shall be arranged as follows:

- a. Volume 1 – Aircrew Weapon Delivery (see 3.5.1).
- b. Volume 2 – Aircrew Weapon Delivery, Classified Supplement (see 3.5.2).
- c. Volume 3 – Aircrew Weapon Delivery, Mission Planning (see 3.5.3).

3.5.1 Volume 1 – Aircrew Weapon Delivery. If specified by the acquiring activity (see 6.2aa), the arrangement of sections and section titles shall be modified to meet unique requirements. This volume shall be arranged as follows:

- a. Front matter (see 3.5.1.1).
- b. Section I – Description (see 3.5.1.2).
- c. Section II – Normal Aircrew Procedures (see 3.5.1.3).
- d. Section III – Emergency Aircrew Procedures (see 3.5.1.4).
- e. Section IV - Supplementary Data (see 3.5.1.5).
- f. Section V – Operating Limitations (see 3.5.1.6).
- g. Section VI – Mission Planning (see 3.5.1.7).
- h. Section VII – Systems Operation (see 3.5.1.8).
- i. Glossary (see 3.5.1.9).
- j. Alphabetical index (see 3.5.1.10).

3.5.1.1 Front matter. The title page/screen, LEP/LOC, TOC, and introduction shall be prepared in accordance with the requirements of MIL-STD-38784.

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3.5.1.2 Section I – Description. The description section shall contain descriptive data on the missile and aircraft components which directly concern delivery of the missile from the aircraft.

3.5.1.3 Section II – Normal Aircrew Procedures. The Normal Aircrew Procedures section shall be prepared as an illustrated checklist and contain detailed operating instructions of all functions from the time the aircrew reports to a loaded aircraft through post loading. Each step shall consist of an unclassified demand/response line, followed by an amplification if required. Each demand/response step shall be placed on one line, if possible. Steps shall not be illustrated unless necessary for clarification. Procedures shall be included for, but not limited to the following:

- a. Mission procedures.
- b. Preflight procedures.
- c. Pre-takeoff procedures.
- d. Coded Switch System (CSS) enabling.
- e. In-flight procedures.
- f. Pre-landing procedures.
- g. After landing procedures.
- h. Unscheduled landing procedures.

3.5.1.4 Section III – Emergency Aircrew Procedures. The Emergency Aircrew Procedures section shall contain emergency procedures involving the aircraft with a loaded missile aboard. Missile jettison procedures and pylon jettison procedures shall be included. Emergency procedures shall be marked in accordance with the requirements of MIL-STD-38784.

3.5.1.5 Section IV – Supplementary Data. The Supplementary Data section shall contain information on operational test launch systems, joint test unit launch systems, and operational test launch procedures.

3.5.1.6 Section V – Operating Limitations. The Operating Limitations section shall contain all missile and warhead limitations that shall be considered in planning and execution of a mission. Classified data shall be included in Volume 2, classified supplement.

3.5.1.7 Section VI – Mission Planning. The Mission Planning section shall contain information on clearance procedures, communications, security requirements, in-flight normal, and emergency notification procedures.

3.5.1.8 Section VII – Systems Operation. The Systems Operation section shall contain information regarding the operation of the aircraft/missile system. Theory of guidance system operation, guidance performance, and malfunction analysis shall be included.

3.5.1.9 Glossary. See [3.4.1.7](#).

3.5.1.10 Alphabetical index. See [3.3.1.8](#).

3.5.2 Volume 2 – Aircrew Weapon Delivery, Classified Supplement. Arrangement of Volume 2 shall be the same as Volume 1 (see [3.5.1](#)).

3.5.3 Volume 3 – Aircrew Weapon Delivery, Mission Planning. The Aircrew Weapon Delivery, Mission Planning volume shall be arranged as follows:

- a. Front matter (see [3.5.3.1](#)).
- b. Section I – Description (see [3.5.3.2](#)).
- c. Section II – Mission Planning (see [3.5.3.3](#)).
- d. Section III – Austere Mission Planning (see [3.5.3.4](#)).
- e. Section IV – Supplementary Data (see [3.5.3.5](#)).
- f. Section V – Missile Signatures (see [3.5.3.6](#)).
- g. Glossary (see [3.5.3.7](#)).
- h. Alphabetical index (see [3.5.3.8](#)).

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3.5.3.1 Front matter. The title page/screen, LEP/LOC, TOC, and introduction shall be prepared in accordance with the requirements of MIL-STD-38784.

3.5.3.2 Section I – Description. The Description section shall contain descriptive data on the missile system. Descriptions shall cover typical mission scenarios, weapons capability, missile hardware, missile flight software, carrier/missile preflight, launch, missile post launch, terminal area, and mission planning system.

3.5.3.3 Section II – Mission Planning. The Mission Planning section shall contain data on the route lay-down requirements, launch, en route, terminal area, and sample mission.

3.5.3.4 Section III – Austere Mission Planning. The Austere Mission Planning section shall contain data to enable operations personnel to plan missions in a timely manner.

3.5.3.5 Section IV – Supplementary Data. The Supplementary Data section shall contain data on missile performance, weapon effects, missile navigational data, and other data as required.

3.5.3.6 Section V – Missile Signatures. Due to the classification level of this data, information for the Missile Signatures section is usually contained in the applicable Air Force lead command, i.e., Air Combat Command (ACC), documents. The acquiring activity will specify how this section shall be presented (see 6.2ab).

3.5.3.7 Glossary. See 3.4.1.7.

3.5.3.8 Alphabetical index. See 3.3.1.8.

3.6 Aircrew Nuclear Bomb Delivery Manual (tactical aircraft). The Aircrew Nuclear Bomb Delivery Manuals shall contain the following: descriptive material for bomb preflight procedures, aircrew procedures, mission planning, supplemental data, strike procedures, and ferry and deployment procedures (see 3.2.4). The manual shall be arranged as follows:

- a. Volume 1 – Aircrew Nuclear Bomb Delivery Manual (see 3.6.1).
- b. Volume 2 – Aircrew Practice Bomb Delivery Manual (see 3.6.2).

3.6.1 Volume 1 – Aircrew Nuclear Bomb Delivery Manual. The Aircrew Nuclear Bomb Delivery Manual volume shall contain, as a minimum, the information to plan and execute nuclear bombing missions. This volume shall be a classified manual. If specified by the acquiring activity (see 6.2ac), specific procedural headings shall be omitted, added, or modified; if data is not available for a particular section, that section shall be omitted and succeeding sections renumbered. Manuals prepared for non-US applications, i.e., Security Assistance Program/Foreign Military Sales (SAP/FMS), shall be Single Volume, unless otherwise specified by the acquiring activity (see 6.2ad). This manual shall be arranged as follows:

- a. Front matter (see 3.6.1.1).
- b. Section I – Description (see 3.6.1.2).
- c. Section II – Normal Aircrew Procedures (see 3.6.1.3).
- d. Section III – Emergency Aircrew Procedures and Abnormal Operations (see 3.6.1.4).
- e. Section IV – Planning Procedures and Sample Problems (see 3.6.1.5).
- f. Section V – Planning Charts and Tables (see 3.6.1.6).
- g. Section VI – Supplementary Data (see 3.6.1.7).
- h. Glossary (see 3.4.1.7).
- i. Alphabetical index (see 3.3.1.8).

3.6.1.1 Front matter. The title page/screen, LEP/LOC, TOC, and introduction shall be prepared in accordance with the requirements of MIL-STD-38784.

3.6.1.2 Section I – Description. This section shall contain information describing the general overview of the weapons system operation as it pertains to nuclear bomb delivery. It shall be arranged as follows.

- a. Nuclear bomb deliveries.
- b. Nuclear bomb monitor control and release.
- c. Nuclear bomb suspension system.

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d. Nuclear bomb description.

e. Nuclear effects data.

3.6.1.2.1 Nuclear bomb deliveries. Information presented in this section provides a general overview of the weapon system operation as it pertains to nuclear weapon delivery. Information such as, but not limited to, fire control system, stores management system, controls and displays, and bomb delivery profiles shall be described.

3.6.1.2.2 Nuclear bomb monitor control and release. This section shall contain information of direct concern to the aircrew to be able to locate, identify, and functionally describe the components of the bomb monitor and control system is mechanized.

3.6.1.2.3 Nuclear bomb suspension system. This section shall include information of direct concern to the aircrew to be able to locate, identify, and functionally describe the bomb suspension and release system. Racks, pylons, and dispensers shall also be included. Alternate and emergency release systems, if applicable, shall also be described. Simplified descriptive art shall be included.

3.6.1.2.4 Nuclear bomb description. This section shall include information of direct concern to the aircrew to be able to identify, and functionally describe the nuclear bombs. Appropriate warnings, cautions, and notes to ensure safe operations shall also be included.

3.6.1.2.5 Nuclear effects data. The nuclear bomb effects shall contain information to acquaint aircrew members with the nuclear radiation, thermal radiation, and shockwave phenomena resulting from the detonation of a nuclear bomb.

3.6.1.3 Section II – Normal Aircrew Procedures. The Normal Aircrew Procedures section contains procedures for delivery of nuclear bombs. It is arranged in two parts. Part 1 shall contain alert/strike/lateral dispersal, including procedures for bomb and aircraft preflight, ground alert, launch, in-flight, abort, and bomb safing. Part 2 shall contain ferry procedures, including procedures for bomb and aircraft preflight. Amplification of procedural steps shall be provided when required for clarification.

3.6.1.4 Section III – Emergency Aircrew Procedures and Abnormal Operations. Procedures in the Emergency Aircrew Procedures and Abnormal Operations section shall pertain to ground operations and in-flight emergencies which may occur when a nuclear bomb is carried. These procedures shall include manual mode selection, systems nuclear caution displays, alternate release, jettison, ejection, malfunction analysis, bomb involved in fire or ground accidents, and crash landings. Manual command disenable procedures shall also be included.

3.6.1.5 Section IV – Planning Procedures and Sample Problems. The Planning Procedures and Sample Problems section shall provide the procedures for planning a nuclear delivery mission and for using the Combat Weapons Delivery Software (CWDS). Mission planning a nuclear delivery mission shall include general mission, lay-down, loft, Low Angel Drogue Delivery (LADD) planning, and mission planning forms.

3.6.1.6 Section V – Planning Charts and Tables. The Planning Charts and Tables section shall provide the charts, forms, and tables for planning a nuclear delivery mission and determine the release parameters to ensure a safe escape.

3.6.1.7 Section VI – Supplementary Data. The Supplementary Data section shall include information not directly related to the accomplishment of a strike mission. Information on in-flight safety, transportation of hazardous materials, firefighting and evacuation, and unscheduled landings with nuclear bombs aboard the aircraft shall be included. This section shall also contain any required data not included in the preceding sections.

3.6.2 Volume 2 – Aircrew Practice Bomb Delivery Manual. Information to plan and execute nuclear bombing missions employing training bombs and equipment shall be included in an unclassified single volume. Single Volume manuals shall be prepared for non-US use, unless otherwise specified by the acquiring activity (see 3.6.1). Specific procedural headings shall be omitted, added, or reworked as required to fit operational requirements. If data is not available for a particular section, that section shall be omitted and succeeding sections renumbered. This volume shall be arranged as follows:

a. Front matter (see 3.6.2.1).

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- b. Section I – Description (see 3.6.2.2).
- c. Section II – Normal Aircrew Procedures (see 3.6.2.3).
- d. Section III – Planning Procedures and Sample Problems (see 3.6.2.4).
- e. Section IV – Error Analysis (see 3.6.2.5).
- f. Glossary (see 3.4.1.7).
- g. Alphabetical index (see 3.3.1.8).

3.6.2.1 Front matter. The title page/screen, LEP/LOC, TOC, and introduction shall be prepared in accordance with the requirements of MIL-STD-38784.

3.6.2.2 Section I – Description. This section shall contain information describing the general overview of the weapons system operation as it pertains to practice nuclear bomb delivery. Section I shall be arranged as follows:

- a. Nuclear practice bomb deliveries.
- b. Nuclear practice bomb monitor control and release.
- c. Bomb suspension system.
- d. Nuclear practice bomb description.

3.6.2.2.1 Nuclear practice bomb deliveries. Information in this section shall provide a general overview of the weapon system operation as it pertains to nuclear weapon delivery. The information shall contain as a minimum, system capabilities, controls and displays, and bomb delivery profiles shall be described.

3.6.2.2.2 Nuclear practice bomb monitor control and release. This section shall contain information of direct concern to the aircrew to be able to locate, identify, and functionally describe the components of the bomb monitor and control system. It shall also describe how the display and control system is mechanized.

3.6.2.2.3 Nuclear suspension system. This section shall contain information of direct concern to the aircrew to be able to locate, identify, and functionally describe the bomb suspension and release system, to include racks, pylons, and dispensers. Alternate and emergency release systems shall also be described. Simplified descriptive art shall be included.

3.6.2.2.4 Nuclear practice bomb descriptions. This section shall include information of direct concern to the aircrew to be able to identify and functionally describe the practice bombs and practice bomb simulators.

3.6.2.3 Section II – Normal Aircrew Procedures. The Section II – Normal Aircrew Procedures section shall contain procedures for delivery of nuclear practice bombs. It shall be arranged in three parts as follows:

- a. Part 1 shall contain procedures for practice bombing using dispensers. Bomb and aircraft preflight, launch, and in-flight procedures shall also be included.
- b. Part 2 shall contain procedures for practice bombing using Bomb Dummy Units (BDUs), including bomb and aircraft preflight, launch, and in-flight.
- c. Part 3 shall contain procedures for training mode, no stores loaded, including bomb and aircraft preflight, launch, and in-flight. Procedural steps shall be amplified when needed for clarification.

3.6.2.4 Section III – Planning Procedures and Sample Problems. The Planning Procedures and Sample Problems section shall contain procedures for planning a nuclear delivery training mission and for using the CWDS. Mission planning a nuclear delivery training mission shall include general mission, lay down, loft, and LADD planning, and mission planning forms. Charts, forms, and tables to plan a nuclear delivery training mission to determine release parameters shall also be included.

3.6.2.5 Section IV – Error Analysis. The Error Analysis section shall include the aircrew error analysis to determine the effect of errors induced in manual delivery of practice nuclear bombs and to compensate for the effects of deviations from planned mission parameters. Errors shall be presented for lay down, loft, and LADD delivery profiles.

3.7 Nonnuclear weapon delivery source data packages. Source data packages shall be prepared as follows:

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- a. Source data packages shall not contain foldout pages.
- b. Source data packages and data contained therein shall be unclassified.

**3.7.1 Source data package contents.** The following apply:

- a. Source data package information and procedures shall be based on the manufacturer's recommendations and service experience.
- b. All available information shall be used to determine the functional criteria of the items.
- c. Warnings, cautions, and notes shall be included as necessary in accordance with MIL-STD-38784.
- d. Data shall be compatible with existing sections of the applicable manual.
- e. Data shall be for generic aircraft application. Aircraft-peculiar information, such as cockpit switch-ology and pylon locations, shall be eliminated, unless otherwise specified by the acquiring activity (see 6.2ae).

**3.7.2 Source data package illustrations.** Source data package illustrations and diagrams shall be prepared in accordance with MIL-STD-38784. Line drawings are the preferred type of illustration.

**4 VERIFICATION**

**4.1 Verification requirements.** When the technical data produced according to this specification is offered for acceptance, all tests, reviews, and verifications required by the acquiring activity to determine that it conforms to the requirements in Section 3 of the specification, shall be performed as specified in the solicitation or contract. The Air Force Technical Order Policy and Procedures (AF TOPP) team, AFMC/A4UE, provides the specific requirements for verification of technical data developed and delivered through this specification, as well as guidance for including those requirements in the solicitation or contract (see TO 00-5-3, 2.2.2).

**4.1.1 Compliance.** Technical manuals (TMs) shall meet all requirements of Section 3 of this specification and the appropriate DTD appendix, as specified by the acquiring activity (see 6.2). The requirements set forth in this specification shall become a part of the contractor's overall inspection system or quality program. The absence of any requirements in this specification shall not relieve the contractor of the responsibility of ensuring that all products or supplies, submitted to the government for acceptance, comply with all requirements of the contract. Use of sampling inspections shall be at the discretion of the contractor, and in accordance with commercially acceptable quality assurance procedures. However, use of sampling in QA procedures does not authorize submission of known defective material, either indicated or actual, nor does it commit the government to accept defective material.

**5 PACKAGING**

**5.1 Packaging.** For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2af). When packaging of materiel is to be performed by DoD or in-house contractor personnel, these personnel need to contact the responsible packaging activity to ascertain packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activities within the Military Service or Defense Agency, or within the military service's system commands. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

**6 NOTES**

(This section contains information of a general or explanatory nature which may be helpful, but is not mandatory.)

**6.1 Intended use.** The technical manuals prepared in accordance with the requirements of this detail specification are intended to provide information for flight crews in the planning and execution of all types of nuclear/nonnuclear weapon delivery missions.

**6.1.1 Nonnuclear weapon delivery source data packages.** All information pertinent to the munitions being procured, for weapon delivery manuals, needs to be included in the appropriate source data packages.



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**6.1.2 Managing requirements relative to electronic and print presentation unique functionality/formatting.** Throughout Section 3 in this detail specification, the statements labeled as "Electronic presentation" and "Print presentation" (see 6.7) are intended as data output related requirement options that are supportive of the content and formatting requirements stated within the specification. The acquiring activity must decide (see 6.2c) between either electronic or print presentation-unique functionality/formatting requirements based on the type of publishing output specified. For example, if the document is to be published in PDF, then the print presentation statements throughout are applicable (exceptions: electronic presentation statements would also apply for hot-linking of references within PDF documents and for color photographs). For documents designed to be displayed in web browsers in a non-print/non-document oriented format, e.g., Hypertext Markup Language (HTML), only the electronic presentation statements apply. Apart from electronic or print presentation statements, the core requirements of given paragraphs will be followed, as tailored by the acquiring activity.

**6.2 Acquisition requirements.** Acquisition documents need to specify the following:

- a. Title, number, and date of this document.
- b. If required, the specific issue of individual documents referenced (see 2.2.1).
- c. Which of either the electronic or print presentation functionality/formatting requirements herein apply throughout; identify any exceptions by specific paragraph number. Specify by type in cases where the presentation requirement of a type of manual(s) differs from the overall set of manuals (see 3.1.1).
- d. If illustrations will be used more than once (see 3.1.2a).
- e. If references to illustrations in the text will state the specific purpose of the illustration (see 3.1.2b).
- f. If the illustration title will be placed within the illustration and if the figure number will be placed below the illustration (see 3.1.2c).
- g. Electronic presentation: If photographs will be used in illustrations in accordance with MIL-STD-38784 rules for electronic presentation, in lieu of line drawings (see 3.1.2).
- h. If shortened nomenclature is permitted (see 3.1.3).
  - i. If a list of applicable reference documents is required (see 3.1.8).
  - j. If aircrew procedure steps within each subsection will begin with 1 (see 3.1.11).
- k. If the third volume, Nuclear Bomb Delivery Ballistics, will be prepared (see 3.2.2).
  - l. Types of manuals to be prepared (see 3.2.1, 3.2.2, 3.2.3, and 3.2.4).
- m. If nonnuclear weapon delivery source data packages are to be prepared (see 3.2.5).
- n. Types of checklists to be prepared (see 3.2.6, 3.2.7, and 3.2.8).
- o. If content changes are required to cover specific aircraft systems or mission requirements (see 3.2.6).
- p. If manuals are to contain classified data and if they will be published as separate manuals (see 3.3 and 3.4).
- q. Print presentation: If the manual will be divided and published in two volumes as a two-volume set (see 3.3.1).
- r. Procedures for submission of improvement reports (see 3.3.1.1.3c).
- s. Electronic presentation: If search functionality will be used in place of an alphabetical index (see 3.3.1.8).
- t. If the format and makeup of classified supplements are going to be other than the Specific Aircraft Manual (see 3.3.1.9).
- u. If Section V, Supplementary Data, is going to contain additional data not covered in sections I and II (see 3.4.1.6).
- v. If aircrew procedural headings are to be combined or augmented (see 3.4.2.3.1).

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- w. If Volume 2, Nuclear Bomb Delivery, Section II, (Normal Aircrew Procedures) technical data requires illustrations (see 3.4.2.3.3).
- x. If emergency procedures areas are to be combined, rather than presented separately for each bomb (see 3.4.2.4).
- y. If Volume 2, Nuclear Bomb Delivery, Section IV (Nuclear Practice Bomb Description) is not required, will be omitted, and succeeding sections, if any, renumbered (see 3.4.2.5).
- z. Electronic presentation: If electronic bombing data forms will be developed and the functionality specified to be used for input, retention, and extraction of data (see 3.4.3.4).
- aa. If the arrangement of the sections and section titles of Volume 1, Aircrew Weapon Delivery manual, will be modified to meet unique requirements (see 3.5.1).
- ab. How Volume 3, Aircrew Weapon Delivery, Mission Planning, Section V (Missile Signatures) technical data will be presented (see 3.5.3.6).
- ac. If specific procedural headings are going to be omitted, added, or modified; if section(s) will be omitted and succeeding sections renumbered (see 3.6.1).
- ad. If manuals prepared for non-US applications will be as other than Single Volume (see 3.6.1).
- ae. If aircraft-peculiar information will be included in source data packages (see 3.7.1e).
- af. Packaging requirements (see 5.1).

6.3 Technical manuals. The requirement for technical manuals should be considered when this specification is applied on a contract. If technical manuals are required, specifications and standards that have been authorized and assigned an Acquisition Management Systems Control (AMSC) number must be listed on a separate Contract Data Requirements List (DD Form 1423), which is included as an exhibit to the contract. The technical manuals must be acquired under separate contract line item in the contract.

6.4 Definitions. For the purpose of this document, the following definitions apply.

6.4.1 Aircrew procedures. The procedures required by the aircrew for planning and executing a weapon delivery mission.

6.4.2 Technical orders. The term technical order applies to both manuals and checklists.

6.4.3 Source data packages. Data procured to supplement weapon delivery manuals when information is required relative to updated procedures or munitions.

6.4.4 Weapons. A general term covering both nuclear and nonnuclear bombs/missiles.

6.4.5 Digital media data. Digital media technical data are computer programs used for the purpose of generating ballistic tables.

6.5 Acronyms and abbreviations. acronyms and abbreviations used in this document are defined as follows:

<b>BRU</b>	Bomb Release Unit
<b>BDU</b>	Bomb Dummy Unit
<b>CMD</b>	Commercial Mobile Device
<b>CSS</b>	Coded Switch System
<b>CWDS</b>	Combat Weapons Delivery Software
<b>DTD</b>	Document Type Definition
<b>ETIMS</b>	Enhanced Technical Information Management System
<b>FAR</b>	Federal Acquisition Regulation
<b>ft</b>	Feet
<b>HTML</b>	Hypertext Markup Language
<b>IETM</b>	Interactive Electronic Technical Manual
<b>IETP</b>	Interactive Electronic Technical Publication
<b>LADD</b>	Low Angel Droge Delivery

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<b>MDS</b>	Model/design/series
<b>MER</b>	Multiple Ejector Rack
<b>MIL</b>	Milliradian
<b>nmi</b>	Nautical Miles
<b>P</b>	Pilot
<b>PED</b>	Portable Electronic Device
<b>QA</b>	Quality Assurance
<b>RO</b>	Radar Operator
<b>TAS</b>	True Airspeed
<b>TCTO</b>	Time Compliance Technical Order
<b>TER</b>	Triple Ejector Rack

**6.6 Subject term (key word) listing.**

Dash 34  
 Data weapons delivery  
 Munition  
 Planning mission  
 Weapon

**6.7 Electronic versus print presentation unique functionality/formatting requirements.** Requirements herein labeled as electronic and print presentation (see 6.1.2) address data functionality/formatting that is determined by two primary modes of rendering and outputting of the TM data that are within the scope of this specification. They are defined as follows:

- a. **Electronic presentation:** Specifies requirements used to develop TM data to be rendered for display on an electronic/digital system, such as various kinds of work station computers, glass cockpit displays, or Portable Electronic Devices (PED)/Commercial Mobile Devices (CMD). These requirements apply to technical data developed as linear-structured compositions to be rendered digitally, i.e., HTML or equivalent web source data, for display in a browser or viewer. Electronic presentation requirements herein do NOT apply to development of PDF files, unless explicitly stated otherwise. Where data functionality requirements are specified through a separate document, such as a functionality matrix or a technical requirements document, that is approved by the acquiring activity, they should reflect or reference the functionality requirements specified herein. NOTE: Requirements for higher level digital non-linear interactive data, herein called Interactive Electronic TMs (IETMs) or Interactive Electronic Technical Publications (IETPs), are contained in a separate specification (see 6.8).
- b. **Print presentation:** Specifies formatting requirements herein used to develop TM data to be rendered only as page-oriented or printed publications. Print presentation requirements herein also apply overall to development of PDF files, with limited exceptions.

**6.8 IETMS/IETPs.** Requirements for digital functionality, formatting, and output of IETMs or IETPs are beyond the scope of this detail specification; refer to MIL-STD-3048.

**6.9 Changes from previous issues.** The margins of this specification are marked with vertical lines to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

**MIL-DTL-38384E(USAF)****APPENDIX A****NONNUCLEAR WEAPON DELIVERY, SPECIFIC AIRCRAFT MANUAL  
MARKUP LANGUAGE TOOLS****A.1 SCOPE.**

A.1.1 Scope. This appendix describes the standard Air Force (AF) markup language digital tools created for developing and delivering AF Technical Manuals (TMs). These tools are available as subsets in the Digital Support Suites (DSS) provided by the AF Technical Manual Specifications and Standards (TMSS) activity (see A.2). This appendix is a mandatory part of this detail specification. The information herein is intended for compliance.

A.1.2 Template Tool. The Document Type Definition (DTD) is the primary tool that is used as a template for authoring AF TMs and is based on rules outlined in MIL-PRF-28001 and ISO 8879. See A.2.1 for information about the DTD specified for this appendix subset.

**A.2 DSS.**

The DSS is comprised of the following tools for authoring and rendering the TM. See A.3 for information about obtaining DSS component files in digital format through the TMSS activity web site. For information about the current status of DSS tools, see A.3.4.

A.2.1 DTD. The DTD provides the structure and content template in accordance with the content specific requirements of this specification (see 3.2.1). To be delivered digitally, the TM shall be tagged using the applicable DTD provided through the TMSS activity. Information concerning the markup language type and use of DTDs currently provided, i.e., Standardized General Markup Language (SGML), may be obtained through the contacts listed under A.3.

A.2.2 Formatted Output Specification Instance (FOSI). The FOSI provides formatting for each element of an SGML tagged instance for rendering as a page-oriented document. It contains formatting information that conforms to the content specific requirements of this specification.

A.2.3 Tag Description Table (TDT). The TDT provides detailed descriptions of the elements contained in the DTD. The TDT contains the element tagging structure, parent elements, full element name, source paragraph, attribute descriptions unique to the element, and entities.

A.2.4 OmniMark™. DSSs contain OmniMark™ scripts designed to be used as a text processing language that enables authors to auto-generate redundant material that may be difficult to tag manually.

**A.3 OBTAINING DSS TOOLS.**

A.3.1 Obtaining files by users with mil web site access. The following applies to those interested in obtaining DSS component files who are on a mil internet domain, having mil web address access.

A.3.1.1 AF TMSS web site. DTDs, TDTs, and other files in the DSS can be accessed at the TMSS web site at <https://techdata.wpafb.af mil/tmss/index.html>. On the web page, the “Baseline” menu option in the left pane contains three bulleted options called “Specifications”, “Standards”, and “Handbooks”. Hover the cursor over “Specifications” and a listing of the TMSS specifications will appear. Hover over the desired specification number and another drop down list will appear that contains an entry indicating the PDF version of the specification and other entries for the associated appendices. To obtain the preferred subset DTD, select the desired appendix from the list. The following items will appear on the downloading page: The name of the specification, the appendix number and name, the current version of the DSS, buttons to download specific DSS files provided and a “Download” button to download the entire DSS zip file.

A.3.2 Obtaining files by users with a Public Key Infrastructure (PKI) certificate or a Common Access Card (CAC). The following applies to those interested in obtaining DSS component files who have a PKI certificate or a CAC (see <http://iase.disa.af mil/pki-pke/index.html> for information on PKI and CAC access requirements).

A.3.2.1 AF TMSS SharePoint web site. DTDs, TDTs, and other files in the DSS can be accessed at the AF TMSS Sharepoint web site: <https://cs3.eis.af mil/sites/OO-LG-MC-38/default.aspx>.

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A.3.3 Obtaining files by users without mil access, PKI certificate, or CAC. Those seeking to obtain DSS files who do not have .mil web access, a PKI certificate, or a CAC should contact their AF Program Management Office (PMO) or see [A.3.4](#) to obtain information.

A.3.4 TMSS Helpdesk assistance. Address any requests relating to the DSS by E-mail to [SGMLSUPPORT@us.af.mil](mailto:SGMLSUPPORT@us.af.mil) (organizational address: Wright-Patterson AFLCMC/HIAM\_AF TMSS HLPDSK) or by postal mail to Air Force Technical Manual Specifications and Standards, AFMC/AFLCMC/HIAM, 4170 Hebble Creek Road, Building 280, Door 15, Wright-Patterson AFB OH 45433-5653.

**MIL-DTL-38384E(USAF)****APPENDIX B****NONNUCLEAR WEAPON DELIVERY MANUAL, STANDARD VOLUME MANUAL  
MARKUP LANGUAGE TOOLS****B.1 SCOPE.**

**B.1.1 Scope.** This appendix describes the standard Air Force (AF) markup language digital tools created for developing and delivering AF Technical Manuals (TMs). These tools are available as subsets in the Digital Support Suites (DSS) provided by the AF Technical Manual Specifications and Standards (TMSS) activity (see [B.2](#)). This appendix is a mandatory part of this detail specification. The information herein is intended for compliance.

**B.1.2 Template Tool.** The Document Type Definition (DTD) is the primary tool that is used as a template for authoring AF TMs and is based on rules outlined in MIL-PRF-28001 and ISO 8879. See [B.2.1](#) for information about the DTD specified for this appendix subset.

**B.2 DSS.**

The DSS is comprised of the following tools for authoring and rendering the TM. See [A.3](#) for information about obtaining DSS component files in digital format through the TMSS activity web site. For information about the current status of DSS tools, see [A.3.4](#).

**B.2.1 DTD.** The DTD provides the structure and content template in accordance with the content specific requirements of this specification (see [3.2.1](#)). To be delivered digitally, the TM shall be tagged using the applicable DTD provided through the TMSS activity. Information concerning the markup language type and use of DTDs currently provided, i.e., Standardized General Markup Language (SGML), may be obtained through the contacts listed under [A.3](#).

**B.2.2 Formatted Output Specification Instance (FOSI).** The FOSI provides formatting for each element of an SGML tagged instance for rendering as a page-oriented document. It contains formatting information that conforms to the content specific requirements of this specification.

**B.2.3 Tag Description Table (TDT).** The TDT provides detailed descriptions of the elements contained in the DTD. The TDT contains the element tagging structure, parent elements, full element name, source paragraph, attribute descriptions unique to the element, and entities.

**B.2.4 OmniMark™.** DSSs contain OmniMark™ scripts designed to be used as a text processing language that enables authors to auto-generate redundant material that may be difficult to tag manually.

**B.3 OBTAINING DSS TOOLS.**

See [A.3](#).



**MIL-DTL-38384E(USAF)****APPENDIX C****AIRCREW NUCLEAR BOMB DELIVERY MANUAL (STRATEGIC BOMBER AIRCRAFT), VOLUME 1 – NUCLEAR BOMB BASIC INFORMATION  
MARKUP LANGUAGE TOOLS****C.1 SCOPE.**

C.1.1 Scope. This appendix describes the standard Air Force (AF) markup language digital tools created for developing and delivering AF Technical Manuals (TMs). These tools are available as subsets in the Digital Support Suites (DSS) provided by the AF Technical Manual Specifications and Standards (TMSS) activity (see [C.2](#)). This appendix is a mandatory part of this detail specification. The information herein is intended for compliance.

C.1.2 Template Tool. The Document Type Definition (DTD) is the primary tool that is used as a template for authoring AF TMs and is based on rules outlined in MIL-PRF-28001 and ISO 8879. See [C.2.1](#) for information about the DTD specified for this appendix subset.

**C.2 DSS.**

The DSS is comprised of the following tools for authoring and rendering the TM. See [A.3](#) for information about obtaining DSS component files in digital format through the TMSS activity web site. For information about the current status of DSS tools, see [A.3.4](#).

C.2.1 DTD. The DTD provides the structure and content template in accordance with the content specific requirements of this specification (see [3.2.2](#)). To be delivered digitally, the TM shall be tagged using the applicable DTD provided through the TMSS activity. Information concerning the markup language type and use of DTDs currently provided, i.e., Standardized General Markup Language (SGML), may be obtained through the contacts listed under [A.3](#).

C.2.2 Formatted Output Specification Instance (FOSI). The FOSI provides formatting for each element of an SGML tagged instance for rendering as a page-oriented document. It contains formatting information that conforms to the content specific requirements of this specification.

C.2.3 Tag Description Table (TDT). The TDT provides detailed descriptions of the elements contained in the DTD. The TDT contains the element tagging structure, parent elements, full element name, source paragraph, attribute descriptions unique to the element, and entities.

C.2.4 OmniMark™. DSSs contain OmniMark™ scripts designed to be used as a text processing language that enables authors to auto-generate redundant material that may be difficult to tag manually.

**C.3 OBTAINING DSS TOOLS.**

See [A.3](#).

**MIL-DTL-38384E(USAF)****APPENDIX D****AIRCREW NUCLEAR BOMB DELIVERY MANUAL (STRATEGIC BOMBER AIRCRAFT), VOLUME 2 – NUCLEAR BOMB DELIVERY BASIC INFORMATION AND OPERATING PROCEDURES  
MARKUP LANGUAGE TOOLS****D.1 SCOPE.**

D.1.1 Scope. This appendix describes the standard Air Force (AF) markup language digital tools created for developing and delivering AF Technical Manuals (TMs). These tools are available as subsets in the Digital Support Suites (DSS) provided by the AF Technical Manual Specifications and Standards (TMSS) activity (see [D.2](#)). This appendix is a mandatory part of this detail specification. The information herein is intended for compliance.

D.1.2 Template Tool. The Document Type Definition (DTD) is the primary tool that is used as a template for authoring AF TMs and is based on rules outlined in MIL-PRF-28001 and ISO 8879. See [D.2.1](#) for information about the DTD specified for this appendix subset.

**D.2 DSS.**

The DSS is comprised of the following tools for authoring and rendering the TM. See [A.3](#) for information about obtaining DSS component files in digital format through the TMSS activity web site. For information about the current status of DSS tools, see [A.3.4](#).

D.2.1 DTD. The DTD provides the structure and content template in accordance with the content specific requirements of this specification (see [3.2.2](#)). To be delivered digitally, the TM shall be tagged using the applicable DTD provided through the TMSS activity. Information concerning the markup language type and use of DTDs currently provided, i.e., Standardized General Markup Language (SGML), may be obtained through the contacts listed under [A.3](#).

D.2.2 Formatted Output Specification Instance (FOSI). The FOSI provides formatting for each element of an SGML tagged instance for rendering as a page-oriented document. It contains formatting information that conforms to the content specific requirements of this specification.

D.2.3 Tag Description Table (TDT). The TDT provides detailed descriptions of the elements contained in the DTD. The TDT contains the element tagging structure, parent elements, full element name, source paragraph, attribute descriptions unique to the element, and entities.

D.2.4 OmniMark™. DSSs contain OmniMark™ scripts designed to be used as a text processing language that enables authors to auto-generate redundant material that may be difficult to tag manually.

**D.3 OBTAINING DSS TOOLS.**

See [A.3](#).

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**APPENDIX E**

**AIRCREW NUCLEAR BOMB DELIVERY MANUAL (STRATEGIC BOMBER  
AIRCRAFT), VOLUME 3 – NUCLEAR BOMB DELIVERY BALLISTICS MANUAL  
MARKUP LANGUAGE TOOLS**

**NOTE**

This Digital Support Suite (DSS) is not available. Refer to [A.3](#) to obtain more information. See [3.2.2](#) for detailed content requirements.

**MIL-DTL-38384E(USAF)****APPENDIX F****AIRCREW NUCLEAR MISSILE DELIVERY MANUAL (STRATEGIC BOMBER AIRCRAFT)  
MARKUP LANGUAGE TOOLS****F.1 SCOPE.**

F.1.1 Scope. This appendix describes the standard Air Force (AF) markup language digital tools created for developing and delivering AF Technical Manuals (TMs). These tools are available as subsets in the Digital Support Suites (DSS) provided by the AF Technical Manual Specifications and Standards (TMSS) activity (see [F.2](#)). This appendix is a mandatory part of this detail specification. The information herein is intended for compliance.

F.1.2 Template Tool. The Document Type Definition (DTD) is the primary tool that is used as a template for authoring AF TMs and is based on rules outlined in MIL-PRF-28001 and ISO 8879. See [F.2.1](#) for information about the DTD specified for this appendix subset.

**F.2 DSS.**

The DSS is comprised of the following tools for authoring and rendering the TM. See [A.3](#) for information about obtaining DSS component files in digital format through the TMSS activity web site. For information about the current status of DSS tools, see [A.3.4](#).

F.2.1 DTD. The DTD provides the structure and content template in accordance with the content specific requirements of this specification (see [3.2.3](#)). To be delivered digitally, the TM shall be tagged using the applicable DTD provided through the TMSS activity. Information concerning the markup language type and use of DTDs currently provided, i.e., Standardized General Markup Language (SGML), may be obtained through the contacts listed under [A.3](#).

F.2.2 Formatted Output Specification Instance (FOSI). The FOSI provides formatting for each element of an SGML tagged instance for rendering as a page-oriented document. It contains formatting information that conforms to the content specific requirements of this specification.

F.2.3 Tag Description Table (TDT). The TDT provides detailed descriptions of the elements contained in the DTD. The TDT contains the element tagging structure, parent elements, full element name, source paragraph, attribute descriptions unique to the element, and entities.

F.2.4 OmniMark™. DSSs contain OmniMark™ scripts designed to be used as a text processing language that enables authors to auto-generate redundant material that may be difficult to tag manually.

**F.3 OBTAINING DSS TOOLS.**

See [A.3](#).

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**APPENDIX G**

**AIRCREW NUCLEAR MISSILE DELIVERY MANUAL (STRATEGIC  
BOMBER AIRCRAFT), VOLUME 2 – AIRCREW WEAPON  
DELIVERY, CLASSIFIED SUPPLEMENTS  
MARKUP LANGUAGE TOOLS**

**NOTE**

This Digital Support Suite (DSS) is not available. Refer to [A.3](#) to obtain more information. See [3.2.3](#) for detailed content requirements.

**MIL-DTL-38384E(USAF)****APPENDIX H****AIRCREW NUCLEAR MISSILE DELIVERY MANUAL (STRATEGIC BOMBER AIRCRAFT), VOLUME 3 – AIRCREW WEAPON DELIVERY, MISSION PLANNING MARKUP LANGUAGE TOOLS****H.1 SCOPE.**

H.1.1 Scope. This appendix describes the standard Air Force (AF) markup language digital tools created for developing and delivering AF Technical Manuals (TMs). These tools are available as subsets in the Digital Support Suites (DSS) provided by the AF Technical Manual Specifications and Standards (TMSS) activity (see [H.2](#)). This appendix is a mandatory part of this detail specification. The information herein is intended for compliance.

H.1.2 Template Tool. The Document Type Definition (DTD) is the primary tool that is used as a template for authoring AF TMs and is based on rules outlined in MIL-PRF-28001 and ISO 8879. See [H.2.1](#) for information about the DTD specified for this appendix subset.

**H.2 DSS.**

The DSS is comprised of the following tools for authoring and rendering the TM. See [A.3](#) for information about obtaining DSS component files in digital format through the TMSS activity web site. For information about the current status of DSS tools, see [A.3.4](#).

H.2.1 DTD. The DTD provides the structure and content template in accordance with the content specific requirements of this specification (see [3.2.3](#)). To be delivered digitally, the TM shall be tagged using the applicable DTD provided through the TMSS activity. Information concerning the markup language type and use of DTDs currently provided, i.e., Standardized General Markup Language (SGML), may be obtained through the contacts listed under [A.3](#).

H.2.2 Formatted Output Specification Instance (FOSI). The FOSI provides formatting for each element of an SGML tagged instance for rendering as a page-oriented document. It contains formatting information that conforms to the content specific requirements of this specification.

H.2.3 Tag Description Table (TDT). The TDT provides detailed descriptions of the elements contained in the DTD. The TDT contains the element tagging structure, parent elements, full element name, source paragraph, attribute descriptions unique to the element, and entities.

H.2.4 OmniMark™. DSSs contain OmniMark™ scripts designed to be used as a text processing language that enables authors to auto-generate redundant material that may be difficult to tag manually.

**H.3 OBTAINING DSS TOOLS.**

See [A.3](#).



**MIL-DTL-38384E(USAF)****APPENDIX I****AIRCREW NUCLEAR BOMB DELIVERY MANUAL (TACTICAL AIRCRAFT),  
VOLUME 1 – AIRCREW NUCLEAR BOMB DELIVERY MANUAL  
MARKUP LANGUAGE TOOLS****I.1 SCOPE.**

**I.1.1 Scope.** This appendix describes the standard Air Force (AF) markup language digital tools created for developing and delivering AF Technical Manuals (TMs). These tools are available as subsets in the Digital Support Suites (DSS) provided by the AF Technical Manual Specifications and Standards (TMSS) activity (see [I.2](#)). This appendix is a mandatory part of this detail specification. The information herein is intended for compliance.

**I.1.2 Template Tool.** The Document Type Definition (DTD) is the primary tool that is used as a template for authoring AF TMs and is based on rules outlined in MIL-PRF-28001 and ISO 8879. See [I.2.1](#) for information about the DTD specified for this appendix subset.

**I.2 DSS.**

The DSS is comprised of the following tools for authoring and rendering the TM. See [A.3](#) for information about obtaining DSS component files in digital format through the TMSS activity web site. For information about the current status of DSS tools, see [A.3.4](#).

**I.2.1 DTD.** The DTD provides the structure and content template in accordance with the content specific requirements of this specification (see [3.2.4](#)). To be delivered digitally, the TM shall be tagged using the applicable DTD provided through the TMSS activity. Information concerning the markup language type and use of DTDs currently provided, i.e., Standardized General Markup Language (SGML), may be obtained through the contacts listed under [A.3](#).

**I.2.2 Formatted Output Specification Instance (FOSI).** The FOSI provides formatting for each element of an SGML tagged instance for rendering as a page-oriented document. It contains formatting information that conforms to the content specific requirements of this specification.

**I.2.3 Tag Description Table (TDT).** The TDT provides detailed descriptions of the elements contained in the DTD. The TDT contains the element tagging structure, parent elements, full element name, source paragraph, attribute descriptions unique to the element, and entities.

**I.2.4 OmniMark™.** DSSs contain OmniMark™ scripts designed to be used as a text processing language that enables authors to auto-generate redundant material that may be difficult to tag manually.

**I.3 OBTAINING DSS TOOLS.**

See [A.3](#).

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**APPENDIX J**

**AIRCREW NUCLEAR BOMB DELIVERY MANUAL (TACTICAL AIRCRAFT),  
VOLUME 2 – AIRCREW PRACTICE BOMB DELIVERY MANUAL  
MARKUP LANGUAGE TOOLS**

**NOTE**

This Digital Support Suite (DSS) is not available. Refer to [A.3](#) to obtain more information. See [3.2.4](#) for detailed content requirements.

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## **CONCLUDING MATERIAL**

Custodians:

Air Force - 16

Preparing activity:

Air Force - 16

(Project TMSS-2014-013)

Review activities:

Air Force - 01, 10, 11, 71, 99

## **NOTE**

**The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.**