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**DETAIL SPECIFICATION
MANUALS, TECHNICAL AND CHECKLISTS:
MUNITIONS/WEAPONS LOADING PROCEDURES,
NONNUCLEAR
AND
NUCLEAR AND PACKAGES, STANDARD DATA:
MUNITIONS LOADING PROCEDURES, NONNUCLEAR**



Comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be submitted to: ESC/HGGI, 4170 Hebble Creek Road, Bldg. 280, Door 15, Area A, Wright-Patterson AFB, OH 45433-5653 or by email to: SGMLsupport@wpafb.af.mil. Since contact information can change, the currency of this address information should be verified using the ASSIST Online database at <https://assist.daps.dla.mil/>

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MIL-DTL-9977L(USAF)**1 SCOPE**

1.1 Scope. This detail specification establishes the requirements for preparation of manuals and checklists for loading/unloading nuclear weapons and nonnuclear munitions on aircraft, and for checking various armament systems used to control/release/fire munitions and weapons that are approved for loading on an aircraft. This specification provides for electronic delivery of data through the use of the Document Type Definitions (DTD) contained in Appendixes A through K (see 6.2).

1.2 Detail. The level of detail contained in this specification is necessary to comply with the requirements of the Joint Computer-aided Acquisition and Logistics Support (JCALS) system.

1.3 Classification. The type(s) of manual(s) to be prepared, as specified by the acquiring activity (see 3.2) are as follows:

- a. Nuclear Weapons Basic Information and Loading Procedures Manual (Fighter Aircraft) (see 3.2.1 and 3.3).
- b. Nuclear Weapons Loading Procedures Manual (Bomber Aircraft) (see 3.2.2 and 3.4).
- c. Nonnuclear Munitions Basic Information Manual (Standard Volume) (see 3.2.3 and 3.5).
- d. Nonnuclear Munitions Loading Procedures Manual (see 3.2.4 and 3.6.)
- e. Integrated Combat Turnaround Procedures Manual (see 3.2.5 and 3.7).
- f. Nonnuclear Munitions Loading Standard Data Packages (see 3.2.6 and 3.8).
- g. Loading Procedures Checklists (see 3.2.7 and 3.9).
- h. Integrated Loading Procedures Checklists (see 3.2.7.1 and 3.9).
- i. Nuclear Weapons Loading Procedures Checklists (see 3.2.7.2 and 3.9).
- j. Integrated Combat Turnaround Procedures Checklists (see 1.4, 3.2.7.3 and 3.10).
- k. NATO Stage B Cross-Servicing Checklists (see 1.5, 3.2.7.4 and 3.11).

1.4 Integrated Combat Turnaround (ICT) procedures. This document describes the requirements for preparing United States Air Force (USAF) ICT procedures for incorporation in technical manuals and checklists. These integrated procedures combine and condense aircraft servicing -2 and -33 technical manuals (see 6.10).

1.5 NATO Stage B cross-servicing. This document establishes the requirements for preparing checklists for loading/unloading nonnuclear munitions, flares, and chaff (including chaff dispensers) on aircraft in support of North Atlantic Treaty Organization (NATO) Stage B cross-servicing. The checklist is a supplement to the Stage A cross-servicing guide for aircraft.

2 APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3, 4 or 5 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 documents cited in sections 3 and 4 or 5 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.

DEPARTMENT OF DEFENSE SPECIFICATIONS**MIL-PRF-5096**

Manuals, Technical: Inspection and Maintenance Requirements; Acceptance and Functional Check Flight Procedures and Checklists; Inspection Work Cards; and Checklists; Preparation of

DEPARTMENT OF DEFENSE STANDARDS**MIL-STD-38784**

Manuals, Technical: General Style and Format Requirements

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(Copies of these documents are available online at <https://assist.daps.dla.mil/quicksearch/> or <https://dodssp.daps.dla.mil/assist.htm> 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 are those cited in the solicitation or contract.

PUBLICATIONS**AIR FORCE MANUALS****AFMAN 91-201**

Explosive Safety Standards

AFMAN 91-221

Weapons Safety Investigations and Reports

AIR FORCE TECHNICAL MANUALS**TO 00-5-3**

AF Technical Order Life Cycle Management

(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.

3 REQUIREMENTS

3.1 Development and preparation. The general manner of development and preparation for manuals and checklists shall be in accordance with the requirements of MIL-STD-38784 and MIL-PRF-5096.

3.1.1 Format. Format shall be in accordance with the requirements of MIL-STD-38784, with the exception that loading procedures shall be in single column format, and checklists procedures may contain single steps. Changes shall be in accordance with the requirements of MIL-STD-38784.

3.1.2 Illustrations. Illustrations shall be prepared in accordance with the requirements of MIL-STD-38784 (see 6.9).

3.1.2.1 Changes to illustrations. Changes to illustrations shall be in accordance with the requirements of MIL-STD-38784.

3.1.2.2 Location of illustrations. For print presentation, illustrations and artwork shall be located as close as possible to the applicable text.

3.1.3 Nomenclature. Nomenclature of switches, circuit breakers, and other controls shall be as it appears on the aircraft decals, placards, engraved legends, and nameplates. Munition/weapon nomenclature used as manual chapter/section titles, and on checklist title pages, on both electronic and printed media, shall be common terminology. Nomenclature of support equipment SE and other type equipment, shall be the official assigned nomenclature, consisting of the item name and type designation. Munition/weapon and SE nomenclature used elsewhere in the manuals and checklists shall be common terminology, unless listed otherwise in the standard data package, which shall take precedence.

3.1.4 Warnings, cautions, and notes. "WARNINGS," "CAUTIONS," and "NOTES" shall be prepared and presented in accordance with the requirements of MIL-STD-38784.

3.1.5 Applicability notations. Procedural steps, within the text, that are applicable to a specific item, shall be prefixed with applicability notations for identification. The applicability notations shall be explained in the manual foreword (see 6.5).

3.1.6 Standardization. The appearance of all nuclear and nonnuclear loading procedures manuals shall be as similar as possible.

3.1.6.1 Standard switch and indicator light terminology. Bomb release buttons, triggers, jettison buttons, sensing switches, etc., shall be "depressed," "released," or "momentarily depressed." All other switches

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shall be “positioned.” Circuit breakers shall be “in” or “out.” Lights shall be “on” or “off,” “momentarily on,” “momentarily off,” or “flashing.”

3.1.6.2 Standardization of terms for procedural steps. Once a phrase such as “check that,” “ensure that,” “lift,” “raise,” etc., has been selected, that phrase shall remain the same throughout the loading manuals (see 6.2).

3.1.6.3 Standardization of terms “if applicable” and “if required.” The term “if required” shall not be used. Unless otherwise specified by the acquiring activity, the term “if applicable” shall only be used when the completion of the procedural step may, or may not, be required due to aircraft configuration or load condition e.g., “remove power (if applicable)” is considered correct if the operation may require power in later steps (see 6.2).

3.1.6.4 Standardization of cockpit switch safing for aircraft preparation. Unless otherwise specified by the acquiring activity, cockpit switch safing procedures shall read “Check that all cockpit armament switches are in the OFF, SAFE, or NORMAL position.” These procedures shall be amplified to include figure 6 showing required switch positions (see 6.2).

3.1.6.5 Nonnuclear munitions loading standard data packages. Unless otherwise specified by the acquiring activity, standard data packages shall be prepared (see 6.2). Only grammatical changes to correct errors or improve compatibility with established manual style shall be permitted (see 6.15).

3.2 Coverage. The manuals to be prepared shall be those specified by the acquiring activity (see 6.2). Procedures shall be covered as follows:

3.2.1 Nuclear weapons basic information and loading procedures manual (fighter aircraft) (see 3.3). This manual shall contain descriptive material, supplementary information, emergency procedures, and weapons loading/unloading procedures. All information shall be unclassified. Nonnuclear munitions procedures shall not be incorporated in this manual.

3.2.2 Nonnuclear weapons loading procedures manual (bomber aircraft) (see 3.4). This manual shall contain descriptive material, general support information, supplementary information, and job-oriented loading procedures. All information shall be unclassified.

3.2.3 Nonnuclear munitions basic information manual (standard volume) (see 3.5). This manual shall contain descriptive material for use in conjunction with all USAF aircraft nonnuclear munition loading procedures manuals (see 6.12). All information shall be unclassified.

3.2.4 Nonnuclear munitions loading procedures manual (see 3.6). This manual shall contain supplementary information, emergency procedures, and munition loading/unloading procedures. All information shall be unclassified.

3.2.5 Integrated combat turnaround procedures manual (see 3.7). This manual shall combine and condense aircraft servicing and munitions loading/unloading procedures for integrated combat turnaround. All information shall be unclassified.

3.2.6 Nonnuclear munitions loading standard data packages (see 3.8).

3.2.7 Loading procedures checklists (see 3.9). These checklists shall contain briefing/emergency procedures and condensed munitions/weapons loading/unloading procedures. Checklists shall only contain basic steps, with the exception of nuclear weapons checklists which shall list each applicable cockpit switch and its proper position. All information shall be unclassified.

3.2.7.1 Integrated loading procedures checklists (see 3.9). procedures. These checklists shall prepared in the same style and format as the loading procedures checklist. These checklists shall contain a combination of procedural steps from - 16 (nuclear) and - 33 (nonnuclear) loading manuals. All information shall be unclassified."

3.2.7.2 Nuclear weapons loading procedures checklists (see 3.9). These checklists shall include team chief checks, preloading and postloading checks, safety checks, unloading procedures, and other checks and steps required to safely complete the required operations. Checklists shall be written in the demand-response format. General preparation shall be in the same style and format as the loading procedures checklists. All information shall be unclassified.

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3.2.7.3 Integrated combat turnaround procedures checklists (see 3.10). These checklists shall contain emergency procedures and condensed aircraft servicing and munitions loading/unloading procedures. All information shall be unclassified.

3.2.7.4 NATO Stage B cross-servicing checklists (see 3.11). Illustrated checklists shall be required, to ensure aircraft are safely cross-serviced without doubt or confusion. These checklists shall contain emergency procedures and munitions loading procedures. All information shall be unclassified.

3.3 Nuclear weapons basic information and loading procedures manual (fighter aircraft). The contractor shall use the DTD in Appendix A, if electronic delivery of this manual is required (see 6.2). Capitalization and underscoring of chapter, section, and paragraph titles shall be in accordance with the requirements of MIL-STD-38784 (see 6.6). This manual shall be arranged as follows:

- a. Front matter.
- b. Chapter 1 - Basic Information.
 1. Section I - General safety requirements.
 2. Section II - Emergency procedures.
 3. Section III - Aircraft description and general arrangement.
 4. Section IV - SE description.
 5. Section V - Bomb/weapon descriptions.
 6. Section VI - General procedures.
 7. Section VII - Aircraft preparation.
 8. Section VIII - Flight Circuit Test (FCT)/Functional checks.
 9. Section IX - Stray voltage checks.
- c. Chapter 2 - Bombs/weapons loading procedures.
 1. General.
 2. Loading procedures.
 3. Unloading procedures.
 4. Ferry procedures.
- d. Chapter 3 - Practice bomb loading procedures.
 1. General.
 2. Loading procedures.
 3. Unloading procedures.

3.3.1 Front matter. The front matter shall be in accordance with the requirements of MIL-STD-38784, except that no list of illustrations or list of tables shall be included.

3.3.1.1 Foreword. The foreword shall be in accordance with the requirements of MIL-STD-38784, with the following additional requirements. The foreword shall include a listing of applicable publications. The foreword shall also contain a precedence paragraph or statement, and a nuclear safety certification statement as provided by the acquiring activity (see 6.2). Submittal and routing instructions for technical manual improvement reports shall be included, and shall reference TO 00- 5-1 as the authority for recommending changes. A paragraph shall be included identifying the Air Force activity having technical responsibility for the manual (see 6.2). Standard definitions of "WARNING," "CAUTION," and "NOTE" shall be included as the final entry of the foreword. Any other additional information shall be included, if provided by the acquiring activity (see 6.2).

3.3.2 Chapter 1 - Basic information. Unless otherwise specified by the acquiring activity, all the following sections shall be included (see 6.2). When not required, the section heading (section number and title) shall be included, followed by "Not Applicable." When specified by the acquiring activity, additional sections shall be included, and shall begin after the last of the required sections. (see 6.2).

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3.3.2.1 Section I - General safety requirements. This section shall contain all general safety requirements necessary for preparation, handling, loading, and unloading of weapons/munitions (see 3.6.2.1).

3.3.2.2 Section II - Emergency procedures. This section shall contain emergency procedures related to weapons/munitions (see 3.6.2.2) or weapons/munitions loaded aircraft. Procedures shall be prefaced by a brief explanation of actions to be accomplished. Emergency procedures shall be marked in accordance with the requirements of MIL-STD-38784 and shall include the words "Emergency Procedures" directly below the technical manual identification number (see figures 2 and 3 for page oriented examples).

3.3.2.3 Section III - Aircraft description and general arrangement. This section shall contain the aircraft description and general arrangement in an illustrated, informational form. The location of panels, switches, safety devices, etc., which are used as part of loading procedures, shall be shown. Each identified item shall have an accompanying brief description of its function/use. See figure 4.

3.3.2.4 Section IV - SE description. Descriptive information, on testers, handling, and loading equipment listed as SE in loading procedures, shall be included. Authorized nuclear weapons SE shall be listed in accordance with the Master Nuclear Certification List (MNCL) (see 6.13).

3.3.2.5 Section V - Bomb/weapon descriptions. This section shall contain descriptive information on all nuclear weapons, trainers, and their components, which are approved for loading on the aircraft concerned.

3.3.2.6 Section VI - General procedures. This section shall contain general information, followed by detailed procedures for selected items of a repetitive nature, within the different chapters of the manual (checking test equipment for proper operation, aircraft grounding procedures, marking of impulse cartridges, etc.). See figure 5.

3.3.2.7 Section VII - Aircraft preparation. This section shall contain detailed steps required to prepare the basic aircraft and installed weapons/munitions (see 3.6.2.5) accessories (e.g., rack, launcher, etc.) for functional/stray voltage checks and weapons/munitions) loading.

3.3.2.7.1 Aircraft preparation. This primary paragraph shall contain all steps required to prepare the basic aircraft for functional/stray voltage checks and weapons/munitions (see 3.6.2.5.1) loading.

3.3.2.7.2 Installed accessory preparation. This primary paragraph shall contain all necessary steps to prepare each installed weapon /munition see 3.6.2.5.2) accessory (e.g., rack, launcher, etc.) for functional/stray voltage checks and weapons/munitions) loading.

3.3.2.8 Section VIII - Flight Circuit Test (FCT)/Functional checks. This section shall contain all necessary steps to perform functional checks of the weapons munitions see 3.6.2.6 control/release/fire and jettison systems. See figure 6.

3.3.2.8.1 System requirements. Procedures shall be subdivided when required by the acquiring activity to meet weapon system requirements (see 6.2). When specified by the acquiring activity, additional primary paragraphs shall be included, and shall be in the designated sequence (see 6.2).

3.3.2.9 Section IX - Stray voltage checks. This section shall contain all necessary steps to perform stray voltage test(s) of weapons/munitions (see 3.6.2.7) control/release/fire and jettison systems. As a minimum, power shall be applied to the aircraft during the stray voltage checks, unless otherwise specified by the acquiring activity (see 6.2).

3.3.3 Chapter 2 - Bombs/weapons loading procedures. Arrangement shall be in accordance with 3.3c. and 3.3.3.2 thru 3.3.3.5. When specified, this chapter shall be divided into sections (see 6.2). Arrangement shall be as specified by the acquiring activity (see 6.2). The arrangement within the chapter shall be dictated by the similarity of tasks to be performed (see 6.5). Integrated nuclear/nonnuclear loading procedures shall not be incorporated in the nuclear weapons basic information and loading procedures manual.

3.3.3.1 Method of presentation. The presentation of the detailed procedures shall be standardized as much as possible. The following method of presentation shall be used:

3.3.3.1.1 Applicability notations shall be in accordance with 3.1.5.

3.3.3.1.2 Illustrations. Print presentation only: Illustrations shall be as close as possible to the applicable step and be of a standard size, if possible. Illustration/text arrangement shall be procedures on the right and

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illustrations down the left side of the page or with procedures at the top and illustration across the bottom of the page. Illustrations shall be placed both along the left side and across the bottom of the page, if necessary. Pages shall not require turning to view an illustration. The required procedures/illustrations shall be provided in a concise and standard form. See figures 5 and 6.

Electronic presentation: The text and figures will be displayed in accordance with MIL-STD-38784.

3.3.3.1.3 Callouts. Figure callouts shall be brief and concise. Referenced illustration content, such as a switch position directed by a procedural step, shall be indicated by leader lines or nomenclature callouts on the applicable figure (see figure 7.)

3.3.3.1.4 Page identification. Print presentation only: Procedural pages shall carry identification consisting of the primary sidehead title, or the initial first subordinate sidehead used, on left pages and the primary sidehead title, or the last first subordinate sidehead used, on right pages. An abbreviated weapon/munition (see 3.6.3.1.4) designation and aircraft station shall also be included, when the aircraft has more than single carriage capability. This identification shall be placed on one line if possible, below the technical manual identification number. Examples are:

	Nuclear	Nonnuclear (see 3.6.3.1.4)
a.	TO 1F-XX-16 Loading/61/WB/CL	TO 1F-XXX-33-1-2 LDG/BSU/CL/WS/CFT
b.	TO 1F-XX-16 Acft Prep	TO 1F-XXX-33-1-2 Acft Prep
c.	TO 1F-XX-16 Unldg/Bomb	TO 1F-XXX-33-1-2 Unldg/Bomb GP (R)/MC

3.3.3.1.5 Identifying changed, added, or deleted material. Identification of changed, added, or deleted material shall be in accordance with the requirements of MIL-STD-38784.

3.3.3.1.6 Titles and headings. Procedures titles, and primary and first subordinate paragraphs, shall be limited to those listed in 3.3.3.2 through 3.3.3.5. If a specific paragraph is not applicable to a particular aircraft/weapon, the paragraph title shall be included, followed by "Not applicable." See 8.

3.3.3.1.7 Procedural steps. Procedural steps shall be numbered 1., 2., 3., etc

3.3.3.2 General. Under this primary paragraph, the following first subordinate paragraphs shall be covered.

3.3.3.2.1 Scope. This paragraph shall include a description of the purpose of the chapter, outline of the major functions therein, and the technical manual identification number of the supporting checklist.

3.3.3.2.2 SE. This paragraph shall list all SE that may be needed to accomplish the requirements of the chapter. For -16 manuals, the use of nuclear safety certified or approved equipment is mandatory, and shall be listed in accordance with the Master Nuclear Certification List (MNCL) (see 6.13).

3.3.3.2.3 Specific safety requirements. This paragraph shall include all specific safety procedures pertaining to the weapon/munition (see 3.6.3.2.3 and 3.8.2.3.2) and loading procedures.

3.3.3.3 Loading procedures. Under this primary paragraph, the following first subordinate paragraphs shall be covered.

3.3.3.3.1 Aircraft preparation. The following "NOTE" and steps shall be included in all loading manuals:

NOTE

Refer to Chapter 1, Section , for applicable aircraft preparation.
Refer to Chapter 1, Section , for FCT/functional checks.
Refer to Chapter 1, Section , for stray voltage checks.

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1. Perform aircraft preparation.
2. Perform required FCT/functional checks.
3. Perform required stray voltage checks.

3.3.3.3.2 Weapons/munitions preparation. This paragraph, applicable to a single weapon/munition (see 3.6.3.3.2 and 3.8.2.3.4), multiple rack, and preloaded accessories, shall include steps required to inspect and prepare each weapon/munition), including components. All steps shall be singular.

3.3.3.3.3 Cartridge installation. For the BRU-3, MAU-12, and similar racks, when due to configuration, the cartridges cannot be installed after the store is loaded, the following "NOTE" shall follow the paragraph title and the following steps shall be included. All steps shall be plural.

NOTE

Omit step 1, if a stray voltage check was performed during aircraft preparation or FCT/functional check, provided no additional power has been applied to the aircraft.

1. Perform required stray voltage checks.
2. Check impulse cartridges for serviceability.
3. Install impulse cartridges.

3.3.3.3.4 Loading. This paragraph shall include steps required to load the weapons. All steps shall be singular.

3.3.3.3.5 Cartridge installation. The following "NOTE" shall follow the paragraph title, and the following steps shall be included. All steps shall be plural.

NOTE

Omit steps 1 through 3, if impulse cartridges were installed as part of the loading, and a stray voltage check was performed during aircraft preparation or FCT/functional check, provided no additional power has been applied to the aircraft.

1. Perform required stray voltage checks.
2. Check impulse cartridges for serviceability.
3. Install impulse cartridges.

3.3.3.3.6 Postloading inspection. This paragraph shall include steps required to ensure that safety devices are installed or removed as required. All steps shall be plural.

3.3.3.3.7 Delayed flight or alert. This paragraph shall include procedural steps required for safing of aircraft accessories, weapons /munitions (see 3.6.3.3.7 and 3.8.2.3.9), and impulse cartridges, and procedural steps for optional readiness configurations. The following "NOTE" shall be placed immediately following the mandatory procedures:

NOTE

Omission of, or options relating to, the following step(s) may be dictated by the local commander.

3.3.3.3.8 Immediately prior to launch. This paragraph shall include steps required to place the aircraft in a launch configuration. All steps shall be plural.

3.3.3.4 Unloading procedures. Under this primary paragraph, the following first subordinate paragraphs shall be covered.

3.3.3.4.1 Safing. This paragraph shall include essential steps required to safe the aircraft/weapons/munitions see 3.6.3.4.1 and 3.8.2.4.1), and install required safety devices. All steps shall be plural. The following "NOTE" shall be placed immediately after the paragraph preceding the steps:

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NOTE

Omission of the following step(s) may be authorized by the local commander.

3.3.3.4.2 Preunloading. This paragraph shall include steps and checks required to prepare the aircraft/weapons/munitions (see 3.6.3.4.2 and 3.8.2.4.2) for unloading. All steps required to safe the aircraft/weapons/munitions, shall be repeated in this paragraph. All steps shall be plural.

3.3.3.4.3 Unloading. This paragraph shall include steps required to unload the weapons/munitions (see 3.6.3.4.3) from the aircraft. All steps shall be plural.

3.3.3.5 Ferry procedures. Under this primary paragraph, the following first subordinate paragraphs shall be covered.

3.3.3.5.1 Deployment. This paragraph shall include information regarding the proper configuration for deployment or logistic shipment on strike aircraft, and the statement: "Ferry checklist procedures are provided in TO 1F-XXX-16CL-X. For amplification of the checklist steps, refer to comparable steps presented in this technical order."

3.3.3.5.2 Strike to nonstrike. This paragraph shall include steps required to convert a strike-loaded aircraft to the configuration required for deployment to an alternate base, from which a strike mission may be flown.

3.3.3.5.3 Nonstrike to strike. This paragraph shall include steps required to reconfigure the aircraft to strike configuration in a minimum of turnaround time, after arrival at the alternate base.

3.3.4 Chapter 3 - Practice bomb loading procedures. Loading procedures for practice bombs shall be essentially as identified in 3.3.3.

3.3.4.1 General. General information shall be in accordance with 3.3.3.2.

3.3.4.2 Loading procedures. Loading procedures shall be in accordance with 3.3.3.3.

3.3.4.3 Unloading procedures. Unloading procedures shall be in accordance with 3.3.3.4

3.4 Nuclear weapons loading procedures manual (bomber aircraft). The contractor shall use the DTD in Appendix B, if electronic delivery of this manual is required (see 6.2). Capitalization and underscoring of chapter, section, and paragraph titles shall be in accordance with the requirements of MIL-STD-38784. This manual shall be arranged as follows:

- a. Front matter.
- b. Chapter 1 - General support information.
- c. Chapter 2 and subsequent - Loading operations. One chapter shall be used for each weapon or group of weapons. Chapter titles shall identify the applicable weapon(s).
- d. Chapter () - Supplementary loading information.

3.4.1 Front matter. The front matter shall be in accordance with the requirements of MIL-STD-38784, except no list of illustrations or list of tables shall be included.

3.4.1.1 Foreword. The foreword shall be in accordance with the requirements of 3.3.1.1 (see 6.2).

3.4.2 Illustrations. Illustrations shall be prepared in accordance with the requirements of MIL-STD-38784. Aircraft and weapon locator type illustrations shall not be used, except where essential to explain data in the supplemental loading information chapter and illustrations required for the job-oriented procedures.

3.4.3 Text. Unless otherwise specified by the acquiring activity, text shall be single column unjustified, and illustrations shall be integrated with text (except in job-oriented procedures) (see 6.2).

3.4.4 Chapter 1 - General support information. This chapter shall contain equipment, safety, loading restrictions, and any necessary procedures and information pertaining to preparation of the aircraft for loading. In addition, a listing of aircraft components, controls, and indicators of direct concern to the load crew, shall be included.

3.4.5 Chapter 2, 3, etc. -Loading operations. Job-oriented loading procedures shall be presented for all stores. Breakdown shall be presented under the following primary paragraphs:

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- a. Loading preparation.Loading preparation.
- b. Loading procedures.
- c. Loading completion procedures prefixed with applicability notations for the applicable bomb or warhead, if applicable (see 3.1.5).

3.4.5.1 Job-oriented procedures (Task Assignment List). The procedures within the manual shall be job-oriented (i.e., task assignments shall be listed for each load crew member in a time-phased sequence). A columnar arrangement shall be used (one column for each load crew member); horizontal alignment of tasks of the crew members shall be used to indicate tasks which must be performed at the same time. Arabic numerals, used as column headings, shall be the load crew member designations; steps shall be numbered consecutively in Arabic numerals within each heading for each crew member.

Each page or scrollable view, shall be identified by the type of procedures, and by the weapon designation, if applicable. This identification shall be placed below the technical manual identification number.

Only illustrations essential to the operation shall be used, and they shall contain no text or callouts, other than arrowheads, to indicate the specific switch or equipment item mentioned in the procedural step. Reference to these illustrations shall be accomplished by the expression “figure XX” next to the number of the illustrated step. Illustrations in the job-oriented procedures shall not be used more than once; the illustrations shall be referenced as often as necessary. Figure titles shall not be used in the job-oriented procedures.

Print presentation only: When the job-oriented procedures require illustrations, they shall be placed on the left-hand page, if possible, and procedures on the facing right-hand page. .

3.4.6 Chapter () - Supplemental loading information. This chapter shall follow the job-oriented procedures, and shall contain any additional information required by the load crew, such as, when to perform safety checks and transfer procedures.

3.5 Nonnuclear munitions basic information manual (standard volume). The contractor shall use the DTD in Appendix C, if electronic delivery of this manual is required (see 6.2). Capitalization and underscoring of chapter, section, and paragraph titles shall be in accordance with the requirements of MIL-STD-38784. only: The first section of a new chapter shall be in accordance with MIL-STD-38784. Subsequent sections within a chapter shall begin on an odd (right hand) page and not follow the text from a previous section. This manual shall be arranged as follows:

- a. Front matter.
- b. Chapter 1 - Munitions description.
 - 1. Section I - Missiles, rockets, and ammunition.
 - 2. Section II - Bomb type munitions.
 - 3. Section III - Fuzes.
 - 4. Section IV - Impulse cartridges, chaff, flares, and photoflash.Section V - Munitions accessories.
- c. Chapter 2 - Suspension equipment description.
 - 1. Section I - Racks.
 - 2. Section II - Launchers and dispensers.
- d. Chapter 3 - Guns and gun pods description.
 - 1. Section I - Guns.
 - 2. Section II - Gun pods.
- e. Chapter 4 - SE description.
 - 1. Section I - Bomb lift trucks.
 - 2. Section II - Munitions handling and loading adapters.
 - 3. Section III - Munitions trailers.

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4. Section IV - Ammunition loading systems.
5. Section V - Test equipment.
6. Front matter.
7. Chapter 1 - Munitions description.
 - (a) Section I - Missiles, rockets, and ammunition.
 - (b) Section II - Bomb type munitions.
 - (c) Section III - Fuzes.
 - (d) Section IV - Impulse cartridges, chaff, flares, and photoflash. Section V - Munitions accessories.
8. Chapter 2 - Suspension equipment description.
 - (a) Section I - Racks.
 - (b) Section II - Launchers and dispensers.
9. Chapter 3 - Guns and gun pods description.
 - (a) Section I - Guns.
 - (b) Section II - Gun pods.
10. Chapter 4 - SE description.
 - (a) Section I - Bomb lift trucks.
 - (b) Section II - Munitions handling and loading adapters.
 - (c) Section III - Munitions trailers.
 - (d) Section IV - Ammunition loading systems.
 - (e) Section V - Test equipment.
 - (f) Section VI - Test adapters.
11. Chapter 5 - Supplementary information.
 - (a) Section I - Special tools.
 - (b) Section II and subsequent - other supplementary information (as many sections as required).
12. Chapter 6 - SE Inspection Criteria and Illustrated Parts Breakdown (IPB) (see [3.5.10](#)).
 - (a) Section I - SE Inspection Criteria.
 - (b) Section II - SE Illustrated Parts Breakdown (IPB).
13. Section VI - Test adapters.
- f. Chapter 5 - Supplementary information.
 1. Section I - Special tools.
 2. Section II and subsequent - other supplementary information (as many sections as required).
- g. Chapter 6 - SE Inspection Criteria and Illustrated Parts Breakdown (IPB) (see [3.5.10](#)).
 1. Section I - SE Inspection Criteria.
 2. Section II - SE Illustrated Parts Breakdown (IPB).

Electronic presentation: This manual shall be divided by sections.

3.5.1 Front matter. The front matter shall be in accordance with the requirements of MIL-STD-38784, except no list of illustrations or list of tables shall be used.

3.5.1.1 Foreword. The foreword shall be prepared in accordance with the requirements of MIL-STD-38784. Submittal and routing instructions for technical manual improvement reports shall be included, and shall

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reference TO 00-5-1 as the authority for recommending changes. A paragraph shall be included to identify the Air Force activity having technical responsibility for the manual (see 6.2).

3.5.2 Foldout pages. Print presentation only: Manual shall not contain foldout pages.

3.5.3 Illustrations. Illustrations shall be in accordance with 3.3.3.1.2.

3.5.4 Chapters 1, 2, 3, 4, and 5 - Description. Descriptions of all munitions items, munitions suspension equipment, aircraft gun systems, munitions SE, and appropriate supplementary information shall be included in sufficient detail for loading purposes (see 6.14 and 6.15).

3.5.5 Chapter 1 - Munitions description. Descriptive information shall be provided on all munitions, their components, and related accessories approved for loading on USAF aircraft. Fuze compatibility for each fuzed munition shall be shown, specifically identifying those munitions authorized for prefuzing and retention while unloading.

3.5.6 Chapter 2 - Suspension equipment description. Descriptive information shall be provided on all equipment used to launch, release, or dispense munitions from USAF aircraft.

3.5.7 Chapter 3 - Guns and gun pods description. Descriptive information, if applicable, shall be provided on all guns and gun pods used on USAF aircraft.

3.5.8 Chapter 4 - SE description. Descriptive information shall be provided on testers and munitions handling/loading equipment listed under SE in USAF aircraft loading procedures manuals.

3.5.9 Chapter 5 - Supplementary information. Descriptive information shall be provided on items, required to support munitions loading operations on USAF aircraft, which are not covered in chapters 1 through 4. If no supplementary information, other than special tools, is required, special tools shall be a primary paragraph, rather than a section.

3.5.10 Chapter 6 - SE Inspection Criteria and Illustrated Parts Breakdown (IPB). If required by the acquiring activity (see 6.2), descriptive information shall be included for all testers and munitions handling/loading equipment listed under SE in the applicable USAF aircraft loading procedures manual.

3.6 Nonnuclear munitions loading procedures manual. The contractor shall use the DTD in Appendix D, if electronic delivery of this manual is required (see 6.2). For numbering of steps shall be the same as Loading procedures checklists (CL-2 and subsequent, except CL-100 (see 3.9.2.4.1.5)). In addition, for electronic presentation, scrollable views shall be divided into sections. Capitalization and underscoring of chapter, section, and paragraph titles shall be in accordance with the requirements of MIL-STD-38784 (see 6.6). This manual shall be arranged as follows:

- a. Front matter.
- b. Chapter 1 - Supplementary information.
 1. Section I - General safety requirements.
 2. Section II - Emergency procedures.
 3. Section III - Aircraft description and general arrangement.
 4. Section IV - General procedures.
 5. Section V - Aircraft preparation.
 6. Section VI - Functional checks.
 7. Section VII - Stray voltage checks.
- c. Chapter 2 and subsequent - Loading procedures. One chapter shall be used for each munition or group of munitions. Chapter titles shall identify the applicable munition(s).

3.6.1 Front matter. The front matter shall be in accordance with the requirements of MIL-STD-38784, except no list of illustrations or list of tables shall be used for screen presentation.

3.6.1.1 Foreword. The foreword shall be prepared in accordance with the requirements of MIL-STD-38784. The foreword shall also contain a precedence paragraph or statement which will be furnished by the acquiring activity. Submittal and routing instructions for technical manual improvement reports shall be

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included. TO 00-5-1 shall be referenced as the authority for recommending changes. A paragraph shall be included identifying the Air Force activity having technical responsibility for the manual. Standard definitions of “WARNING,” “CAUTION,” and “NOTE” shall be included as the final entry of the foreword. Additional information shall be included, if provided by the acquiring activity. See figure 9 for printed media example and 6.2.

3.6.2 Chapter 1 - Supplementary information. Unless otherwise specified by the acquiring activity, this chapter shall have the following sections. When not required, the section heading (section number and title) shall be included, followed by “Not Applicable.” When specified, additional sections shall be included, shall begin after the last of the required sections, and shall be of the type specified by the acquiring activity (see 6.2). Each section shall include the following information.

3.6.2.1 Section I - General safety requirements. General safety requirements shall be in accordance with 3.3.2.1 (see 6.8).

3.6.2.2 Section II - Emergency procedures. Emergency procedures shall be in accordance with 3.3.2.2.

3.6.2.3 Section III - Aircraft description and general arrangement. Aircraft description and general arrangement shall be in accordance with 3.3.2.3.

3.6.2.4 Section IV - General procedures. General procedures shall be in accordance with 3.3.2.6.

3.6.2.5 Section V - Aircraft preparation. Aircraft preparation shall be in accordance with 3.3.2.7.

3.6.2.5.1 Aircraft preparation. Aircraft preparation shall be in accordance with 3.3.2.7.1.

3.6.2.5.2 Installed accessory preparation. Installed accessory preparation shall be in accordance with 3.3.2.7.2.

3.6.2.6 Section VI - Functional checks. Functional checks shall be in accordance with 3.3.2.8. In addition, when Multiple Ejector Racks (MER), Triple Ejector Racks (TER), Bomb Release Units (BRU), etc., are installed, the functional check shall ensure that release and arming voltage is present, as a minimum, at the number one station of each item. One manual release and jettison mode will be functionally checked, as specified by the acquiring activity (see 6.2).

3.6.2.6.1 System requirements. Functional check procedures shall be further subdivided, if determined to be necessary, to meet weapon system requirements. When specified by the acquiring activity, additional primary paragraphs, as follows, shall be included (see 6.2).

a. Jettison checks.

b. Functional checks.

3.6.2.7 Section VII - Stray voltage checks. Stray voltage checks shall be in accordance with 3.3.2.9.

3.6.3 Chapter 2, 3, 4, etc. - Loading procedures. Arrangement shall be as specified in 3.6.3.2 through 3.6.3.4. When specified by the acquiring activity, these chapters shall be divided into sections. Arrangement shall be as specified by the acquiring activity (see 6.2). The arrangement within a chapter shall be dictated by the similarity of tasks to be performed (see 6.9). The basic manual shall not contain integrated loading procedures.

3.6.3.1 Method of presentation. The presentation of the detailed procedures shall be standardized as much as possible. The following method of presentation shall be used:

3.6.3.1.1 Applicability notations. Applicability notations shall be in accordance with 3.1.5.

3.6.3.1.2 Illustrations. Illustrations shall be in accordance with 3.3.3.1.2. Electronic presentation only: Links to illustrations shall be placed as close to the steps to which they apply.

3.6.3.1.3 Callouts. Figure callouts shall be in accordance with 3.3.3.1.3.

3.6.3.1.4 Page identification. Print presentation only: Page identification shall be in accordance with 3.3.3.1.4.

3.6.3.1.5 Identifying changed, added, or deleted material. Identification of changed, added, or deleted material shall be in accordance with the requirements of MIL-STD-38784.

3.6.3.1.6 Titles and headings. Procedure titles, and primary and subordinate paragraphs shall be limited to those listed in 3.6.3.2 through 3.6.3.4. If a specific paragraph is not applicable to a particular aircraft/munition, the paragraph title shall be included, followed by “Not applicable.” See figure 8.

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3.6.3.2 General. Under this primary paragraph, the following first subordinate paragraphs shall be covered.

3.6.3.2.1 Scope. The scope shall be in accordance with 3.3.3.2.1.

3.6.3.2.2 SE. SE shall be in accordance with 3.3.3.2.2.

3.6.3.2.3 Specific safety requirements. Specific safety requirements shall be in accordance with 3.3.3.2.3.

3.6.3.3 Loading procedures. Under this primary paragraph, the following first subordinate paragraphs shall be covered.

3.6.3.3.1 Aircraft preparation. Aircraft preparation shall be in accordance with 3.3.3.3.1.

3.6.3.3.2 Munitions preparation. Munitions preparation shall be in accordance with 3.3.3.3.2. In addition, this procedure shall include steps required to assemble and install authorized fuzes, prior to munitions loading. Procedures shall be included to verify the safety of each fuzed munition.

3.6.3.3.3 Cartridge installation. Cartridge installation shall be in accordance with 3.3.3.3.3.

3.6.3.3.4 Loading. This paragraph shall include steps required to load the munition. All steps shall be singular. Unless otherwise specified by the acquiring activity, this procedure shall include steps to remove fuze safety device(s) after munitions are loaded (see 6.2). These procedures shall also include steps to install fuzes which are not authorized for preloading installation.

3.6.3.3.5 Cartridge installation. Cartridge installation shall be in accordance with 3.3.3.3.5.

3.6.3.3.6 Postloading inspection. This paragraph shall include steps required to ensure that required safety devices are installed, bombs and fuzes are installed properly, and fuze safety devices have been removed or installed as required. All steps shall be plural.

3.6.3.3.7 Delayed flight or alert. Delayed flight or alert procedures shall be in accordance with 3.3.3.3.7.

3.6.3.3.8 Immediately prior to launch. Immediately prior to launch shall be in accordance with 3.3.3.3.8.

3.6.3.4 Unloading procedures. Under this primary paragraph, the following first subordinate paragraphs shall be covered.

3.6.3.4.1 Safing. Safing shall be in accordance with 3.3.3.4.1.

3.6.3.4.2 Preunloading. Preunloading shall be in accordance with 3.3.3.4.2.

3.6.3.4.3 Unloading. Unloading procedures shall be in accordance with 3.3.3.4.3.

3.6.3.4.4 Fuze and sensor removal. This paragraph shall include steps required to safe and remove the fuze or sensor from the nonnuclear munition. All steps shall be singular. The following "NOTE" shall be placed immediately after the paragraph and preceding the steps:

NOTE

With local commander approval, the following fuzes may remain installed.

3.7 Integrated combat turnaround procedures manual. The contractor shall use the DTD in Appendix E, if electronic delivery of this manual is required (see 6.2). In addition, for electronic presentation, scrollable views shall be divided into sections. Capitalization and underscoring of chapter, section, and paragraph titles shall be in accordance with the requirements of MIL-STD-38784 (This manual shall be arranged as follows:

- a. Front matter.
- b. Chapter 1 - Positioning and munition(s) preparation.
 1. Scope.
 2. General safety requirements.
 3. Emergency procedures.
 4. SE
 5. Positioning/inspection.
 6. Munition preparation.

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c. Chapter 2 - Servicing/loading.

1. Scope.
2. cursory inspection.
3. Aircraft preparation.
4. Munitions/tanks unloading.
5. Gun loading.
6. Final cockpit preparation.
7. Aircraft servicing/tank installation/munition loading.
8. Final aircraft preparation.
9. Immediately prior to launch.

3.7.1 Front matter. The front matter shall be in accordance with the requirements of MIL-STD-38784, except no list of illustrations or list of tables shall be used for screen presentation.

3.7.1.1 Foreword. The foreword shall be in accordance with 3.6.1.1 (see 6.2).

3.7.2 Titles and headings. Procedures titles and primary paragraphs shall be limited to those listed in 3.7.2.1 and 3.7.2.2. If a specific paragraph is not applicable to a particular aircraft/munition, the paragraph title shall be included, followed by "Not applicable." See figure 7.

3.7.2.1 Chapter 1 - Positioning and munition(s) preparation. Under this chapter, the following primary paragraphs shall be covered.

3.7.2.1.1 Scope. The scope paragraph shall be in accordance with 3.3.3.2.1 and the following:

3.7.2.1.1.1 Authorizations/restrictions. The authorizations/restrictions paragraph(s) shall contain a list of all authorizations and restrictions that apply to integrated combat turnaround operations. A brief explanation of actions to be accomplished by the turnaround crew shall precede the list of authorizations and restrictions. The authorizations and restrictions shall contain the following statement: "A summary of operations authorized by the System Safety Engineering Analysis (SSEA) is included in this manual."

3.7.2.1.2 General safety requirements. This primary paragraph shall contain safety procedures related to aircraft servicing, munitions loaded aircraft, munitions loading/unloading, and munitions. Procedures shall be prefaced by a brief explanation of actions to be accomplished. The following statements shall be included:

- a. "Firefighting protection equipment shall be as required by TO 00-25-172."
- b. "Refueling equipment shall be as required by TO 00-25-172."

3.7.2.1.3 Emergency procedures. Print presentation only: The emergency procedure page(s) shall be marked in accordance with the requirements of MIL-STD-38784. All applicable emergency procedures shall be included. When more than one type of munition is included, and withdrawal distances differ, emergency procedures shall be provided for each type of munition (see figure 2 and 3) for page oriented examples.

3.7.2.1.4 SE. This primary paragraph shall list the SE and test equipment that may be required to perform an integrated combat turnaround (excluding firefighting and refueling equipment as required by the SSEA). Substitutes are not authorized.

3.7.2.1.5 Positioning/inspection. This primary paragraph shall include the specific requirements for items which need to be positioned and inspected. All steps shall be singular.

3.7.2.1.6 Munition preparation. This primary paragraph shall include munition, missile, preloaded MER/TER/BRU, and preloaded launcher inspections for serviceability and safety, prior to aircraft loading. All steps shall be singular.

3.7.2.2 Chapter 2 - Servicing/loading. Under this chapter, the following primary paragraphs shall be covered. These paragraphs shall be sequenced to be compatible with the SSEA (see 6.16).

3.7.2.2.1 Scope. The scope paragraph shall be in accordance with 3.3.3.2.1.

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3.7.2.2.2 Cursory inspection. As a minimum, the requirement to ensure the aircraft is secured/safe, flight crew/ground crew communication has been established, the aircraft is operational, and ammunition/fuel requirements have been determined prior to aircraft preparation, shall be included. All steps shall be plural.

3.7.2.2.3 Aircraft preparation. This paragraph shall include all procedures to ensure the aircraft is serviceable and is prepared for munition loading/unloading.

3.7.2.2.4 Munitions/tanks unloading. This paragraph shall include the requirements for safing, fuze or sensor removal (if applicable), and unloading munition(s) and tank(s) from the aircraft. All steps shall be singular.

3.7.2.2.5 Gun loading. This paragraph shall include gun loading procedures.

3.7.2.2.6 Final cockpit preparation. This paragraph shall include all procedures to prepare the cockpit for aircraft servicing/munitions loading. These procedures shall include towing and positioning, if applicable. All steps shall be singular.

3.7.2.2.7 Aircraft servicing/tank installation/munitions loading. This paragraph shall include all procedures for tank installation, refueling, servicing, and loading of munitions. All steps shall be singular.

3.7.2.2.8 Final aircraft preparation. This paragraph shall include procedures to ensure safety devices have been removed or installed as required, tools and equipment have been removed, and the aircraft is ready for flight. All steps shall be plural.

3.7.2.2.9 Immediately prior to launch. This paragraph shall include all steps required to place the aircraft in a launch configuration.

3.8 Nonnuclear munitions loading standard data packages (see 3.3 and 6.6).

3.8.1 Numbering. Paragraphs, tables, and figures shall be numbered in accordance with the requirements of MIL-STD-38784, with the exception that the Family Group number shall be used in lieu of a chapter number. print presentation only: Pages shall be numbered in accordance with page requirements of MIL-STD-38784.

3.8.2 Arrangement. The contractor shall use the DTD in Appendix F, if electronic delivery of the standard data package is required (see 6.2). These procedures shall be arranged as follows:

- a. Front matter.
- b. Munitions description.
- c. Standard munitions loading procedures.
- d. Standard munitions unloading procedures.

3.8.2.1 Front matter. The front matter shall consist of a title page / scrollable view and table of contents in accordance with the requirements of MIL-STD-38784. The following is an exception to the general front matter requirements:

Electronic presentation: The front matter shall include a list of changes.

Print presentation requirement: The front matter shall include a list of effective pages.

3.8.2.1.1 Cover page. Print presentation: The cover page shall be prepared in the same style and format as shown in figure 12. For electronic presentation, refer to MIL-STD-38784.

3.8.2.2 Munitions description. Munitions nomenclature/identification, weight, dimensions, length, integral safety features, and functional description shall be included. Any differences (if munition has more than one version) shall be described and illustrated.

3.8.2.2.1 Bomb fuzes. Descriptive data on bomb fuzes shall include a brief description and illustration of the fuze. The data shall also include functional type, safety devices, armed/safe indications, action, arming delays, and functioning delays.

3.8.2.2.2 Nomenclature. Nomenclature shall be in accordance with 3.1.3.

3.8.2.3 Standard munitions loading procedures. The standard data package loading procedures shall contain the following information.

3.8.2.3.1 SE. SE shall be in accordance with 3.3.3.2.2. In addition, the following "NOTE" shall apply to aircraft procedures identified by the acquiring activity (see 6.2).

MIL-DTL-9977L(USAF)**NOTE****TO SPM/SPO**

List all SE, except common hand tools, required to load/unload munitions on/off aircraft.

- 3.8.2.3.2 Specific safety requirements. Specific safety requirements shall be in accordance with 3.3.3.2.3.
- 3.8.2.3.3 Aircraft preparation. Aircraft preparation shall be in accordance with 3.3.3.3.1 for aircraft procedures identified by the acquiring activity (see 6.2). The “NOTE” heading shall be “NOTE TO SPM/SPO.”
- 3.8.2.3.4 Munitions preparation. Munitions preparation shall be in accordance with 3.3.3.3.3.
- 3.8.2.3.5 Cartridge installation. Cartridge installation shall be in accordance with 3.3.3.3.3.
- 3.8.2.3.6 Loading. This paragraph shall include steps required to load the munition. All steps shall be singular. Unless otherwise specified by the acquiring activity, this procedure shall include steps to remove fuze safety device(s) after munitions are loaded (see 6.2). These procedures shall also include steps to install fuzes which are not authorized for preloading installation.
- 3.8.2.3.7 Cartridge installation. The following “NOTE” shall be included for aircraft procedures identified by the acquiring activity (see 6.2).

NOTE**TO SPM/SPO**

Implement those procedures required for stray voltage checks at impulse cartridge breeches and installation of impulse cartridges.”

- 3.8.2.3.8 Postloading inspection. Postloading inspection shall be in accordance with 3.6.3.3.6. In addition, the following “NOTE” shall be included for aircraft procedures identified by the acquiring activity (see 6.2).

NOTE**TO SPM/SPO**

Implement those procedures required for checking that all pertinent aircraft steps have been accomplished.

- 3.8.2.3.9 Delayed flight or alert. Delayed flight or alert shall be in accordance with 3.3.3.3.7. In addition, the following “NOTE” shall be included.

NOTE**TO SPM/SPO**

Implement those procedures required to place the aircraft in approved delayed flight or alert status.

- 3.8.2.3.10 Immediately prior to launch. This paragraph shall include munitions peculiar steps required to place the aircraft in a launch configuration. All steps shall be plural. The following “NOTE” shall be included for aircraft procedures identified by the acquiring activity (see 6.2).

NOTE**TO SPM/SPO**

Implement those procedures required for preparing the aircraft for launch.

- 3.8.2.4 Standard munitions unloading procedures. The standard data package unloading procedures shall include the following information.
- 3.8.2.4.1 Safing. Safing shall be in accordance with 3.3.3.4.1. In addition, the following “NOTE” shall be included.

MIL-DTL-9977L(USAF)**NOTE****TO SPM/SPO**

Implement those procedures required to safe the aircraft.

3.8.2.4.2 Preunloading. Preunloading shall be in accordance with 3.3.3.4.2. In addition, the following “NOTE” shall be included for aircraft procedures identified by the acquiring activity (see 6.2).

NOTE**TO SPM/SPO**

Implement those procedures required to prepare the aircraft for unloading munitions from aircraft.

3.8.2.4.3 Unloading. This paragraph shall include only those steps peculiar to munitions. All steps shall be singular. The following “NOTE” shall be included for aircraft procedures identified by the acquiring activity (see 6.2).

NOTE**TO SPM/SPO**

Implement those procedures required for unloading the munitions from the aircraft.

3.8.2.4.4 Fuze and sensor. Fuze and sensor shall be in accordance with 3.6.3.4.4.

3.9 Loading procedures checklists (CL-2 and subsequent, except CL-100) . The types of checklists to be prepared, shall be those specified by the acquiring activity, and for nuclear weapons loading checklists, OL-NS/EN (see 6.2). Any procedural step that pertains only to a specific munition/weapon, aircraft configuration, or accessory, shall be prefixed with applicability notations for identification (see 3.1.5). Torque values, preset dimensions, orifice identifiers, etc., included in the loading procedures chapter shall be placed in the checklist. Nuclear weapons loading procedures checklists for bomber aircraft shall stand alone (i.e., shall not be a condensed version of the parent manual procedures). The checklists shall contain complete briefing, loading, and unloading procedures in checklist format, oriented for use by the load team chief, to monitor loading.

3.9.1 Checklist types. The following types of checklists may be required:

- a. Single - For one type of munition/weapon.
- b. Integrated - For two or more different types of munitions/weapons carried concurrently on the same aircraft without regard to whether such munitions/weapons are nuclear or nonnuclear.
- c. Family group - For a group of nonnuclear munitions which have similar safety, functional, and loading characteristics.

3.9.2 Arrangement. The general requirements of MIL-PRF-5096 apply, print presentation only: Arrangement shall be head to foot. The contractor shall use the DTD in Appendix G, if electronic delivery of the checklist(s) is required (see 6.2). Each checklist shall contain the following:

- a. Front matter
- b. Load crew briefing
- c. Emergency procedures (except nuclear weapons loading procedures checklists for bomber aircraft)
- d. Loading procedures
- e. Unloading procedures

3.9.2.1 Front matter. The front matter shall be in accordance with the requirements of MIL-PRF- 5096.

3.9.2.1.1 Foreword. The foreword shall be prepared in accordance with the requirements of MILPRF- 5096, and shall provide a brief explanation for the purpose of the checklist. Submittal and routing instructions for technical manual improvement reports shall be included, and shall reference TO 00-5-1 as the authority for

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recommending changes. Additional information shall be included as required by the acquiring activity and, for nuclear weapons loading checklists, OL-NS/EN (see 6.2). The foreword to nonnuclear loading checklists (-33 series only) shall contain a statement that the checklist provides for the check-off of procedural steps one time (when first completed). This relaxation of check-off requirements does not apply to nuclear loads appearing in -16 (nuclear loading) checklists since it could compromise nuclear safety. A list of abbreviations/acronyms shall not be included in checklists.

3.9.2.2 Load crew briefings. This information shall state that an emergency procedures briefing shall be required prior to loading.

3.9.2.2.1 Specific briefing requirements. These briefings shall contain information on which the load crew will be briefed prior to loading. The briefing requirements shall contain all specific safety requirements from the loading procedures manual for the applicable munition(s)/weapon(s) being loaded.

3.9.2.3 Emergency procedures. The emergency procedure pages (printed media)/scrollable views (electronic presentation) shall be marked in accordance with the requirements of MIL-STD-38784 and be prepared generally in accordance with this document. When more than one type of munition/weapon is included and withdrawal distances differ, evacuation distances shall be requested from the acquiring activity (see 6.18). Nuclear weapons loading procedures checklists for bomber aircraft shall not contain emergency procedures. print presentation only: Each page shall include the words “Emergency Procedures” immediately above the page number (see figure 10). Electronic presentation: Areas for entering withdrawal distances and similar data shall be presented as text boxes.

Electronic presentation: Areas for entering withdrawal distances and similar data shall be presented as text boxes.

3.9.2.4 Loading/unloading procedures. Paragraph headings used in the checklist shall be upper case. The “General” paragraph and its contents shall not be placed in the checklist.

3.9.2.4.1 Detailed requirements. All required steps shall be included for aircraft preparation and stray voltage checks.

3.9.2.4.1.1 Headings. Paragraph headings shall be worded the same as corresponding headings in the loading procedures manual.

Electronic presentation: Each task level (task, airprepld, loadprep, etc...) shall have it's own scrollable section. The heading at the top of the section shall contain the chapter heading information, followed by the task heading information.

Print presentation: Each heading (primary sidehead) shall begin on a new page.

3.9.2.4.1.2 Procedural steps. Steps which are considered routine action on all aircraft during loading procedures, and well within the capabilities of a trained technician, shall be omitted. Redundant Actions/checks shall be omitted; however, to ensure maximum safety, separate procedures for each fuze combination shall be included under appropriate subordinate headings. The number of steps shall be kept to a minimum.

3.9.2.4.1.3 Text. (See figure 11). Steps shall be shortened by the elimination of excess words, and by use of abbreviations, so that one-line entries can be utilized to the greatest extent possible; however, steps shall be written to ensure ease of reading and interpretation. Steps shall follow the same sequence as they appear in the manual, but need not be numbered the same. “WARNINGS” in the loading procedures chapters shall be included in the checklists. When specified by the acquiring activity, “CAUTIONS” and “NOTES” shall be included (see 6.2). “WARNINGS,” “CAUTIONS,” and “NOTES” shall immediately precede the step to which they apply.

3.9.2.4.1.4 Illustrations. Unless otherwise specified by the acquiring activity, illustrations shall not be included (see 6.2).

3.9.2.4.1.5 Numbering. Steps shall be numbered in numerical sequence under each heading; substeps shall be assigned lower case letters.

Electronic presentation: Steps in this checklist differ in numbering scheme than steps used in a narrative manual.

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3.9.2.4.1.6 Step completion line or parentheses. Print presentation: Step completion parentheses shall be used in lieu of lines. Parentheses shall be placed in accordance with blank line (check space) requirements of MILPRF- 5096. Nuclear weapons loading procedures checklists for bomber aircraft shall include multiple step completion parentheses as specified by the acquiring activity (see 6.2).

Electronic presentation: A checkbox shall be used in lieu of the usual parentheses.

3.9.2.4.1.7 Column format. Column format shall be in accordance with the requirements of MILPRF- 5096.

3.9.2.4.1.8 Type size. Text shall be 12-point type size.

3.9.2.4.1.9 Multi-carriage numbering. Print presentation only: When aircraft have more than single carriage capability, page content headings shall consist of applicable title and primary sidehead, munition/weapon identification, and aircraft station. These headings shall also be included at the bottom of each applicable checklist procedural page, above the page number. Nuclear weapons loading procedures checklists for bomber aircraft shall not have multicarriage numbering.

3.10 Integrated combat turnaround procedures checklist. This checklist shall meet the general requirements of this specification and MIL-PRF-5096, print presentation only: The arrangement shall be head to foot. and paragraphs 3.9 through 3.9.2.4.1.9 above. Additionally, the following exceptions to MIL-PRF-5096 shall also be included:

Electronic presentation: Head to foot requirements are non-applicable.

3.10.1 Arrangement. Arrangement of the checklist shall follow the arrangement of the ICT procedures manual (see 3.7). The contractor shall use the DTD in Appendix H if electronic delivery of this manual is required (see 6.2).

3.10.1.1 Front matter. The front matter shall be in accordance with the requirements of MIL-PRF- 5096.

3.10.1.1.1 Foreword. The foreword shall be prepared in accordance with the requirements of MILPRF-5096, and shall provide a brief explanation of the purpose of the checklist. Submittal and routing instructions for technical manual improvement reports shall be included, and shall reference TO 00-5-1 as the authority for recommending changes. A paragraph shall be included identifying the Air Force activity having technical responsibility for the manual. Additional information shall be included as required by the acquiring activity (see 6.2).

3.10.1.2 Turnaround crew briefing. This information shall state that an emergency procedure briefing shall be required prior to the first ICT performed by a turnaround crew. A briefing shall not be required prior to subsequent ICTs provided there are no changes in the basic configuration of aircraft to be turned, or in the composition of the turnaround crew.

3.10.1.2.1 Specific briefing requirements. Briefing requirements shall be in accordance with 3.9.2.2.1.

3.10.1.3 Emergency procedures. Emergency procedures shall be in accordance with MIL-STD-38784 (see 3.9.2.3.)

3.10.1.4 Procedures. Paragraph headings used in the checklist shall be presented the same as in the Integrated Combat Turnaround Procedures technical manual.

3.10.1.5 Step completion line or parentheses. Step completion lines or parentheses shall not be used in Integrated Combat Turnaround Checklists.

In addition, no checkbox shall be given.

3.11 NATO Stage B cross-servicing checklist. The contractor shall use the DTDs in Appendixes I and J, if electronic delivery of these checklists is required (see 6.2).

3.11.1 Loading procedures checklists. Checklists shall contain emergency procedures, loading procedures, and unloading procedures. All information shall be unclassified. When specified by the acquiring activity, these checklists shall be translated from English to the specified languages (see 6.2). Illustrated checklists shall be prepared, to ensure clarity during translation, so that aircraft are safely cross-serviced without doubt or confusion (see 6.1.2).

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3.11.1.1 Text. The checklists shall be written using clear, concise English. Short complete sentences that can be understood by allied personnel, and easily translated, shall be used. Every effort shall be made to avoid use of words with multiple meanings. print presentation only: Each primary paragraph shall begin on a new page.

3.11.1.2 Steps. Steps shall be in numerical order under each heading; substeps shall be assigned lower case letters.

3.11.1.3 Column format. Column format shall be in accordance with the requirements of MIL-PRF-5096.

3.11.1.4 Presentation of detailed procedures.

3.11.1.4.1 Method of presenting procedures. The presentation of the detailed procedures shall be standardized as much as possible. The following method of presentation shall be used.

3.11.1.4.2 Illustration. Illustrations shall convey location, if applicable, and dimensional data with tolerance information. The illustration shall be limited to the equipment upon which the tasks are to be performed, plus sufficient surroundings to allow a technician to easily locate the equipment item. Callouts, and identifier numbers, on the illustration, shall have a leader line connecting the number to the correct point on the illustration. The callout and identifier numbers shall be limited to those used on the accompanying task step. The callouts, or identifiers, shall be keyed to the task step(s). When an equipment item is first illustrated in a task, and its location has not yet been specified, a general locator illustration shall be used to identify the location of the equipment item within the system. Leader lines shall be used to help readers orient themselves with respect to the illustration, and to provide directional movement in tasks. In addition to the normal situations described above, the following requirements apply to special situations. (See figure 6).

Print presentation only:

- a. Two or more tasks using the same illustration shall be included on the same page if both can be completed without crowding the page. Alpha suffixes shall be used on callout identifiers to identify callouts applicable to the second task.
- b. If the associated illustration occupies less than a full page, instructional text shall be arranged on the top or bottom of the page to the extent possible without crowding.
- c. If the text occupies less than a full page, but requires more than a full page to illustrate, a portion of the associated illustration shall be placed on the page containing the text.
- d. Single page illustrations shall be repeated as necessary to support multipage tasks.

3.11.1.4.3 Applicability notations. Applicability notations shall be in accordance with 3.1.5.

3.11.2 Checklist (CL-1) arrangement. The general requirements of MIL-PRF-5096 apply. print presentation only: The arrangement shall be head to foot. The contractor shall use the DTD in Appendix I, if electronic delivery of this checklist is required (see 6.2). The checklist shall contain the following:

- a. Front matter.
- b. General procedures.
- c. Aircraft preparation.

3.11.2.1 Front matter. Front matter shall be in accordance with the requirements of MIL-PRF-5096.

3.11.2.1.1 Foreword. The foreword shall be prepared in accordance with the requirements of MILPRF- 5096, and shall provide a brief explanation of the purpose of the checklist. Submittal and routing instructions for the technical manual improvement reports shall be included, and shall reference TO 00-5-1 as the authority for recommending changes. A paragraph shall be included identifying the Air Force activity having technical responsibility for the manual (see 6.2). Standard definitions of "WARNING," "CAUTION," and "NOTE" shall be provided. The definition of abbreviations shall be the final entry of the foreword. (See figures 1 and 9).

3.11.2.2 General procedures.

3.11.2.2.1 SE. This paragraph shall list only the SE required to accomplish munitions loading. The nomenclature, and any other information required to specifically identify this equipment, shall be included.

3.11.2.2.2 General safety requirements. This paragraph(s) shall contain all general safety requirements necessary for preparation, handling, loading, and unloading of munitions (see 6.8).

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3.11.2.2.3 Emergency procedures. This paragraph(s) shall contain emergency procedures related to munitions-loaded aircraft (see 6.7). See figure 10.

3.11.2.2.4 Aircraft general arrangement. This paragraph(s) shall contain the aircraft general arrangement in an illustrated form, showing the location of panels and switches used by the load crew. See figure 4.

3.11.2.3 Aircraft preparation. This paragraph shall include steps which must be accomplished for munitions loading. The steps shall contain procedures for preparation of the aircraft and installed accessories for loading, and a stray voltage check for those munitions/accessories as required. As a minimum, power shall be applied to the aircraft during stray voltage checks, unless otherwise specified by the acquiring activity, in coordination with the responsible engineering organization see 6.2. A configuration chart, depicting authorized loading configuration(s) for the specific munition, shall be shown. The steps shall include procedures to safe any munitions items which might be on the aircraft prior to stray voltage checks (i.e., safe missile motors, disconnect AGM-65 igniter cable, etc.).

3.11.3 Checklist (CL-2 and subsequent) arrangement. The general requirements of MIL-PRF-5096 shall apply. print presentation only: The arrangement shall be head to foot. The contractor shall use the DTD in Appendix J if electronic delivery of this checklist is required (see 6.2). The checklist shall contain the following:

- a. Front matter.
- b. General procedures.
- c. Loading procedures.
- d. Unloading procedures.

3.11.3.1 Front matter. The front matter shall be in accordance with the requirements of MIL-PRF- 5096.

3.11.3.2 General procedures.

3.11.3.2.1 SE. SE shall be in accordance with 3.11.2.2.1.

3.11.3.2.2 Specific safety requirements. This paragraph shall contain all specific safety requirements pertaining to the munitions loading procedures of the specific munition.

3.11.3.3 Loading procedures. Under this chapter, the following paragraphs/tasks shall be covered.

3.11.3.3.1 Munitions preparation. This paragraph is applicable to a single munition and preloaded accessories; it shall include steps required to inspect and prepare each munition (including components). This procedure shall include steps required to assemble and install authorized fuzes prior to munitions loading. Procedures shall be included to verify the safety of each fuzed munition. All steps shall be singular.

3.11.3.3.2 Cartridge installation. All accessories that require preinstalled cartridges shall be included. This paragraph shall include steps required to check impulse cartridges for serviceability, and to properly install cartridges in those accessories that must have cartridges installed prior to loading munitions. All steps shall be plural.

3.11.3.3.3 Loading. This procedure shall include steps required to load stores. All steps shall be singular. This procedure shall include steps to remove fuzed safety devices after store is loaded.

3.11.3.3.4 Cartridge installation. This paragraph shall include steps required to check impulse cartridges for serviceability, and properly install cartridges in all accessories, as required. All steps shall be plural.

3.11.3.3.5 Postloading inspection. This paragraph shall include steps required to ensure that accessory safety devices are installed, bombs and fuzes are installed properly, and fuze safety devices have been removed or installed, as required. All steps shall be plural.

3.11.3.3.6 Immediately prior to launch. This paragraph shall include steps required to place the aircraft in a launch configuration. Steps shall be included to arm munition items safed during preparation (e.g., arm missile motors, connect AGM-65 igniter cable, etc.). All steps shall be plural.

3.11.3.4 Unloading procedures. Under this chapter, the following paragraphs/tasks shall be covered.

3.11.3.4.1 Safing. This paragraph shall include essential steps required to safe the aircraft/munitions, and install associated safety devices. All steps shall be plural.

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3.11.3.4.2 Preunloading. This paragraph shall include steps and checks required to prepare the aircraft/munitions for unloading. All steps required to safe the aircraft/munitions shall be repeated in the paragraph. All steps shall be plural.

3.11.3.4.3 Unloading. This paragraph shall include steps required to unload the munition from the aircraft. All steps shall be singular.

3.11.3.4.4 Fuze and sensor. This paragraph shall include steps required to safe, and to remove, the fuze from the munition. All steps shall be plural.

3.12 Functional Check procedures checklists (CL-1). This checklist shall meet the general requirements of MIL-PRF-5096, print presentation only: The arrangement shall be head to foot and comply with paragraphs 3.9 through 3.9.2.4.1.9 above. Additionally, the following exceptions to MIL-PRF-5096 shall also be included:

3.12.1 Arrangement. The contractor shall use the DTD in Appendix K, if electronic delivery of this checklist is required. The checklist shall contain the following:

- a. Front matter.
- b. General procedures.
- c. Aircraft preparation.
- d. Functional checks.

3.12.1.1 Front matter. Front matter shall be in accordance with the requirements of MIL-PRF-5096.

3.12.1.1.1 Foreword. The foreword shall be prepared in accordance with the requirements of MIL-PRF-5096, and shall provide a brief explanation of the purpose of the checklist. Submittal and routing instructions for the technical manual improvement reports shall be included, and shall reference TO 00-5-1 as the authority for recommending changes. A paragraph shall be included identifying the Air Force activity having technical responsibility for the manual (see 6.2). Standard definitions of "WARNING," "CAUTION," and "NOTE" shall be provided. The definition of abbreviations shall be the final entry of the foreword.

3.12.1.2 General procedures.

3.12.1.2.1 Emergency procedures. This paragraph(s) shall contain emergency procedures related to munitions-loaded aircraft (see 6.7). See Figure 10.

3.12.1.3 Aircraft preparation. This paragraph shall include steps which must be accomplished for munitions loading. The steps shall contain procedures for preparation of the aircraft and installed accessories for functional checks for those munitions/accessories as required. The steps shall include procedures to safe any munitions items which might be on the aircraft prior to functional checks (i.e., safe pins, impulse cartridges, etc.).

3.12.2 Functional check. This paragraph shall contain all necessary steps to perform functional checks of the weapons control/release/fire and jettison systems.

3.13 End of Runway (EOR) procedures checklist (CL-100). This checklist shall meet the general requirements of MIL-PRF-5096, print presentation only: Arrangement shall be head to foot, and comply with paragraphs 3.9 through 3.9.2.4.1.9 above. Additionally, the following exceptions to MIL-PRF-5096 shall also be included:

3.13.1 Arrangement. The contractor shall use the DTD in Appendix K if electronic delivery of this checklist is required. The checklist shall contain the following

- a. Front matter.
- b. General procedures.
- c. Delayed Flight or Alert
- d. Immediately Prior to Launch.
- e. Safing.

3.13.1.1 Front matter.

3.13.1.1.1 Foreword. The foreword shall be prepared in accordance with the requirements of MIL-PRF-5096, and shall provide a brief explanation of the purpose of the checklist. Submittal and routing instructions for

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the technical manual improvement reports shall be included, and shall reference TO 00-5-1 as the authority for recommending changes. A paragraph shall be included identifying the Air Force activity having technical responsibility for the manual. Standard definitions of “WARNING,” “CAUTION,” and “NOTE” shall be provided. The definition of abbreviations shall be the final entry of the foreword.

3.13.1.2 General procedures.

3.13.1.2.1 General safety requirements. This paragraph(s) shall contain all general safety requirements necessary for the arming and safing or loaded of munitions.

3.13.1.2.2 Emergency procedures. This paragraph(s) shall contain emergency procedures related to munitions-loaded.

3.13.1.3 Delayed Flight or Alert. This paragraph shall include steps required to ensure that safety devices are installed or removed as required. All steps shall be plural.

3.13.1.4 Immediately Prior to Launch. This paragraph shall include steps required to place the aircraft in a launch configuration. All steps shall be plural.

3.13.1.5 Safing. This paragraph shall include steps required to safe the aircraft/weapons/munitions, and install required safety devices. All steps shall be plural. The following “NOTE” shall be placed immediately after the paragraph preceding the steps:

NOTE

Omission of the following step(s) may be authorized by the local commander.

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 these requirements in the solicitation or contract (see TO 00-5-3, AF Technical Order Life Cycle Management, 2.2.2).

4.2 Compliance. Technical manuals (TMs) shall meet all requirements of section 3 of this specification and the appropriate DTD appendix, as required 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 6.2). When actual packaging of material is to be performed by DoD personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Point’s packaging activity within the Military Department or Defense Agency, or within the Military Department’s System Command. 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.

MIL-DTL-9977L(USAF)**6 NOTES**

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

6.1 Intended use. Manuals and checklists prepared in accordance with this document are for use in loading/unloading munitions/weapons on or in aircraft.

6.1.1 Integrated combat turnaround procedures. These manuals and checklists are to be used to service, maintain, and load/unload munitions on aircraft under combat or combat training turnaround conditions.

6.1.2 NATO Stage B. These checklists will also be used by NATO allies to load/unload munitions on aircraft. Therefore, the checklists should be written in a simple, direct, and illustrated manner.

6.2 Acquisition requirements. Acquisition documents must specify the following:

- a. Title, number, and date of this document.
- b. If electronic delivery of manuals is required (see [1.1](#), [3.33.4](#), [3.5](#), [3.6](#), [3.7](#), [3.8.2](#), [3.9.2](#), [3.10.1](#), [3.11.1](#), [3.11.2](#), [3.11.3](#)).
- c. Munition/weapon nomenclature(s) (see [3.1.3](#)).
- d. Grammatical phrases to be used (OL-NS/EN will supply grammatical phrases for nuclear weapons loading manuals) (see [3.1.6.2](#)).
- e. If other than standard data packages are to be prepared (see [3.1.6.5](#)).
- f. If use of the term “if applicable” is to be other than as specified in this document (see [3.1.6.3](#)).
- g. If cockpit switch safing procedures are to read other than as specified in this document (see [3.1.6.4](#)).
- h. Types of manuals to be prepared (see [3.2](#)).
- i. Precedence paragraph or statement, nuclear safety certification statement, and additional information provided by OL-NS/EN to be included in manual foreword (see [3.3.1.1](#), and [3.4.1.1](#)).
- j. The Air Force activity having technical responsibility for the manuals and checklists (see [3.2.3](#), [3.3.1.1](#), [3.5.1.1](#), [3.6.1.1](#), [3.10.1.1.1](#), and [3.11.2.2.1](#)).
- k. If all sections in chapter 1 are required (see [3.3.2](#)).
- l. If additional sections, specified by OL-NS/EN, are to be included in chapter 1, and, if so, type to be included (see [3.3.2](#)).
- m. If procedures are to be subdivided when required to meet weapon system requirements, if additional primary paragraphs, provided by OL-NS/EN, are to be included, and, if so, type to be included (see [3.3.2.8.1](#)).
- n. If power is to be applied to the aircraft during stray voltage checks (see [3.3.2.9](#), [3.11.2.3](#)).
- o. If chapter 2 is to be divided into sections, and, if so, arrangement of those sections (provided by OL-NS/EN (see [3.3.3](#)).
- p. If text is to be other than single column unjustified, and if illustrations are to be other than integrated with text (see [3.4.3](#)).
- q. Precedence paragraph or statement, and additional information to be included in manual foreword (see [3.6.1.1](#) and [3.7.1.1](#)).
- r. If all sections in chapter 1 are required (see [3.6.2](#)).
- s. If additional sections are to be included in chapter 1, and if so, type to be included (see [3.6.2](#)).
- t. Manual release and jettison mode to be functionally checked (see [3.6.2.6](#)).
- u. If additional primary paragraphs are to be included (see [3.6.2.6.1](#)).
- v. If chapters 2, 3, 4, etc., are to be divided into sections, and, if so, arrangement of those sections (see [3.6.3](#)).

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- w. If steps to remove fuze safety device(s) are to be other than as specified in this document (see [3.6.3.3.4](#), [3.8.2.3.6](#)).
- x. Aircraft procedures to be identified by NOTE (see [3.8.2.3.1](#), [3.8.2.3.3](#), [3.8.2.3.7](#), [3.8.2.3.8](#), [3.8.2.3.10](#), [3.8.2.4.2](#), [3.8.2.4.3](#)).
- y. Types of checklists to be prepared (see [3.9](#)).
- z. Additional information to be included in checklist foreword (see [3.9.2.2.1](#), [3.10.1.1.1](#)).
- aa. If cautions and/or notes are to be included in checklists (see [3.9.2.4.1.3](#)).
- ab. If inclusion of illustrations is to be other than as specified in this document (see [3.9.2.4.1.4](#)).
- ac. Number of step completion parentheses required (see [3.9.2.4.1.6](#)).
- ad. If NATO Stage B loading procedures checklists are to be translated from English, and, if so, the language(s) required (see [3.11.1](#)).
- ae. If performance of inspections is to be other than as specified in this document (see [4.1](#)).
- af. Packaging requirements (see [5.1](#)).
- ag. If the nonnuclear munitions basic information manual (standard volume) will contain an illustrated parts breakdown and/or inspection criteria chapter (see [3.5.10](#)).

6.3 Acronyms. The acronyms used in this document are defined as follows:

AFMC	Air Force Materiel Command
AFR	Air Force Regulation
AGM	Air to Ground Missile
AIM	Airlaunch Interceptor Missile
BRU	Bomb Release Unit
CBU	Cluster Bomb Unit
CDRL	Contract Data Requirements List
CSAF	Chief of Staff Air Force
DODISS	Department of Defense Index of Specifications and Standards
EOD	Explosive Ordnance Disposal
FCT	Flight Circuit Test
GFAE	Government Furnished Aeronautical Equipment
GFE	Government Furnished Equipment
HQ	Headquarters
ICT	Integrated Combat Turnaround
LAU	Launcher Auxiliary Unit
MAU	Miscellaneous Armament Unit
MER	Multiple Ejector Rack
NATO	North Atlantic Treaty Organization
OL-NS/EN	Directorate of Nuclear Systems Engineering
OO-ALC	Ogden Air Logistics Center
SA-ALC	San Antonio Air Logistics Center
SDP	Standard Data Package, Source Data Package
SE	Support Equipment
SPM	System Program Manager
SPO	System Program Office
SSEA	System Safety Engineering Analysis
SUU	Suspended Utility Unit
TER	Triple Ejector Rack

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

6.4.1 Accessory. An item which is required to mate the munition/weapon to the aircraft and which remains as an integral part of the system (e.g. pylon, missile launcher and adapter, Multiple Ejector Rack (MER), Triple Ejector Rack (TER), and other bomb racks).

6.4.2 Checklists. Checklists are condensed versions of the loading procedures in the manuals.

6.4.3 Integrated Checklist. A technical order pertaining to the loading of two or more different types of munitions/weapons. For example: AIM-120 (nonnuclear) and AIM-9 (nonnuclear), or AIM-9 B61 (nuclear).

6.4.4 Loading/unloading. Terms applied when a munition/weapon or an accessory loaded with a munition/weapon is placed on, or removed from, an aircraft (e.g. single bombs, preloaded accessories, preloaded rocket launchers, preloaded dispensers).

6.4.5 Munitions. A general term covering nonnuclear munitions.

6.4.6 Nonnuclear munitions. Nonnuclear bombs, fuzes, warheads, missiles, rockets, mines, destructors, pyrotechnics, LAU-Series Rocket Launchers, SUU-42/A and SUU-65 series dispensers, chemical materials, and items; such as, impulse cartridge jettison charges, training items, ammunition, and other non-aircraft inventory items considered similar or relative to nonnuclear munitions, including accessories which have been preloaded.

6.4.7 Technical orders. The term “technical order” as used herein applies to both manuals and checklists.

6.4.8 Verification. Verification (section 4), in the context of this specification equates to the contractor’s quality assurance program for validating the content of the manuals and checklists. Suggested validation methods include:

- a. Actual performance. Using production configured equipment, hands-on performance of the procedure using the technical instructions as written.
- b. Simulation. Using production cond equipment and the manual procedures and checklists, simulate the actions required by the task steps.
- c. Table top analysis. Primarily for nonprocedural data, compare the technical content to source data to ensure the technical accuracy and depth of coverage.

6.4.9 Weapons. A general term covering both nuclear bombs/missiles.

6.5 Bombs/weapons loading procedures. Loading procedures, for a specific weapon to be loaded on an aircraft equipped with more than one type of bomb rack, may be presented in one section, by prefixing minor procedural differences with applicability notations (see 3.1.5). However, loading procedures, for a specific weapon on an aircraft which has an internal and external carriage capability, could dictate individual sections for each station loading (e.g., weapon bay) (see 3.3.3).

6.6 Chapter, section, and paragraph titles. Items with “(munitions)” indicate the requirement is also applicable to the nonnuclear munitions loading procedures manual and nonnuclear munitions loading standard data packages (see 3.3, 3.6 and 3.8).

6.7 Emergency procedures. Emergency procedures are included in standard data package 37 (see 3.11.2.2.3).

6.8 General safety requirements. Standard data package 37 contains most of this information (see 3.6.2.1 and 3.11.2.2.2).

6.9 Illustrations. References to illustrations in the text need not state specifically the purpose of the illustration, if the purpose is obvious. Illustrations may be used more than once, if necessary, for clarity (see 3.1.2).

6.10 Integrated combat turnaround procedures. These procedures are used by qualified personnel to service, maintain, and load/unload munitions on aircraft under combat or combat training turnaround conditions (see 1.4).

6.11 Integrated loading procedures checklists. These checklists may contain a combination of procedural steps from -16 (nuclear) and -33 (nonnuclear) loading manuals (see 3.2.7.1).

6.12 Loading procedures checklists. These checklists will be assigned the basic number of the Stage A cross-servicing guide (i.e., 1F-4C-2CL-X) (see 3.11.1).

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6.13 Nuclear weapons SE. Authorized nuclear weapons SE should be listed in accordance with the Master Nuclear Certification List (MNCL) (see [3.3.2.4](#) and [3.3.3.2.2](#)).

6.14 Source data. Source data for GFE/GFAE for manuals and checklists will be provided by the AFMC Air Logistics Center having engineering responsibility, as follows (see [3.5.4](#)):

- a. Description.
- b. Illustrations.
- c. Preloading and postloading checks during loading phases.
- d. Safety precautions.
- e. Preload preparation, if applicable.
- f. Fuzing instructions.
- g. Ground handling instructions.
- h. Arming wire handling, if applicable.
- i. Criteria for emergency procedures.
- j. Peculiar SE.
- k. Procedures for safety wiring and sealing.
- l. Aircraft load configuration.

6.15 Standard data packages. Approved standard data packages contain descriptive information, illustrations, and procedural steps required for preparation of nonnuclear munitions loading manuals (see [3.1.6.5](#) and [3.5.4](#)).

6.16 System safety engineering analysis. System safety engineering analysis will be provided by HQ AFMC/SE (see [3.7.2.2](#)).

6.17 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.

6.18 Withdrawal distances. If more than one type of munition/weapon is included, and withdrawal distances differ, evacuation distances will be furnished by the acquiring activity (see [3.9.2.3](#)).

6.19 Subject term (key word) listing.

ICT
NATO
Stage B
Weapon

6.20 Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

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TO 1X-XXX-16

FOREWORD

1. PURPOSE.

The purpose of this technical order is to provide safe and reliable procedures for loading/unloading nuclear bombs, missiles, and practice bombs on X-XXX aircraft.

2. SCOPE.

This manual contains all procedures necessary for loading/unloading nuclear bombs, and all applicable practice bombs. Chapter 1 contains safety requirements, emergency procedures, general arrangements, general procedures, flight circuit test, flight equipment checks, functional checks, and munitions rejection criteria. Chapter 2, and on, contains loading, unloading, and ferry procedures for nuclear bombs.

3. RELATED PUBLICATIONS.

The following publications are referenced in and/or used in conjunction with this manual. The regulations listed contain detailed safety information regarding the equipment and procedures in this manual. AFR 0-2, Numerical Index of Standard Air Force Publications, should be checked to determine the latest effective publication date. The checklists are those applicable for each weapon contained in this manual. Deployment procedures are contained in each bomb/weapons loading checklist.

LIST OF RELATED PUBLICATIONS

PUBLICATION NUMBER	PUBLICATION TITLE
AFI 91-101	Air Force Nuclear Weapons Surety Program
AFI 91-104	Nuclear Surety Tamper Control and Detection Program
AFI 91-XXX	Safety Rules for X-XXX Weapon System
TO 1X-XXX-16-CL-1	Nuclear Bomb Loading Procedures (B57)
TO 1X-XXX-16-CL-2	Nuclear Bomb Loading Procedures (B61)
TO 1X-XXX-16-CL-3	Nuclear/Nonnuclear Weapon Integrated Loading Procedures (Internal Gun, AIM-9, Chaff/Flare and B57/B61 Bombs)
TO 1X-XXX-16-CL-4	Nuclear Bomb Practice Bomb Loading Procedures (BDU-38B)

4. NUCLEAR SAFETY CERTIFICATION.

The support equipment and procedures contained herein have been evaluated and are acceptable for the prescribed use with nuclear weapons.

5. PRECEDENCE.

Compliance with procedures herein is mandatory. Use of war reserve nuclear weapons in peacetime operations requires nuclear weapon system safety rules published in the 91-series of Air Force instructions or disseminated by CSAF correspondence. In all instances, only those operations which are within the scope of the current applicable safety rules may be performed. Load crews are not required by this TO to have applicable nuclear weapon system safety rules in their possession at the loading site.

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FIGURE 1. Typical foreword - nuclear loading procedures manual.

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NOTE

Load crews shall comply with AFI 91-104 (Nuclear Surety Tamper Control and Detection Program) for access to the aircraft/bomb combination.

6. LOADING CONFIGURATIONS.

TO 1X-XXX-1 and TO 1X-XX-25 flight manuals contain information regarding weapons authorized for carriage and approved load configurations. Only those weapons and load configurations covered in the -1 and -25 manuals may be used.

7. ABBREVIATIONS/ACRONYMS.

Definitions of abbreviations/Acronyms appearing in this technical order and supporting checklists are as follows:

FCT	Flight Circuit Test
MAU	Miscellaneous Armament Unit
MFD	Multifunction Display

8. IMPROVEMENT REPORTS.

Improvement Reports, AFTO Form 22, or recommendations proposing changes to this technical manual shall be submitted in accordance with TO 00-5-1.

9. COMMENTS.

The Directorate of Nuclear Systems Engineering is the Air Force activity responsible for the accuracy of the technical contents of the manual. Any comments or recommendations other than improvement reports (AFTO Form 22) shall be forwarded through command headquarters to the Directorate of Nuclear Systems Engineering (OL-NS/EN), Kirtland AFB, NM 87117-5000.

10. DEFINITIONS.

The following definitions apply to WARNINGS, CAUTIONS, and NOTES within the procedures:

WARNING

Highlights an operating or maintenance procedure, practice, condition, statement, etc., which, if not strictly observed, could result in injury to or death of personnel.

CAUTION

Highlights an operating or maintenance procedure, practice, condition, statement, etc., which, if not strictly observed, could result in damage to, or destruction of, equipment, or loss of mission effectiveness.

NOTE

Highlights an operating or maintenance procedure, condition, or statement.

iv

FIGURE 1. Typical foreword - nuclear loading procedures manual. - Continued.

MIL-DTL-9977L(USAF)

TO 1F-16A-16
Emergency ProceduresSECTION II
EMERGENCY PROCEDURES1.5 SCOPE

Emergency procedures consist of actions to be taken if munitions are involved in an accident or incident such as fire, collision, bomb dropped, or H70 blend hydrazine contamination. Typical examples of incidents are: (B57, B61-0/2/5) the Ready/Safe switch is found in R (Ready) or the NUCLEAR caution light comes on. Loading crew personnel should be thoroughly familiar with these instructions.

1. (USAF) Refer to AFI 91- 201 and TO 11N-20-11 for firefighting guidance.
2. (BAF/FNLAF) Refer to ELO-1 for firefighting guidance.
3. Refer to TO 1F-16A-33-1-2 for emergency procedures on nonnuclear munitions.

1.6 INSTRUCTIONS

NOTE

If any of the emergency conditions arise, appropriate personnel shall be notified. Under no circumstances shall troubleshooting or maintenance of the bomb be attempted by other than authorized personnel.

1.6.1 Waiting Period. In the event nuclear bombs become involved in an accident/incident or fire, the following procedures are mandatory and shall be performed by the loading crew prior to the arrival of base disaster control team.

1. If pullout cables are connected to the bomb, turn SMS off.
2. On the emergency page of the checklist in step 6 under FOR FIRE, record the time fire was extinguished; in step 2 under FOR DROP/COLLISION/INCIDENT, record the time SMS power is removed and time of accident/incident. These times shall be provided to the base disaster control team upon their arrival.
3. The minimum waiting periods provided in table 1-1 shall be observed before performing any operation on or movement of the bomb. These waiting periods are timed from the time recorded in step 2 above.

Table 1-1. Minimum Waiting Periods

BOMB	MINIMUM WAITING PERIOD
B57	15 minutes
B61	30 minutes

1.6.2 Bomb Dropped or Collision. If bomb is dropped or collision occurs, perform the following:

1. If bomb case remains intact, report accident/incident in accordance with applicable directives.
2. If bomb case is ruptured, perform the following:
 - a. Evacuate nonessential personnel to a minimum of 2000 feet.

1-5

FIGURE 2. Typical emergency procedures - (odd page number).

MIL-DTL-9977L(USAF)

TO 1F-16A-16
Emergency Procedures

- b. Notify base disaster control team.
- c. Report accident/incident in accordance with applicable directives.

WARNING

- * Danger is from detonation of High Explosive (HE) components and possible radioactive.
- * Hazards of CB. CB has toxic effects when inhaled and is irritating when it comes in contact with the skin.

1.6.3 Munitions/Bomb Involved in Fire. In the event of fire during loading/unloading, evacuate nonessential personnel to at least the distance indicated in table 1-2. On the emergency procedures page of the checklist, record the time that flames envelop the munitions/bomb. This time shall be provided to firefighting supervisor/responsible official. Loading crews shall withdraw to the specified distance after fire envelops munition/bomb, or after arrival of firefighters, whichever occurs first.

1.6.4 Munitions/Bomb Involved in H70 Hydrazine Fuel Leak or Spill. If an H70 EPU hydrazine fuel leak occurs, the bomb shall be downloaded, and the aircraft placed in a nonalert status until the extent of damage to nuclear related aircraft wiring has been determined and corrected. When an H70 leak is discovered on a nuclear bomb loaded aircraft, take the following action:

1. Remove electrical power from the aircraft.
2. Evacuate the area and notify appropriate personnel.
3. After H70 fuel cleanup is completed, download the bomb as directed.

Table 1-2. Firefighting Guidance

Nomenclature	Withdrawal Time	Withdrawal Distance (FT) Nonessential Personnel	Fire Symbol
B-57	NA	2000	NA
B-61	NA	2000	NA
BDU-38/B	NA	500	NA
Crtg, 20mm HEI/HEIT/INC	*	1800	2
Crtg, 20mm TP/API/API-T/APT	*	300	4
Crtg, Impulse	*	300	4
Crtg, Chaff	*	300	4
Flares	*	600	3
AIM-9 HE Warhead	45 sec to 2 min	1800	2
AIM-9 (live Mot & inert or Prac Warhead)	45 sec to 2 min	600	3

* No specific withdrawal time assigned.

FIGURE 3. Typical emergency procedures - (even page number).

MIL-DTL-9977L(USAF)

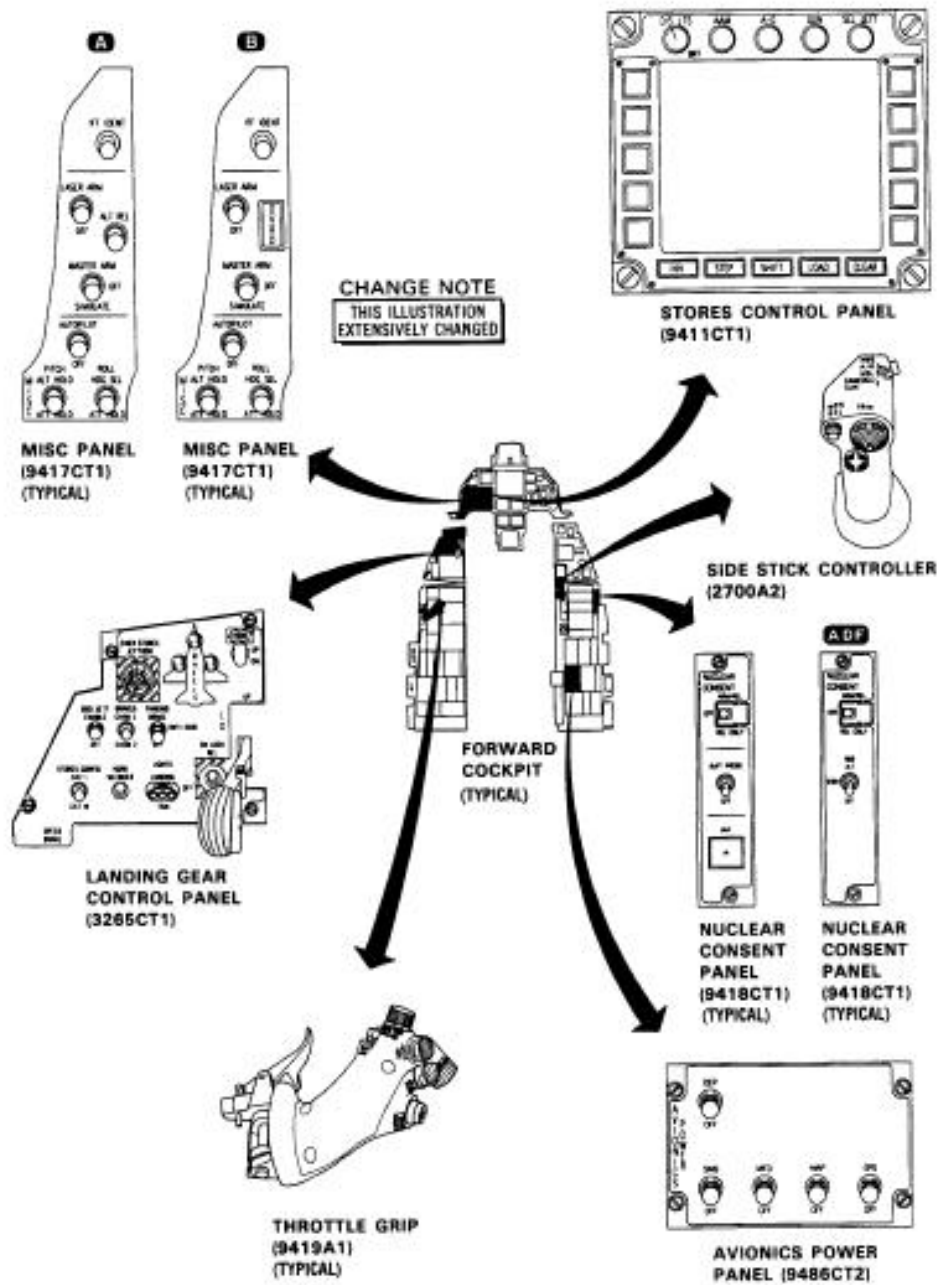


FIGURE 4. Typical aircraft arrangement

MIL-DTL-9977L(USAF)

T.O. 1F-16A-33-1-2
Mun Prep/CBU-52/58/71

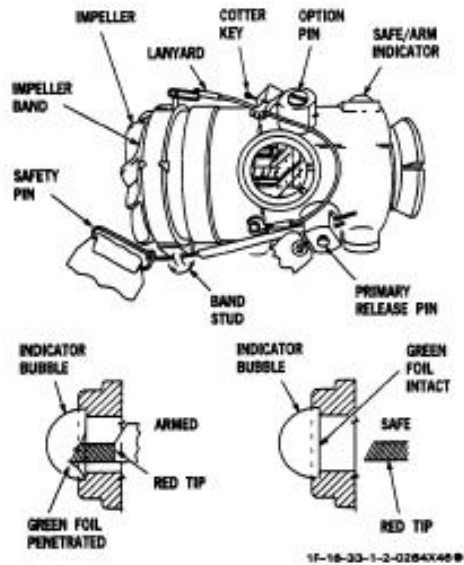


Figure 14-1. MK339 Mod 1 Fuse

- g. (MK339 Mod 1) Check that SAFE/ARM indicator red pin has not punctured green foil at base of bubble (figure 14-1).
- h. (MK339 Mod 1) Check that safety pin is installed through impeller band stud and primary release pin bracket (figure 14-1).
- i. (MK339 Mod 1) Check that cotter key/arming wire is installed through option pin and bracket.
2. Check that fuze(s) is serviceable as follows:
- Check that fuze is clean and not damaged.
 - (M907) Check that fuze vane is locked in position and not damaged.
 - (M907) Check that foil seal or tape covers slider ports.
 - (MK339 Mod 1) Check that fuze impeller is not dented or cracked.
- e. (MK339 Mod 1) Check that fuze impeller band retention lanyard is installed.
- f. (FMU-56D/B, FMU-110/B) Check that fuze radome is not cracked.
- g. (FMU-110/B) Check that guide tube plug is installed in guide tube.
- h. (MK339 Mod 1) Check that fuze time window is in line with suspension lugs and fuze is secured on nose of dispenser.
- Check that fuze setting matches mission requirement.
 - Check that arming wire/lanyard is installed.
 - Check that tail plate is secure.
 - Check that fin is not damaged.
 - Check that arming wire guides to be used are not damaged.
 - Check that lanyard retention post, washers, and nuts are not damaged.
 - Check that suspension lugs are flush with dispenser, then backed out sufficiently to permit locking of rack.

14-3

FIGURE 5. Typical general procedures.

MIL-DTL-9977L(USAF)

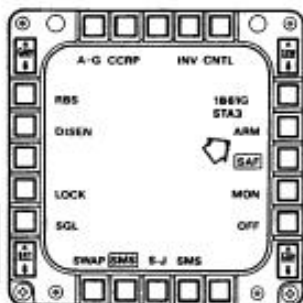
TO 1F-16C-16
Flight Circuit Test

Figure 1-102. A-G Mode (ARM)

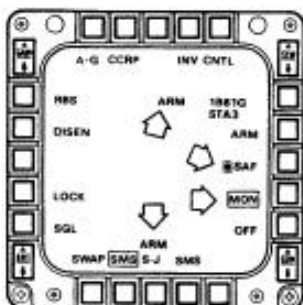


Figure 1-103. A-G Mode (ARM, *SAF, MON)

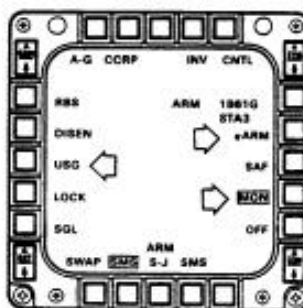


Figure 1-104. A-G Mode (USG, *ARM, MON)

23. On adapter cable W11, position S1 selector switch to 3; STATUS light on.

24. On right console, position NUCLEAR CONSENT switch to ARM/REL.

25. On MISC panel, position MASTER ARM switch to MASTER ARM; MFD displays ARM (FIGURE 1-102).

NOTE

Disregard the NRIU bad status that may occur during steps 26 thru 29.

26. On adapter cable W11, position S2 selector switch to 3; MFD displays *SAF, highlights MON, WPN status ARM (FIGURE 1-103).

27. On right MFD, depress and release OSB adjacent to ARM; MFD displays USG and *ARM and highlights MON (FIGURE 1-104); STATUS light off.

28. On voltage detector, position selector switch to SV; STATUS light off.

29. On voltage detector, position selector switch to PV; STATUS light off.

FIGURE 6. Typical Flight Circuit Test (FCT)/functional checks.

MIL-DTL-9977L(USAF)

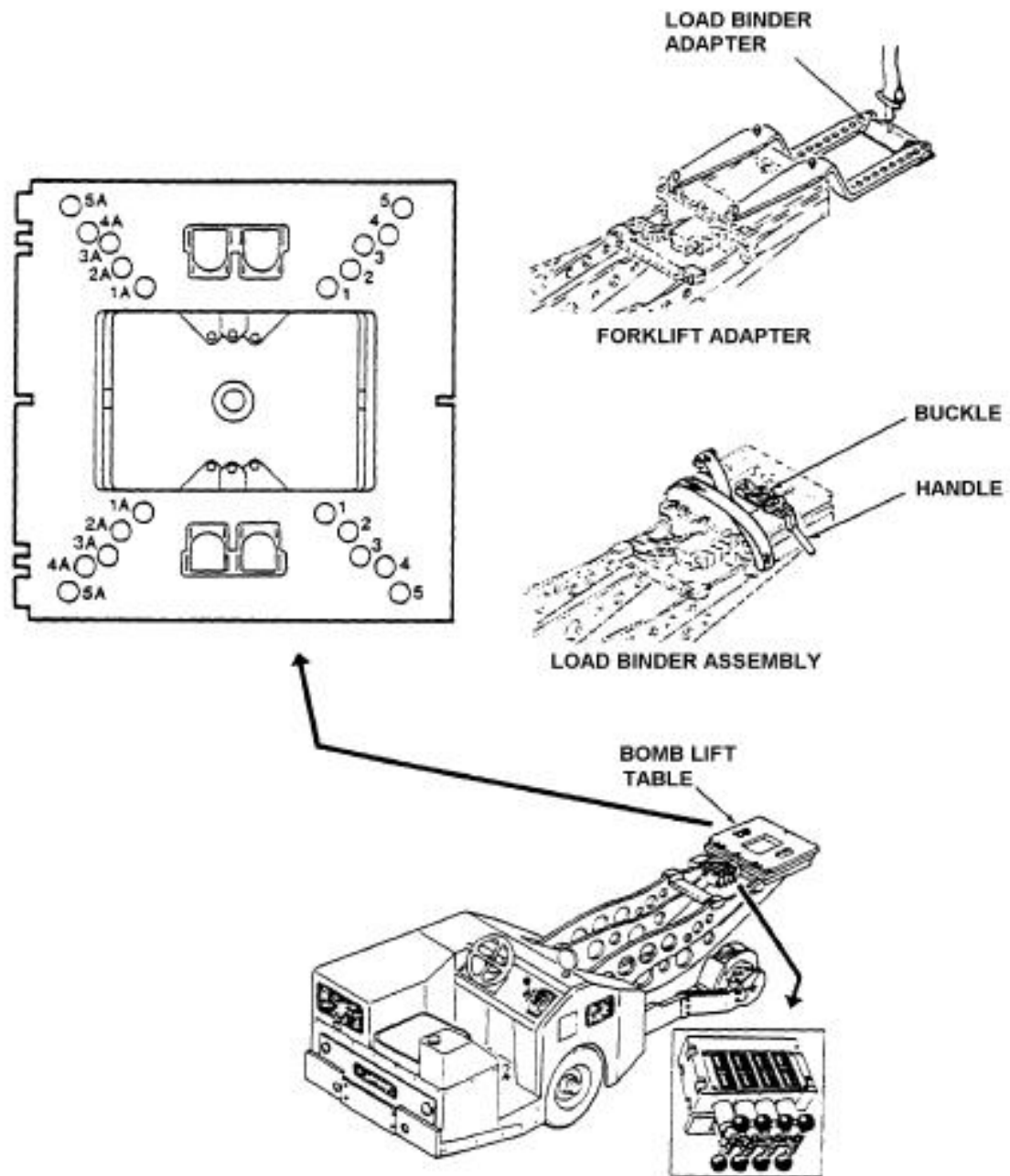


FIGURE 7. Typical illustrations.

MIL-DTL-9977L(USAF)

- 2.1 GENERAL.
 - 2.1.1 Scope.
 - 2.1.2 Support equipment (SE).
 - 2.1.3 Specific safety requirements.
- 2.2 LOADING PROCEDURES.
 - 2.2.1 Aircraft preparation.
 - 2.2.1.1 Flight circuit test.
 - 2.2.1.2 Stray voltage checks.
 - 2.2.2 Munitions preparation.
 - 2.2.3 Cartridge installation.
 - 2.2.4 Loading.
 - 2.2.4.1 Fuzing.
 - 2.2.5 Postloading.
 - 2.2.6 Cartridge installation.
 - 2.2.7 Postloading inspection.
 - 2.2.8 Delayed flight or alert.
 - 2.2.9 Immediately prior to launch.
- 2.3 UNLOADING PROCEDURES.
 - 2.3.1 Safing.
 - 2.3.2 Preunloading.
 - 2.3.3 Unloading.
 - 2.3.4 Fuze removal.
- 2.4 TACTICAL FERRY PROCEDURES. (Nuclear only)
 - 2.4.1 Deployment.
 - 2.4.2 Strike to nonstrike.
 - 2.4.3 Nonstrike to strike.

FIGURE 8. Typical titles and headings

MIL-DTL-9977L(USAF)

TO 1X-XXX-33

FOREWORD

1. PURPOSE.

The purpose of this technical manual is to provide safe and reliable procedures for loading and unloading nonnuclear munitions.

2. SCOPE.

This manual contains all procedures necessary for loading/unloading nonnuclear munitions. Chapter 1 contains general safety requirements, emergency procedures, general arrangement, general procedures, aircraft preparation, flight circuit test, functional checks, and stray voltage checks. Chapter 2 and subsequent contain loading and unloading procedures for each munition or group of munitions.

3. DEFERRED PROCEDURES.

Dependent upon restrictions dictated by actual combat conditions, performance of procedural steps under the headings "Delayed Flight or Alert," "Immediately prior to Launch," "Safing," and "Unloading" that are to be deferred for accomplishment in the Arming/Dearming area shall be as directed by the local commander.

4. FUNCTIONAL CHECKS.

Functional checks shall be performed within 30 days of loading, or more frequently if directed by the local commander. Functional checks shall be performed when the system has malfunctioned, or when trouble is suspected. Functional checks shall be valid for the period of time the aircraft remains of alert, during war emergencies or simulated war emergencies. Functional checks need not be performed if a turnaround mission is to be flown immediately. Functional checks need not be performed provided the stores were dropped successfully from that aircraft and no reconfiguration is required. Munitions preparation procedures under the subordinate paragraph headings PREFUZED or PRELOADED are written so that upon completion of the steps under these headings, the munition is ready for loading. Steps under PREFUZED or PRELOADED not previously accomplished, shall be accomplished using the procedures under the applicable subordinate paragraph heading.

5. PRECEDENCE.

When procedures outlined in this manual conflict with other directives, procedures in this manual shall take precedence, except for the aircraft -1 flight manual. Compliance with procedures in this manual is mandatory.

6. ABBREVIATIONS/ACRONYMS.

Definitions of abbreviations/acronyms appearing in this technical order and supporting checklists are as follows:

LAU	Launcher Aircraft Unit
MAU	Miscellaneous Armament Unit
MFD	Multifunction Display

7. IMPROVEMENT REPORTS.

Improvement Reports, AFTO Form 22, or recommendations proposing changes to this technical manual shall be submitted in accordance with TO 00-5-1.

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FIGURE 9. Typical foreword - nonnuclear munitions loading procedures manual. (Page oriented format only)

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TO IX-XXX-33

8. COMMENTS.

OO-ALC/LIWS is the Air Force activity responsible for the accuracy of the technical contents of the manual. Any comments or recommendations other than improvement reports (AFTO Form 22), shall be forwarded through major command headquarters to OO-ALC/LIWS, Hill AFB, Utah 84056-5000.

9. DEFINITIONS.

WARNING

Highlights an operation or maintenance procedure, practice, condition, statement, etc., which, if not strictly observed, could result in injury to or death of personnel.

CAUTION

Highlights an operation or maintenance procedure, practice, condition, statement, etc., which, if not strictly observed, could result in damage to, or destruction of, equipment, or loss of mission effectiveness.

NOTE

Highlights an operation or maintenance procedure, condition, or statement.

FIGURE 9. Typical foreword - nonnuclear munitions loading procedures manual. (Page oriented format only) - Continued.

MIL-DTL-9977L(USAF)

TO 1F-16A-16CL-3

EMERGENCY PROCEDURES

FOR FIRE

1. Fight fire; remove munitions.
2. Call _____ and give location _____.
3. Evacuate nonessential personnel to _____ feet.
4. Record time flames envelop munitions _____; give to firefighting supervisor.
5. Withdraw to _____ feet within _____ minutes after fire envelops munitions, or after arrival of firefighters, whichever occurs first.

NOTE

Step 6 entry is required only if a loading crew-member is present when fire is extinguished.

6. Record time fire is extinguished _____; give to EOD personnel. Waiting period is 15 minutes (B57) or 30 minutes (B61).

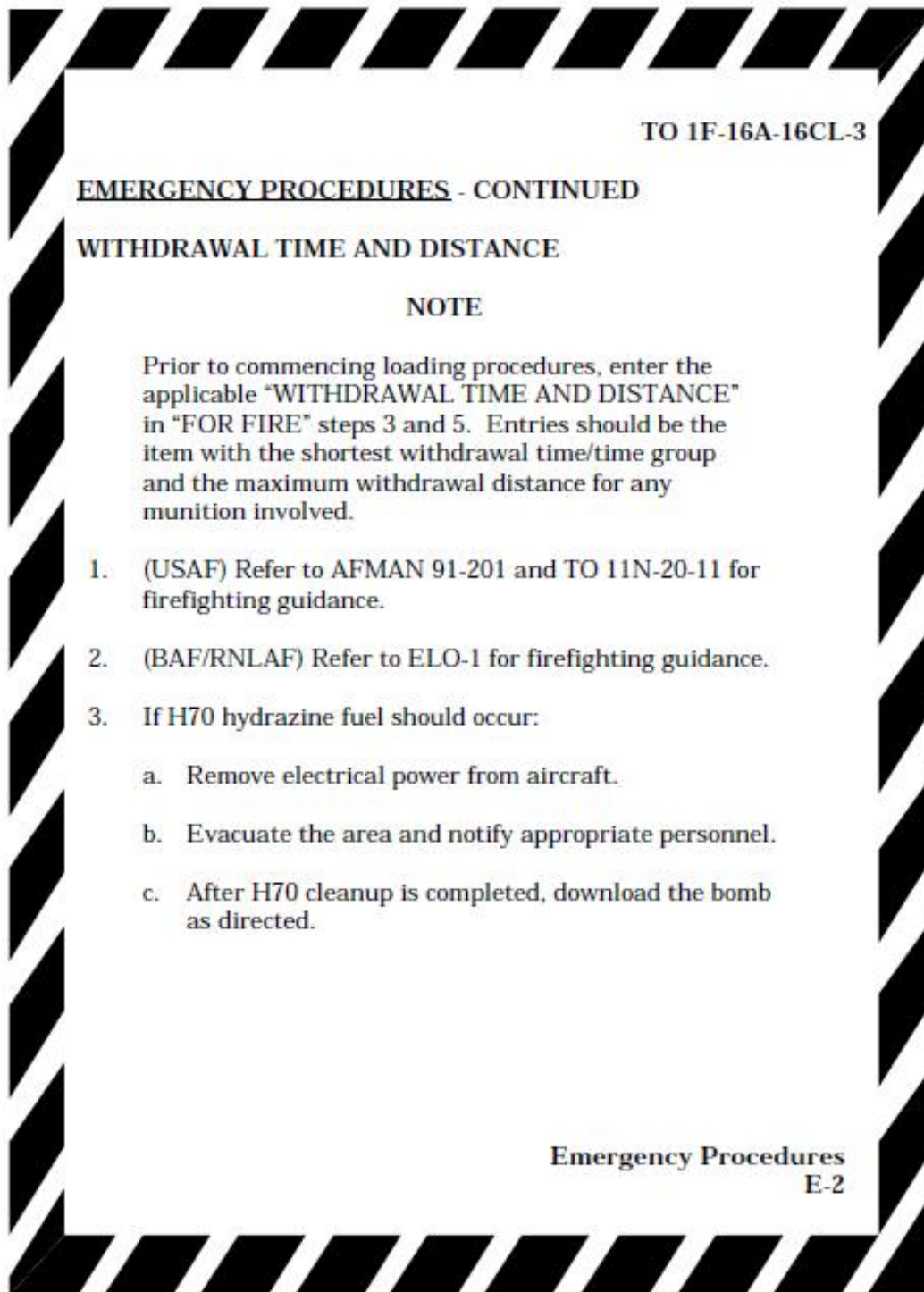
FOR DROP/COLLISION/INCIDENT

1. Call _____.
2. Record time of accident/incident or when SMS power is removed _____; give to EOD personnel. Waiting period is 15 minutes (B57) or 30 minutes (B61).

Emergency Procedures
E-1

FIGURE 10. Emergency Procedures

MIL-DTL-9977L(USAF)



TO 1F-16A-16CL-3

EMERGENCY PROCEDURES - CONTINUED

WITHDRAWAL TIME AND DISTANCE

NOTE

Prior to commencing loading procedures, enter the applicable "WITHDRAWAL TIME AND DISTANCE" in "FOR FIRE" steps 3 and 5. Entries should be the item with the shortest withdrawal time/time group and the maximum withdrawal distance for any munition involved.

1. (USAF) Refer to AFMAN 91-201 and TO 11N-20-11 for firefighting guidance.
2. (BAF/RNLAF) Refer to ELO-1 for firefighting guidance.
3. If H70 hydrazine fuel should occur:
 - a. Remove electrical power from aircraft.
 - b. Evacuate the area and notify appropriate personnel.
 - c. After H70 cleanup is completed, download the bomb as directed.

Emergency Procedures
E-2

FIGURE 10. Emergency Procedures - Continued.

MIL-DTL-9977L(USAF)

TO 1F-16A-16CL-3

EMERGENCY PROCEDURES - CONTINUED

Firefighting Guidance

Nomenclature	Withdrawal Time	Withdrawal Distance (ft) Non-essential Personnel	Fire Symbol
B57	NA	2000	NA
B61	NA	2000	NA
Crtg, 20 mm HEI/HEIT/INC	*	1800	2
Crtg, 20 mm TP/API/API-T/APT	*	300	4
Crtg, Impulse	*	300	4
Crtg, Chaff	*	300	4
Flares	*	600	3
AIM-9 HE Warhd	45 sec to 2 min	1800	2

* No specific withdrawal time assigned.

Emergency Procedures
E-3/(E-4 blank)

FIGURE 10. Emergency Procedures - Continued.

MIL-DTL-9977L(USAF)

TO XX-XX-16-2CL-1

AIRCRAFT PREPARATION

- | | | |
|-----|---|-------|
| 1. | Aircraft - POSITIONED, CHOCKED & GROUNDED | _____ |
| 2. | Landing gear safety pins - INSTALLED | _____ |
| 3. | Firefighting & support equipment - POSITIONED | _____ |
| 4. | Rack safety pins - INSTALLED | _____ |
| 5. | Guns - SAFE | _____ |
| 6. | Seat & canopy pins - INSTALLED | _____ |
| 7. | Form 781 - CHECKED | _____ |
| 8. | Cockpit arm switches - OFF/SAFE/NORMAL | _____ |
| 9. | Pylons & racks - SERVICEABLE | _____ |
| 10. | Pylon electrical connectors - STOWED | _____ |
| 11. | CONSENT sw - SAFE | _____ |
| 12. | GEN sw - OFF | _____ |
| 13. | ENGINE MASTER sw - OFF | _____ |
| 14. | (C/D/E) NORMAL SW FLAPS - UP | _____ |
| 15. | (E) 556 SLATS/FLAPS - NORM | _____ |

Acft Prep/61/CL/WS
1

FIGURE 11. Aircraft Preparation - Text

MIL-DTL-9977L(USAF)

TO XX-XX-16-CL-1

AIRCRAFT PREPARATION (Continued)

16. (C/D/E) sel msl jett sw - OFF

17 (C) Position cockpit sw:

- a. Msl PWR - OFF
- b. RADAR - HEAT - HEAT REJECT - RADAR
- c.. ARM/SAFE - SAFE
- d. INTLK - IN
- e. BDN SEL - ALL
- f. BOMB CONT - OFF
- g. NUCL STORES - NORMAL
- h. WPL SEL - BOMBS PAIRS
- i. GAM - AUX - NORM
- j. MA - SAFE
- k. STEP - NORMAL

Aaft Prep/61/CL/WS

2

FIGURE 11. Aircraft Preparation - Text - Continued.

MIL-DTL-9977L(USAF)

TO 1F-16A-16CL-3

EMERGENCY PROCEDURES - CONTINUED

Firefighting Guidance

Nomenclature	Withdrawal Time	Withdrawal Distance (ft) Non-essential Personnel	Fire Symbol
B57	NA	2000	NA
B61	NA	2000	NA
Crtg, 20 mm HEI/HEIT/INC	*	1800	2
Crtg, 20 mm TP/API/API-T/APT	*	300	4
Crtg, Impulse	*	300	4
Crtg, Chaff	*	300	4
Flares	*	600	3
AIM-9 HE Warhd	45 sec to 2 min	1800	2

* No specific withdrawal time assigned.

Emergency Procedures
E-3/(E-4 blank)

FIGURE 11. Aircraft Preparation - Text - Continued.

MIL-DTL-9977L(USAF)

FAMILY GROUP NO. 12

APPROVED
STANDARD DATA PACKAGE
FOR
-33 NON-NUCLEAR MUNITIONS LOADING MANUALS

BOMB, GENERAL PURPOSE, 500-POUND MK 82;
BOMB, PRACTICE, 500-POUND MK82/DBU-50/B AND BDU-50A/B
WITH BSU-49/B AIR INFLATABLE RETARDER (AIR),

AND

2000-POUND MK 84
WITH BSU-50/B AIR INFLATABLE RETARD (AIR)

APPLICABLE FUZE DATA REQUIRED FOR GROUP NO. 12
MUNITIONS DESCRIPTIVE DATA ARE CONTAINED IN
FAMILY GROUP NO. 40

THIS STANDARD DATA PACKAGE REPLACES ALL PREVIOUS ISSUES

FIGURE 12. Typical cover page – standard data package.

MIL-DTL-9977L(USAF)**APPENDIX A****NUCLEAR WEAPONS BASIC INFORMATION AND LOADING PROCEDURES MANUAL
DOCUMENT TYPE DEFINITION (DTD) SUBSET****A.1 SCOPE.**

A.1.1 Scope. DTDs are based on rules outlined in MIL-PRF-28001 and ISO 8879. The DTD subset referenced within this appendix provides the structure and content templates of documents prepared in accordance with this detail specification. For digital copies of the DTD, Tag Description Table (TDT), and the Attribute Description Table (ADT), see [A.4.1](#). This appendix is a mandatory part of this detail specification. The information herein is intended for compliance.

A.2 APPLICABLE DOCUMENTS.

A.2.1 General. The documents listed in this section are specified in sections [3](#), [4](#), or [5](#) 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](#), [4](#), or [5](#) of this specification, whether or not they are listed.

A.2.2 Government documents.

A.2.2.1 Specifications, standards, and handbooks. The following specifications and standards 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.

DEPARTMENT OF DEFENSE SPECIFICATIONS**MIL-PRF-28001**

Markup Requirements and Generic Style Specification for Electronic Printed Output and Exchange of Text

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

A.2.3 Non-government publications.**INTERNATIONAL ORGANIZATION FOR STANDARDIZATION****ISO 8879 (DoD adopted)** Information Processing - Text and Office Systems - Standard Generalized Markup Language (SGML)

(Copies of this document are available for purchase online at <http://www.ansi.org> or may be ordered by mail from the American National Standards Institute, 1819 L. Street, NW, US-Washington, DC 20036.)

A.3 DIGITAL SUPPORT SUITE (DSS).

The following comprise the tools contained in the DSS used for authoring and rendering the Nuclear weapons basic information and loading procedures manual (fighter aircraft) doctype.

A.3.1 Document Type Definition. to be delivered digitally in accordance with this specification shall be tagged using the Nuclear weapons basic information and loading procedures manual (fighter aircraft) DTD found at the TMSS website (see [A.4.1](#)). This DTD provides the structure and content template in accordance with the detail specification. The procedure for accomplishing this is found in MIL-PRF-28001 and ISO 8879.

A.3.2 Tag Description Table. TDT provides detailed descriptions of the elements contained in the Nuclear weapons basic information and loading procedures manual (fighter aircraft) DTD. The TDT contains the element tagging structure, full element name, tag minimization requirements, element structure, reference elements, source paragraph, and attribute descriptions unique to the element. See [A.4.1](#) for information on obtaining this file in digital format.

A.3.3 Attribute Description Table. ATD provides detailed descriptions of the attributes contained in the Nuclear weapons basic information and loading procedures manual (fighter aircraft) DTD. See [A.4.1](#) for information on obtaining this file in digital format.

MIL-DTL-9977L(USAF)**APPENDIX A****A.4 OBTAINING DSS FILES.**

A.4.1 Obtaining DSS files with a .mil address. DTDs, TDTs, and other files in the DSS can be accessed at the TMSS website <https://techdata.wpafb.af.mil/tmss/index.html>. The “Baseline” menu option in the left pane, on the web page, 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 shows a list containing a PDF version of the specification and the associated appendices. To obtain the preferred DTD, select the desired appendix. 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 the DTD, FOSI, screen FOSI, ATD, and the TDT, and a “Download” button to download the entire DSS zip file.

A.4.2 Obtaining files without a .mil address. For addresses other than .mil., access to the TMSS Community of Practice (CoP) must be obtained via the Air Force (AF) Portal. To access the AF Portal, the AF Portal help desk can be reached at commercial number (334) 416-5771, option 7 or toll free at (877) 596-5771, option 7. Once access to the Portal is obtained, navigate to the TMSS CoP at <https://afkm.wpafb.af.mil/community/views/home.aspx?Filter=OO-LG-MC-38> to download the files contained in the DSS. A DSS can be downloaded by selecting the “Digital Support Suites (DSSs)” link under the “Document Management” section. A listing of the most current zip files for the DSSs appears. Select the appropriate zip file to download.

A.4.3 TMSS support. Please address any comments or questions relating to DSSs and/or specifications and standards to SGMLSUPPORT@wpafb.af.mil or to Technical Manual Specifications and Standards, ESC/HGGL, 4170 Hebble Creek Road, Building 280, Door 15, Wright-Patterson AFB OH 45433-5006.

MIL-DTL-9977L(USAF)**APPENDIX B****NUCLEAR WEAPONS LOADING PROCEDURES MANUAL
DOCUMENT TYPE DEFINITION (DTD) SUBSET****B.1 SCOPE.**

B.1.1 Scope. DTDs are based on rules outlined in MIL-PRF-28001 and ISO 8879. The DTD subset referenced within this appendix provides the structure and content templates of documents prepared in accordance with this detail specification. For digital copies of the DTD, Tag Description Table (TDT), and the Attribute Description Table (ADT), see [B.4.1](#). This appendix is a mandatory part of this detail specification. The information herein is intended for compliance.

B.2 APPLICABLE DOCUMENTS.

B.2.1 General. The documents listed in this section are specified in sections 3, 4, or 5 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, 4, or 5 of this specification, whether or not they are listed.

B.2.2 Government documents.

B.2.2.1 Specifications, standards, and handbooks. The following specifications and standards 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.

DEPARTMENT OF DEFENSE SPECIFICATIONS**MIL-PRF-28001**

Markup Requirements and Generic Style Specification for Electronic Printed Output and Exchange of Text

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

B.2.3 Non-government publications.**INTERNATIONAL ORGANIZATION FOR STANDARDIZATION****ISO 8879 (DoD adopted)** Information Processing - Text and

Office Systems - Standard Generalized

Markup Language (SGML)

(Copies of this document are available for purchase online at <http://www.ansi.org> or may be ordered by mail from the American National Standards Institute, 1819 L. Street, NW, US-Washington, DC 20036.)

B.3 DIGITAL SUPPORT SUITE (DSS).

The following comprise the tools contained in the DSS used for authoring and rendering the Nuclear weapons loading procedures manual (bomber aircraft) doctype.

B.3.1 Document Type Definition. to be delivered digitally in accordance with this specification shall be tagged using the Nuclear weapons loading procedures manual (bomber aircraft) manual DTD found at the TMSS website (see [B.4.1](#)). This DTD provides the structure and content template in accordance with the detail specification. The procedure for accomplishing this is found in MIL-PRF-28001 and ISO 8879.

B.3.2 Tag Description Table. TDT provides detailed descriptions of the elements contained in the Nuclear weapons loading procedures manual (bomber aircraft) DTD. The TDT contains the element tagging structure, full element name, tag minimization requirements, element structure, reference elements, source paragraph, and attribute descriptions unique to the element. See [B.4.1](#) for information on obtaining this file in digital format.

B.3.3 Attribute Description Table. ATD provides detailed descriptions of the attributes contained in the Nuclear weapons loading procedures manual (bomber aircraft) manual DTD. See [B.4.1](#) for information on obtaining this file in digital format.

MIL-DTL-9977L(USAF)**APPENDIX B****B.4 OBTAINING DSS FILES.**

B.4.1 Obtaining DSS files with a .mil address. DTDs, TDTs, and other files in the DSS can be accessed at the TMSS website <https://techdata.wpafb.af.mil/tmss/index.html>. The “Baseline” menu option in the left pane, on the web page, 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 shows a list containing a PDF version of the specification and the associated appendices. To obtain the preferred DTD, select the desired appendix. 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 the DTD, FOSI, screen FOSI, ATD, and the TDT, and a “Download” button to download the entire DSS zip file.

B.4.2 Obtaining files without a .mil address. For addresses other than .mil., access to the TMSS Community of Practice (CoP) must be obtained via the Air Force (AF) Portal. To access the AF Portal, the AF Portal help desk can be reached at commercial number (334) 416-5771, option 7 or toll free at (877) 596-5771, option 7. Once access to the Portal is obtained, navigate to the TMSS CoP at <https://afkm.wpafb.af.mil/community/views/home.aspx?Filter=OO-LG-MC-38> to download the files contained in the DSS. A DSS can be downloaded by selecting the “Digital Support Suites (DSSs)” link under the “Document Management” section. A listing of the most current zip files for the DSSs appears. Select the appropriate zip file to download.

B.4.3 TMSS support. Please address any comments or questions relating to DSSs and/or specifications and standards to SGMLSUPPORT@wpafb.af.mil or to Technical Manual Specifications and Standards, ESC/HGGL, 4170 Hebble Creek Road, Building 280, Door 15, Wright-Patterson AFB OH 45433-5006.

MIL-DTL-9977L(USAF)**APPENDIX C****NONNUCLEAR MUNITIONS BASIC INFORMATION MANUAL
DOCUMENT TYPE DEFINITION (DTD) SUBSET****C.1 SCOPE.**

C.1.1 Scope. DTDs are based on rules outlined in MIL-PRF-28001 and ISO 8879. The DTD subset referenced within this appendix provides the structure and content templates of documents prepared in accordance with this detail specification. For digital copies of the DTD, Tag Description Table (TDT), and the Attribute Description Table (ADT), see C.4.1. This appendix is a mandatory part of this detail specification. The information herein is intended for compliance.

C.2 APPLICABLE DOCUMENTS.

C.2.1 General. The documents listed in this section are specified in sections 3, 4, or 5 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, 4, or 5 of this specification, whether or not they are listed.

C.2.2 Government documents.

C.2.2.1 Specifications, standards, and handbooks. The following specifications and standards 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.

DEPARTMENT OF DEFENSE SPECIFICATIONS**MIL-PRF-28001**Markup Requirements and Generic Style Specification for
Electronic Printed Output and Exchange of Text

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

C.2.3 Non-government publications.**INTERNATIONAL ORGANIZATION FOR STANDARDIZATION****ISO 8879 (DoD adopted)** Information Processing - Text and

Office Systems - Standard Generalized

Markup Language (SGML)

(Copies of this document are available for purchase online at <http://www.ansi.org> or may be ordered by mail from the American National Standards Institute, 1819 L. Street, NW, US-Washington, DC 20036.)

C.3 DIGITAL SUPPORT SUITE (DSS).

The following comprise the tools contained in the DSS used for authoring and rendering the Nonnuclear munitions basic information manual (standard volume) doctype.

C.3.1 Document Type Definition. to be delivered digitally in accordance with this specification shall be tagged using the Nonnuclear munitions basic information manual (standard volume) DTD found at the TMSS website (see C.4.1). This DTD provides the structure and content template in accordance with the detail specification. The procedure for accomplishing this is found in MIL-PRF-28001 and ISO 8879.

C.3.2 Tag Description Table. TDT provides detailed descriptions of the elements contained in the Nonnuclear munitions basic information manual (standard volume) DTD. The TDT contains the element tagging structure, full element name, tag minimization requirements, element structure, reference elements, source paragraph, and attribute descriptions unique to the element. See C.4.1 for information on obtaining this file in digital format.

C.3.3 Attribute Description Table. ATD provides detailed descriptions of the attributes contained in the Nonnuclear munitions basic information manual (standard volume) DTD. See C.4.1 for information on obtaining this file in digital format.

MIL-DTL-9977L(USAF)**APPENDIX C****C.4 OBTAINING DSS FILES.**

C.4.1 Obtaining DSS files with a .mil address. DTDs, TDTs, and other files in the DSS can be accessed at the TMSS website <https://techdata.wpafb.af.mil/tmss/index.html>. The “Baseline” menu option in the left pane, on the web page, 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 shows a list containing a PDF version of the specification and the associated appendices. To obtain the preferred DTD, select the desired appendix. 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 the DTD, FOSI, screen FOSI, ATD, and the TDT, and a “Download” button to download the entire DSS zip file.

C.4.2 Obtaining files without a .mil address. For addresses other than .mil., access to the TMSS Community of Practice (CoP) must be obtained via the Air Force (AF) Portal. To access the AF Portal, the AF Portal help desk can be reached at commercial number (334) 416-5771, option 7 or toll free at (877) 596-5771, option 7. Once access to the Portal is obtained, navigate to the TMSS CoP at <https://afkm.wpafb.af.mil/community/views/home.aspx?Filter=OO-LG-MC-38> to download the files contained in the DSS. A DSS can be downloaded by selecting the “Digital Support Suites (DSSs)” link under the “Document Management” section. A listing of the most current zip files for the DSSs appears. Select the appropriate zip file to download.

C.4.3 TMSS support. Please address any comments or questions relating to DSSs and/or specifications and standards to SGMLSUPPORT@wpafb.af.mil or to Technical Manual Specifications and Standards, ESC/HGGL, 4170 Hebble Creek Road, Building 280, Door 15, Wright-Patterson AFB OH 45433-5006.

MIL-DTL-9977L(USAF)**APPENDIX D****NONNUCLEAR MUNITIONS LOADING PROCEDURES MANUAL
DOCUMENT TYPE DEFINITION (DTD) SUBSET****D.1 SCOPE.**

D.1.1 Scope. DTDs are based on rules outlined in MIL-PRF-28001 and ISO 8879. The DTD subset referenced within this appendix provides the structure and content templates of documents prepared in accordance with this detail specification. For digital copies of the DTD, Tag Description Table (TDT), and the Attribute Description Table (ADT), see [D.4.1](#). This appendix is a mandatory part of this detail specification. The information herein is intended for compliance.

D.2 APPLICABLE DOCUMENTS.

D.2.1 General. The documents listed in this section are specified in sections 3, 4, or 5 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, 4, or 5 of this specification, whether or not they are listed.

D.2.2 Government documents.

D.2.2.1 Specifications, standards, and handbooks. The following specifications and standards 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.

DEPARTMENT OF DEFENSE SPECIFICATIONS**MIL-PRF-28001**Markup Requirements and Generic Style Specification for
Electronic Printed Output and Exchange of Text

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

D.2.3 Non-government publications.**INTERNATIONAL ORGANIZATION FOR STANDARDIZATION****ISO 8879 (DoD adopted)** Information Processing - Text and

Office Systems - Standard Generalized

Markup Language (SGML)

(Copies of this document are available for purchase online at <http://www.ansi.org> or may be ordered by mail from the American National Standards Institute, 1819 L. Street, NW, US-Washington, DC 20036.)

D.3 DIGITAL SUPPORT SUITE (DSS).

The following comprise the tools contained in the DSS used for authoring and rendering the (nonnuclear munitions loading procedures manual) doctype.

D.3.1 Document Type Definition. to be delivered digitally in accordance with this specification shall be tagged using the (Nonnuclear munitions loading procedures manual) DTD found at the TMSS website (see [D.4.1](#)). This DTD provides the structure and content template in accordance with the detail specification. The procedure for accomplishing this is found in MIL-PRF-28001 and ISO 8879.

D.3.2 Tag Description Table. TDT provides detailed descriptions of the elements contained in the (Nonnuclear munitions loading procedures manual) DTD. The TDT contains the element tagging structure, full element name, tag minimization requirements, element structure, reference elements, source paragraph, and attribute descriptions unique to the element. See [D.4.1](#) for information on obtaining this file in digital format.

D.3.3 Attribute Description Table. ATD provides detailed descriptions of the attributes contained in the (Nonnuclear munitions loading procedures manual) DTD. See [D.4.1](#) for information on obtaining this file in digital format.

MIL-DTL-9977L(USAF)**APPENDIX D****D.4 OBTAINING DSS FILES.**

D.4.1 Obtaining DSS files with a .mil address. DTDs, TDTs, and other files in the DSS can be accessed at the TMSS website <https://techdata.wpafb.af.mil/tmss/index.html>. The “Baseline” menu option in the left pane, on the web page, 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 shows a list containing a PDF version of the specification and the associated appendices. To obtain the preferred DTD, select the desired appendix. 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 the DTD, FOSI, screen FOSI, ATD, and the TDT, and a “Download” button to download the entire DSS zip file.

D.4.2 Obtaining files without a .mil address. For addresses other than .mil., access to the TMSS Community of Practice (CoP) must be obtained via the Air Force (AF) Portal. To access the AF Portal, the AF Portal help desk can be reached at commercial number (334) 416-5771, option 7 or toll free at (877) 596-5771, option 7. Once access to the Portal is obtained, navigate to the TMSS CoP at <https://afkm.wpafb.af.mil/community/views/home.aspx?Filter=OO-LG-MC-38> to download the files contained in the DSS. A DSS can be downloaded by selecting the “Digital Support Suites (DSSs)” link under the “Document Management” section. A listing of the most current zip files for the DSSs appears. Select the appropriate zip file to download.

D.4.3 TMSS support. Please address any comments or questions relating to DSSs and/or specifications and standards to SGMLSUPPORT@wpafb.af.mil or to Technical Manual Specifications and Standards, ESC/HGGL, 4170 Hebble Creek Road, Building 280, Door 15, Wright-Patterson AFB OH 45433-5006.

MIL-DTL-9977L(USAF)**APPENDIX E****INTEGRATED COMBAT TURNAROUND PROCEDURES MANUAL
DOCUMENT TYPE DEFINITION (DTD) SUBSET****E.1 SCOPE.**

E.1.1 Scope. DTDs are based on rules outlined in MIL-PRF-28001 and ISO 8879. The DTD subset referenced within this appendix provides the structure and content templates of documents prepared in accordance with this detail specification. For digital copies of the DTD, Tag Description Table (TDT), and the Attribute Description Table (ADT), see E.4.1. This appendix is a mandatory part of this detail specification. The information herein is intended for compliance.

E.2 APPLICABLE DOCUMENTS.

E.2.1 General. The documents listed in this section are specified in sections 3, 4, or 5 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, 4, or 5 of this specification, whether or not they are listed.

E.2.2 Government documents.

E.2.2.1 Specifications, standards, and handbooks. The following specifications and standards 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.

DEPARTMENT OF DEFENSE SPECIFICATIONS**MIL-PRF-28001**Markup Requirements and Generic Style Specification for
Electronic Printed Output and Exchange of Text

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

E.2.3 Non-government publications.**INTERNATIONAL ORGANIZATION FOR STANDARDIZATION****ISO 8879 (DoD adopted)**Information Processing - Text and
Office Systems - Standard Generalized
Markup Language (SGML)

(Copies of this document are available for purchase online at <http://www.ansi.org> or may be ordered by mail from the American National Standards Institute, 1819 L. Street, NW, US-Washington, DC 20036.)

E.3 DIGITAL SUPPORT SUITE (DSS).

The following comprise the tools contained in the DSS used for authoring and rendering the (Integrated combat turnaround procedures manual) doctype.

E.3.1 Document Type Definition. to be delivered digitally in accordance with this specification shall be tagged using the (Integrated combat turnaround procedures manual) DTD found at the TMSS website (see E.4.1). This DTD provides the structure and content template in accordance with the detail specification. The procedure for accomplishing this is found in MIL-PRF-28001 and ISO 8879.

E.3.2 Tag Description Table. TDT provides detailed descriptions of the elements contained in the (Integrated combat turnaround procedures manual) DTD. The TDT contains the element tagging structure, full element name, tag minimization requirements, element structure, reference elements, source paragraph, and attribute descriptions unique to the element. See E.4.1 for information on obtaining this file in digital format.

E.3.3 Attribute Description Table. ATD provides detailed descriptions of the attributes contained in the (Integrated combat turnaround procedures manual) DTD. See E.4.1 for information on obtaining this file in digital format.

MIL-DTL-9977L(USAF)**APPENDIX E****E.4 OBTAINING DSS FILES.**

E.4.1 Obtaining DSS files with a .mil address. DTDs, TDTs, and other files in the DSS can be accessed at the TMSS website <https://techdata.wpafb.af.mil/tmss/index.html>. The “Baseline” menu option in the left pane, on the web page, 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 shows a list containing a PDF version of the specification and the associated appendices. To obtain the preferred DTD, select the desired appendix. 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 the DTD, FOSI, screen FOSI, ATD, and the TDT, and a “Download” button to download the entire DSS zip file.

E.4.2 Obtaining files without a .mil address. For addresses other than .mil., access to the TMSS Community of Practice (CoP) must be obtained via the Air Force (AF) Portal. To access the AF Portal, the AF Portal help desk can be reached at commercial number (334) 416-5771, option 7 or toll free at (877) 596-5771, option 7. Once access to the Portal is obtained, navigate to the TMSS CoP at <https://afkm.wpafb.af.mil/community/views/home.aspx?Filter=OO-LG-MC-38> to download the files contained in the DSS. A DSS can be downloaded by selecting the “Digital Support Suites (DSSs)” link under the “Document Management” section. A listing of the most current zip files for the DSSs appears. Select the appropriate zip file to download.

E.4.3 TMSS support. Please address any comments or questions relating to DSSs and/or specifications and standards to SGMLSUPPORT@wpafb.af.mil or to Technical Manual Specifications and Standards, ESC/HGGL, 4170 Hebble Creek Road, Building 280, Door 15, Wright-Patterson AFB OH 45433-5006.

MIL-DTL-9977L(USAF)**APPENDIX F****NONNUCLEAR MUNITIONS LOADING STANDARD DATA PACKAGES
DOCUMENT TYPE DEFINITION (DTD) SUBJECT****F.1 SCOPE.**

F.1.1 Scope. DTDs are based on rules outlined in MIL-PRF-28001 and ISO 8879. The DTD subset referenced within this provides the structure and content templates of documents prepared in accordance with this detail specification. For digital copies of the DTD, Tag Description Table (TDT), and the Attribute Description Table (ADT), see [F.4.1](#). This appendix is a mandatory part of this detail specification. The information herein is intended for compliance.

F.2 APPLICABLE DOCUMENTS.

F.2.1 General. The documents listed in this section are specified in sections 3, 4, or 5 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, 4, or 5 of this specification, whether or not they are listed.

F.2.2 Government documents.

F.2.2.1 Specifications, standards, and handbooks. The following specifications and standards 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.

DEPARTMENT OF DEFENSE SPECIFICATIONS**MIL-PRF-28001**

Markup Requirements and Generic Style Specification for Electronic Printed Output and Exchange of Text

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

F.2.3 Non-government publications.**INTERNATIONAL ORGANIZATION FOR STANDARDIZATION****ISO 8879 (DoD adopted)**

Information Processing - Text and Office Systems - Standard Generalized Markup Language (SGML)

(Copies of this document are available for purchase online at <http://www.ansi.org> or may be ordered by mail from the American National Standards Institute, 1819 L. Street, NW, US-Washington, DC 20036.)

F.3 DIGITAL SUPPORT SUITE (DSS).

The following comprise the tools contained in the DSS used for authoring and rendering the (nonnuclear munitions loading standard data packages manual) doctype.

F.3.1 Document Type Definition. to be delivered digitally in accordance with this specification shall be tagged using the (Nonnuclear munitions loading standard data packages manual) DTD found at the TMSS website (see [F.4.1](#)). This DTD provides the structure and content template in accordance with the detail specification. The procedure for accomplishing this is found in MIL-PRF-28001 and ISO 8879.

F.3.2 Tag Description Table. TDT provides detailed descriptions of the elements contained in the (Nonnuclear munitions loading standard data packages manual) DTD. The TDT contains the element tagging structure, full element name, tag minimization requirements, element structure, reference elements, source paragraph, and attribute descriptions unique to the element. See [F.4.1](#) for information on obtaining this file in digital format.

F.3.3 Attribute Description Table. ATD provides detailed descriptions of the attributes contained in the (Nonnuclear munitions loading standard data packages manual) DTD. See [F.4.1](#) for information on obtaining this file in digital format.

MIL-DTL-9977L(USAF)**APPENDIX F****F.4 OBTAINING DSS FILES.**

F.4.1 Obtaining DSS files with a .mil address. DTDs, TDTs, and other files in the DSS can be accessed at the TMSS website <https://techdata.wpafb.af.mil/tmss/index.html>. The “Baseline” menu option in the left pane, on the web page, 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 shows a list containing a PDF version of the specification and the associated appendices. To obtain the preferred DTD, select the desired appendix. 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 the DTD, FOSI, screen FOSI, ATD, and the TDT, and a “Download” button to download the entire DSS zip file.

F.4.2 Obtaining files without a .mil address. For addresses other than .mil., access to the TMSS Community of Practice (CoP) must be obtained via the Air Force (AF) Portal. To access the AF Portal, the AF Portal help desk can be reached at commercial number (334) 416-5771, option 7 or toll free at (877) 596-5771, option 7. Once access to the Portal is obtained, navigate to the TMSS CoP at <https://afkm.wpafb.af.mil/community/views/home.aspx?Filter=OO-LG-MC-38> to download the files contained in the DSS. A DSS can be downloaded by selecting the “Digital Support Suites (DSSs)” link under the “Document Management” section. A listing of the most current zip files for the DSSs appears. Select the appropriate zip file to download.

F.4.3 TMSS support. Please address any comments or questions relating to DSSs and/or specifications and standards to SGMLSUPPORT@wpafb.af.mil or to Technical Manual Specifications and Standards, ESC/HGGL, 4170 Hebble Creek Road, Building 280, Door 15, Wright-Patterson AFB OH 45433-5006.

MIL-DTL-9977L(USAF)**APPENDIX G****LOADING PROCEDURES CHECKLISTS
DOCUMENT TYPE DEFINITION (DTD) SUBSET****G.1 SCOPE.**

G.1.1 Scope. DTDs are based on rules outlined in MIL-PRF-28001 and ISO 8879. The DTD subset referenced within this appendix provides the structure and content templates of documents prepared in accordance with this detail specification. For digital copies of the DTD, Tag Description Table (TDT), and the Attribute Description Table (ADT), see G.4.1. This appendix is a mandatory part of this detail specification. The information herein is intended for compliance.

G.2 APPLICABLE DOCUMENTS.

G.2.1 General. The documents listed in this section are specified in sections 3, 4, or 5 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, 4, or 5 of this specification, whether or not they are listed.

G.2.2 Government documents.

G.2.2.1 Specifications, standards, and handbooks. The following specifications and standards 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.

DEPARTMENT OF DEFENSE SPECIFICATIONS**MIL-PRF-28001**

Markup Requirements and Generic Style Specification for Electronic Printed Output and Exchange of Text

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

G.2.3 Non-government publications.**INTERNATIONAL ORGANIZATION FOR STANDARDIZATION****ISO 8879 (DoD adopted)**

Information Processing - Text and Office Systems - Standard Generalized Markup Language (SGML)

(Copies of this document are available for purchase online at <http://www.ansi.org> or may be ordered by mail from the American National Standards Institute, 1819 L. Street, NW, US-Washington, DC 20036.)

G.3 DIGITAL SUPPORT SUITE (DSS).

The following comprise the tools contained in the DSS used for authoring and rendering the Loading procedures checklists (CL-2 and subsequent, except CL-100) doctype.

G.3.1 Document Type Definition. to be delivered digitally in accordance with this specification shall be tagged using the Loading procedures checklists (CL-2 and subsequent, except CL-100) DTD found at the TMSS website (see G.4.1). This DTD provides the structure and content template in accordance with the detail specification. The procedure for accomplishing this is found in MIL-PRF-28001 and ISO 8879.

G.3.2 Tag Description Table. TDT provides detailed descriptions of the elements contained in the Loading procedures checklists (CL-2 and subsequent, except CL-100) DTD. The TDT contains the element tagging structure, full element name, tag minimization requirements, element structure, reference elements, source paragraph, and attribute descriptions unique to the element. See G.4.1 for information on obtaining this file in digital format.

G.3.3 Attribute Description Table. ATD provides detailed descriptions of the attributes contained in the Loading procedures checklists (CL-2 and subsequent, except CL-100) DTD. See G.4.1 for information on obtaining this file in digital format.

MIL-DTL-9977L(USAF)**APPENDIX G****G.4 OBTAINING DSS FILES.**

G.4.1 Obtaining DSS files with a .mil address. DTDs, TDTs, and other files in the DSS can be accessed at the TMSS website <https://techdata.wpafb.af.mil/tmss/index.html>. The “Baseline” menu option in the left pane, on the web page, 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 shows a list containing a PDF version of the specification and the associated appendices. To obtain the preferred DTD, select the desired appendix. 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 the DTD, FOSI, screen FOSI, ATD, and the TDT, and a “Download” button to download the entire DSS zip file.

G.4.2 Obtaining files without a .mil address. For addresses other than .mil., access to the TMSS Community of Practice (CoP) must be obtained via the Air Force (AF) Portal. To access the AF Portal, the AF Portal help desk can be reached at commercial number (334) 416-5771, option 7 or toll free at (877) 596-5771, option 7. Once access to the Portal is obtained, navigate to the TMSS CoP at <https://afkm.wpafb.af.mil/community/views/home.aspx?Filter=OO-LG-MC-38> to download the files contained in the DSS. A DSS can be downloaded by selecting the “Digital Support Suites (DSSs)” link under the “Document Management” section. A listing of the most current zip files for the DSSs appears. Select the appropriate zip file to download.

G.4.3 TMSS support. Please address any comments or questions relating to DSSs and/or specifications and standards to SGMLSUPPORT@wpafb.af.mil or to Technical Manual Specifications and Standards, ESC/HGGL, 4170 Hebble Creek Road, Building 280, Door 15, Wright-Patterson AFB OH 45433-5006.

MIL-DTL-9977L(USAF)**APPENDIX H****INTEGRATED COMBAT TURNAROUND PROCEDURES CHECKLIST
DOCUMENT TYPE DEFINITION (DTD) SUBSET****H.1 SCOPE.**

H.1.1 Scope. DTDs are based on rules outlined in MIL-PRF-28001 and ISO 8879. The DTD subset referenced within this appendix provides the structure and content templates of documents prepared in accordance with this detail specification. For digital copies of the DTD, Tag Description Table (TDT), and the Attribute Description Table (ADT), see H.4.1. This appendix is a mandatory part of this detail specification. The information herein is intended for compliance.

H.2 APPLICABLE DOCUMENTS.

H.2.1 General. The documents listed in this section are specified in sections 3, 4, or 5 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, 4, or 5 of this specification, whether or not they are listed.

H.2.2 Government documents.

H.2.2.1 Specifications, standards, and handbooks. The following specifications and standards 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.

DEPARTMENT OF DEFENSE SPECIFICATIONS**MIL-PRF-28001**Markup Requirements and Generic Style Specification for
Electronic Printed Output and Exchange of Text

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

H.2.3 Non-government publications.**INTERNATIONAL ORGANIZATION FOR STANDARDIZATION****ISO 8879 (DoD adopted)** Information Processing - Text and

Office Systems - Standard Generalized

Markup Language (SGML)

(Copies of this document are available for purchase online at <http://www.ansi.org> or may be ordered by mail from the American National Standards Institute, 1819 L. Street, NW, US-Washington, DC 20036.)

H.3 DIGITAL SUPPORT SUITE (DSS).

The following comprise the tools contained in the DSS used for authoring and rendering the (Integrated combat turnaround procedures checklist) doctype.

H.3.1 Document Type Definition. to be delivered digitally in accordance with this specification shall be tagged using the (Integrated combat turnaround procedures checklist) DTD found at the TMSS website (see H.4.1). This DTD provides the structure and content template in accordance with the detail specification. The procedure for accomplishing this is found in MIL-PRF-28001 and ISO 8879.

H.3.2 Tag Description Table. TDT provides detailed descriptions of the elements contained in the (Integrated combat turnaround procedures checklist) DTD. The TDT contains the element tagging structure, full element name, tag minimization requirements, element structure, reference elements, source paragraph, and attribute descriptions unique to the element. See H.4.1 for information on obtaining this file in digital format.

H.3.3 Attribute Description Table. ATD provides detailed descriptions of the attributes contained in the (Integrated combat turnaround procedures checklist) DTD. See H.4.1 for information on obtaining this file in digital format.

MIL-DTL-9977L(USAF)**APPENDIX H****H.4 OBTAINING DSS FILES.**

H.4.1 Obtaining DSS files with a .mil address. DTDs, TDTs, and other files in the DSS can be accessed at the TMSS website <https://techdata.wpafb.af.mil/tmss/index.html>. The “Baseline” menu option in the left pane, on the web page, 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 shows a list containing a PDF version of the specification and the associated appendices. To obtain the preferred DTD, select the desired appendix. 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 the DTD, FOSI, screen FOSI, ATD, and the TDT, and a “Download” button to download the entire DSS zip file.

H.4.2 Obtaining files without a .mil address. For addresses other than .mil., access to the TMSS Community of Practice (CoP) must be obtained via the Air Force (AF) Portal. To access the AF Portal, the AF Portal help desk can be reached at commercial number (334) 416-5771, option 7 or toll free at (877) 596-5771, option 7. Once access to the Portal is obtained, navigate to the TMSS CoP at <https://afkm.wpafb.af.mil/community/views/home.aspx?Filter=OO-LG-MC-38> to download the files contained in the DSS. A DSS can be downloaded by selecting the “Digital Support Suites (DSSs)” link under the “Document Management” section. A listing of the most current zip files for the DSSs appears. Select the appropriate zip file to download.

H.4.3 TMSS support. Please address any comments or questions relating to DSSs and/or specifications and standards to SGMLSUPPORT@wpafb.af.mil or to Technical Manual Specifications and Standards, ESC/HGGL, 4170 Hebble Creek Road, Building 280, Door 15, Wright-Patterson AFB OH 45433-5006.

MIL-DTL-9977L(USAF)**APPENDIX I****NATO STAGE B CROSS-SERVICING CHECKLIST (CLI)
DOCUMENT TYPE DEFINITION (DTD) SUBSET****I.1 SCOPE.**

I.1.1 Scope. DTDs are based on rules outlined in MIL-PRF-28001 and ISO 8879. The DTD subset referenced within this appendix provides the structure and content templates of documents prepared in accordance with this detail specification. For digital copies of the DTD, Tag Description Table (TDT), and the Attribute Description Table (ADT), see I.4.1. This appendix is a mandatory part of this detail specification. The information herein is intended for compliance.

I.2 APPLICABLE DOCUMENTS.

I.2.1 General. The documents listed in this section are specified in sections 3, 4, or 5 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, 4, or 5 of this specification, whether or not they are listed.

I.2.2 Government documents.

I.2.2.1 Specifications, standards, and handbooks. The following specifications and standards 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.

DEPARTMENT OF DEFENSE SPECIFICATIONS**MIL-PRF-28001**

Markup Requirements and Generic Style Specification for
Electronic Printed Output and Exchange of Text

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

I.2.3 Non-government publications.**INTERNATIONAL ORGANIZATION FOR STANDARDIZATION****ISO 8879 (DoD adopted)**

Information Processing - Text and
Office Systems - Standard Generalized
Markup Language (SGML)

(Copies of this document are available for purchase online at <http://www.ansi.org> or may be ordered by mail from the American National Standards Institute, 1819 L. Street, NW, US-Washington, DC 20036.)

I.3 DIGITAL SUPPORT SUITE (DSS).

The following comprise the tools contained in the DSS used for authoring and rendering the (NATO Stage B cross-servicing checklist) doctype.

I.3.1 Document Type Definition. to be delivered digitally in accordance with this specification shall be tagged using the (NATO Stage B cross-servicing checklist) DTD found at the TMSS website (see I.4.1). This DTD provides the structure and content template in accordance with the detail specification. The procedure for accomplishing this is found in MIL-PRF-28001 and ISO 8879.

I.3.2 Tag Description Table. TDT provides detailed descriptions of the elements contained in the (NATO Stage B cross-servicing checklist) DTD. The TDT contains the element tagging structure, full element name, tag minimization requirements, element structure, reference elements, source paragraph, and attribute descriptions unique to the element. See I.4.1 for information on obtaining this file in digital format.

I.3.3 Attribute Description Table. ATD provides detailed descriptions of the attributes contained in the (NATO Stage B cross-servicing checklist) manual DTD. See I.4.1 for information on obtaining this file in digital format.

MIL-DTL-9977L(USAF)**APPENDIX I****I.4 OBTAINING DSS FILES.**

I.4.1 Obtaining DSS files with a .mil address. DTDs, TDTs, and other files in the DSS can be accessed at the TMSS website <https://techdata.wpafb.af.mil/tmss/index.html>. The “Baseline” menu option in the left pane, on the web page, 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 shows a list containing a PDF version of the specification and the associated appendices. To obtain the preferred DTD, select the desired appendix. 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 the DTD, FOSI, screen FOSI, ATD, and the TDT, and a “Download” button to download the entire DSS zip file.

I.4.2 Obtaining files without a .mil address. For addresses other than .mil., access to the TMSS Community of Practice (CoP) must be obtained via the Air Force (AF) Portal. To access the AF Portal, the AF Portal help desk can be reached at commercial number (334) 416-5771, option 7 or toll free at (877) 596-5771, option 7. Once access to the Portal is obtained, navigate to the TMSS CoP at <https://afkm.wpafb.af.mil/community/views/home.aspx?Filter=OO-LG-MC-38> to download the files contained in the DSS. A DSS can be downloaded by selecting the “Digital Support Suites (DSSs)” link under the “Document Management” section. A listing of the most current zip files for the DSSs appears. Select the appropriate zip file to download.

I.4.3 TMSS support. Please address any comments or questions relating to DSSs and/or specifications and standards to SGMLSUPPORT@wpafb.af.mil or to Technical Manual Specifications and Standards, ESC/HGGL, 4170 Hebble Creek Road, Building 280, Door 15, Wright-Patterson AFB OH 45433-5006.

MIL-DTL-9977L(USAF)**APPENDIX J****NATO STAGE B CROSS-SERVICING CHECKLIST (CL2 AND SUBSEQUENT)
DOCUMENT TYPE DEFINITION (DTD) SUBSET****J.1 SCOPE.**

J.1.1 Scope. DTDs are based on rules outlined in MIL-PRF-28001 and ISO 8879. The DTD subset referenced within this appendix provides the structure and content templates of documents prepared in accordance with this detail specification. For digital copies of the DTD, Tag Description Table (TDT), and the Attribute Description Table (ADT), see J.4.1. This appendix is a mandatory part of this detail specification. The information herein is intended for compliance.

J.2 APPLICABLE DOCUMENTS.

J.2.1 General. The documents listed in this section are specified in sections 3, 4, or 5 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, 4, or 5 of this specification, whether or not they are listed.

J.2.2 Government documents.

J.2.2.1 Specifications, standards, and handbooks. The following specifications and standards 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.

DEPARTMENT OF DEFENSE SPECIFICATIONS**MIL-PRF-28001**Markup Requirements and Generic Style Specification for
Electronic Printed Output and Exchange of Text

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

J.2.3 Non-government publications.**INTERNATIONAL ORGANIZATION FOR STANDARDIZATION****ISO 8879 (DoD adopted)** Information Processing - Text and

Office Systems - Standard Generalized

Markup Language (SGML)

(Copies of this document are available for purchase online at <http://www.ansi.org> or may be ordered by mail from the American National Standards Institute, 1819 L. Street, NW, US-Washington, DC 20036.)

J.3 DIGITAL SUPPORT SUITE (DSS).

The following comprise the tools contained in the DSS used for authoring and rendering the Checklist (CL-2 and subsequent) arrangement doctype.

J.3.1 Document Type Definition. to be delivered digitally in accordance with this specification shall be tagged using the Checklist (CL-2 and subsequent) arrangement manual DTD found at the TMSS website (see J.4.1). This DTD provides the structure and content template in accordance with the detail specification. The procedure for accomplishing this is found in MIL-PRF-28001 and ISO 8879.

J.3.2 Tag Description Table. TDT provides detailed descriptions of the elements contained in the Checklist (CL-2 and subsequent) arrangement DTD. The TDT contains the element tagging structure, full element name, tag minimization requirements, element structure, reference elements, source paragraph, and attribute descriptions unique to the element. See J.4.1 for information on obtaining this file in digital format.

J.3.3 Attribute Description Table. ATD provides detailed descriptions of the attributes contained in the Checklist (CL-2 and subsequent) arrangement DTD. See J.4.1 for information on obtaining this file in digital format.

MIL-DTL-9977L(USAF)**APPENDIX J****J.4 OBTAINING DSS FILES.**

J.4.1 Obtaining DSS files with a .mil address. DTDs, TDTs, and other files in the DSS can be accessed at the TMSS website <https://techdata.wpafb.af.mil/tmss/index.html>. The “Baseline” menu option in the left pane, on the web page, 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 shows a list containing a PDF version of the specification and the associated appendices. To obtain the preferred DTD, select the desired appendix. 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 the DTD, FOSI, screen FOSI, ATD, and the TDT, and a “Download” button to download the entire DSS zip file.

J.4.2 Obtaining files without a .mil address. For addresses other than .mil., access to the TMSS Community of Practice (CoP) must be obtained via the Air Force (AF) Portal. To access the AF Portal, the AF Portal help desk can be reached at commercial number (334) 416-5771, option 7 or toll free at (877) 596-5771, option 7. Once access to the Portal is obtained, navigate to the TMSS CoP at <https://afkm.wpafb.af.mil/community/views/home.aspx?Filter=OO-LG-MC-38> to download the files contained in the DSS. A DSS can be downloaded by selecting the “Digital Support Suites (DSSs)” link under the “Document Management” section. A listing of the most current zip files for the DSSs appears. Select the appropriate zip file to download.

J.4.3 TMSS support. Please address any comments or questions relating to DSSs and/or specifications and standards to SGMLSUPPORT@wpafb.af.mil or to Technical Manual Specifications and Standards, ESC/HGGI, 4170 Hebble Creek Road, Building 280, Door 15, Wright-Patterson AFB OH 45433-5006.

MIL-DTL-9977L(USAF)**APPENDIX K****END OF RUNWAY (EOR) PROCEDURES CHECKLIST (CL-100)
DOCUMENT TYPE DEFINITION (DTD) SUBSET****K.1 SCOPE.**

K.1.1 Scope. DTDs are based on rules outlined in MIL-PRF-28001 and ISO 8879. The DTD subset referenced within this appendix provides the structure and content templates of documents prepared in accordance with this detail specification. For digital copies of the DTD, Tag Description Table (TDT), and the Attribute Description Table (ADT), see [K.4.1](#). This appendix is a mandatory part of this detail specification. The information herein is intended for compliance.

K.2 APPLICABLE DOCUMENTS.

K.2.1 General. The documents listed in this section are specified in sections 3, 4, or 5 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, 4, or 5 of this specification, whether or not they are listed.

K.2.2 Government documents.

K.2.2.1 Specifications, standards, and handbooks. The following specifications and standards 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.

DEPARTMENT OF DEFENSE SPECIFICATIONS**MIL-PRF-28001**Markup Requirements and Generic Style Specification for
Electronic Printed Output and Exchange of Text

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

K.2.3 Non-government publications.**INTERNATIONAL ORGANIZATION FOR STANDARDIZATION****ISO 8879 (DoD adopted)**Information Processing - Text and
Office Systems - Standard Generalized
Markup Language (SGML)

(Copies of this document are available for purchase online at <http://www.ansi.org> or may be ordered by mail from the American National Standards Institute, 1819 L. Street, NW, US-Washington, DC 20036.)

K.3 DIGITAL SUPPORT SUITE (DSS).

The following comprise the tools contained in the DSS used for authoring and rendering the Functional Check procedures checklists (CL-1) manual doctype.

K.3.1 Document Type Definition. to be delivered digitally in accordance with this specification shall be tagged using the End of runway (EOR) procedures checklist (CL-100) DTD found at the TMSS website (see [K.4.1](#)). This DTD provides the structure and content template in accordance with the detail specification. The procedure for accomplishing this is found in MIL-PRF-28001 and ISO 8879.

K.3.2 Tag Description Table. TDT provides detailed descriptions of the elements contained in the End of runway (EOR) procedures checklist (CL-100) DTD. The TDT contains the element tagging structure, full element name, tag minimization requirements, element structure, reference elements, source paragraph, and attribute descriptions unique to the element. See [K.4.1](#) for information on obtaining this file in digital format.

K.3.3 Attribute Description Table. ATD provides detailed descriptions of the attributes contained in the End of runway (EOR) procedures checklist (CL-100) DTD. See [K.4.1](#) for information on obtaining this file in digital format.

MIL-DTL-9977L(USAF)**APPENDIX K****K.4 OBTAINING DSS FILES.**

K.4.1 Obtaining DSS files with a .mil address. DTDs, TDTs, and other files in the DSS can be accessed at the TMSS website <https://techdata.wpafb.af.mil/tmss/index.html>. The “Baseline” menu option in the left pane, on the web page, 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 shows a list containing a PDF version of the specification and the associated appendices. To obtain the preferred DTD, select the desired appendix. 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 the DTD, FOSI, screen FOSI, ATD, and the TDT, and a “Download” button to download the entire DSS zip file.

K.4.2 Obtaining files without a .mil address. For addresses other than .mil., access to the TMSS Community of Practice (CoP) must be obtained via the Air Force (AF) Portal. To access the AF Portal, the AF Portal help desk can be reached at commercial number (334) 416-5771, option 7 or toll free at (877) 596-5771, option 7. Once access to the Portal is obtained, navigate to the TMSS CoP at <https://afkm.wpafb.af.mil/community/views/home.aspx?Filter=OO-LG-MC-38> to download the files contained in the DSS. A DSS can be downloaded by selecting the “Digital Support Suites (DSSs)” link under the “Document Management” section. A listing of the most current zip files for the DSSs appears. Select the appropriate zip file to download.

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CONCLUDING MATERIAL

Custodians:
Air Force - 16

Preparing activity:
Air Force - 16
(Project TMSS-2011-004)

Review activities:
Air Force - 01, 10, 11, 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.daps.dla.mil>.