

INCH-POUND

MIL-DTL-5096H(USAF)  
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SUPERSEDING  
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w/AMENDMENT 1  
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# **DETAIL SPECIFICATION**

## **MANUALS, TECHNICAL - INSPECTION AND MAINTENANCE REQUIREMENTS; INSPECTION WORK CARDS; AND CHECKLISTS; PREPARATION OF**



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

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

**1 SCOPE**

1.1 Scope. This detail specification covers the requirements for the preparation of inspection and maintenance requirements (-6) manuals and inspection (-6WC) work cards. This detail specification also covers the general requirements for all checklists and specific requirements for maintenance checklists (as applicable to aircraft, Communication Electronic (CE) equipment, air/ground launched missiles, drones, support/systems equipment, rockets and electronic systems). Some systems may require an inspection requirements manual only or work cards only. For other systems a combination of both inspection manual and work cards may be more suitable. This specification provides for Standard Generalized Markup Language (SGML) Document Type Definitions (DTD) usage required for preparation of manuals, workcards and checklists listed in this specification (see appendices A through F, (appendices B, C, and E have been deleted)).

1.2 Illustrations in the specification. The illustrations appearing in this specification are used only as examples. If there is any conflict between the text and illustrations of this document, the text applies.

**2 APPLICABLE DOCUMENTS**

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

2.2 Government documents.

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

DEPARTMENT OF DEFENSE SPECIFICATIONS

<b>MIL-DTL-38769</b> -	Manuals, Technical - Work Unit Code
<b>MIL-DTL-83495</b> -	Manuals, Technical - On Equipment Maintenance Manual Set

DEPARTMENT OF DEFENSE STANDARDS

<b>MIL-STD-1808</b> -	System Subsystem Sub-Subsystem Numbering
<b>MIL-STD-1798</b> -	Mechanical Equipment and Subsystems Integrity Program
<b>MIL-STD-38784</b> -	Manuals, Technical: General Style and Format Requirements

(Copies of these documents are available online at <https://quicksearch.dla.mil>.)

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

AIR FORCE TECHNICAL MANUALS

<b>TO 00-5-3</b> -	Air Force Technical Order Life Cycle Management
<b>TO 42B1-1-15</b> -	Cross Reference-NATO/ASIC Interchangeability of Aviation Fuels, Lubricants, and Allied Products

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

2.3 Order of precedence. Unless otherwise noted herein or in the contract, in the event of a conflict between the text of this document and the references cited herein, the text of this document takes

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precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

**3 REQUIREMENTS**

3.1 General. As specified by the acquiring activity (see 6.2b), each contract shall state which documents are required for aircraft, air/ground launched missiles, rockets, drones, CE, and support systems. An aircraft or ground system may require an inspection requirements manual only, or work cards only. Others may use the work cards, inspection manual, and checklist. The requirements of MIL-STD-38784 are applicable, except as otherwise specified herein.

3.1.1 General criteria. Unless otherwise specified herein, the general preparation and format for all manuals covered by this detail specification shall be in accordance with MIL-STD-38784 (see 6.6.12 for explanation of print versus electronic presentation requirements specified herein). The following exceptions apply:

3.1.2 Equipment nomenclatures. When related Organizational Maintenance Manuals (OMMs) are prepared to the requirements of MIL-DTL-83495, equipment nomenclatures in inspection manuals shall be followed by the applicable higher level designation in parenthesis. System titles in the inspection manual (-6) shall be followed by the applicable Work Unit Code (WUC) system number in parenthesis followed by the applicable System/Subsystem/Sub-Subsystem Number (SSSN). SSSN definition and assignment instructions are contained in MIL-STD-1808.

3.1.3 Security classification. When possible, the contents of the documents shall be so arranged and worded that they shall be unclassified. However, if classified information is required, it shall be prepared in accordance with MIL-STD-38784.

3.1.4 Effectivity markings. Effectivity markings, such as flag note symbols, base codes, and other indicators, shall be used to denote wing applicability, configurational differences, alternate actions, and other equipment differences. Markings shall be explained in the introduction.

3.2 Inspection and maintenance requirements (-6) manual.

3.2.1 Requirements (-6) manual. There shall be one manual prepared for the aircraft, air/ground launched missiles, rocket, drone, CE and support systems entitled: "Technical Manual, Scheduled Inspection and Maintenance Requirements." The need for additional manual(s) shall be as specified by the acquiring activity (see 6.2c).

3.2.1.1 Basis. Initial requirements as determined by the acquiring activity (see 6.2d), shall be based on technical and maintenance analysis, using the following objectives of an efficient maintenance program:

- a. To prevent deterioration of the inherent design levels of reliability and operating safety.
- b. To accomplish this protection at the minimum practical costs.

3.2.1.1.1 Requirements to be included. The manual shall include all scheduled and special inspections, replacement and check flight requirements and base level repair restrictions for the weapon system and equipment installed therein. Also included shall be requirements pertaining to the marriage of an aircraft with weapons, missiles and other stores, when applicable. The manual shall establish a complete preventive maintenance program for the weapon system to which it pertains. The inspection requirements shall reflect the requirements contained in the inspection work cards. No requirement shall be omitted.

3.2.1.1.2 Frequency requirements. The determination of each individual requirement and how frequently these requirements should be scheduled, shall be accomplished from the source data collected from the Mechanical Equipment And Subsystems Integrity Program (MECSIP) process spelled out in MIL-STD-1798, (see 2.2.1). The acquiring activity (see 6.2e), shall specify the maximum safe interval between inspections so that the weapon system is not over inspected.

3.2.1.2 Excluded information. The inspection requirements shall not explain procedures for removal or installation of equipment nor contain instructions for repair or adjustment. Reference to this type of information shall be in accordance with MIL-STD-38784.

Electronic Presentation: References shall be linked to the data to which it applies.

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3.2.1.3 Functional nature requirements. The design of a weapon or support system may include various functional systems (i.e. made up of components from several systems). In such cases, the inspections may be broken out by functional systems, as necessary, under suitable headings.

3.2.1.4 Additional considerations. Preparation of the inspection requirements may involve more than just inserting data applicable to systems or end items. The impact of a component failure upon the remainder of a functional system, the impact of a part failure upon the remainder of a functional system, and the impact of a part failure in a component shall also be considered. If visual inspection or other nondestructive inspection can be utilized to detect wear or other evidence of impending failure, those factors shall be weighed in determining scheduled maintenance. When preparing structural inspections, consideration shall be given in determining what stresses are applied to the structure and what structural components are likely to be affected.

3.2.1.5 Syntax. The syntax for stating inspection requirements shall be “Noun” followed by the adverse condition to be sought. Example: “Exhaust Nozzle for cracks and corrosion.”

3.2.1.6 Inspection intervals. To simplify recording and scheduling of inspections, all inspection intervals shall be divisible by the lowest interval, rounded to the conservative side. This information cannot be any more specific. Since this specification covers all inspection manuals, and covers all intervals from hours to years, the details need to be specified by the acquiring activity.

3.2.1.7 Components coverage. Unless otherwise specified by the acquiring activity, all installed subsystems, components, etc., shall be covered. The acquiring activity will provide a listing of any items, components or subsystems exempt from coverage (see 6.2f).

3.2.2 Arrangement and contents (-6) manual. Appendix A provides the directions for obtaining digital tools for the electronic preparation of the -6 manual. The manual shall be arranged and divided into chapters as follows:

**Front Matter**

<b>Chapter 1</b>	Scheduled Inspection and Maintenance Requirements
<b>Chapter 2</b>	Special Inspections and Maintenance Requirements (includes Depot Level Requirements, Acceptance and Functional Check Flight)
<b>Chapter 3</b>	Replacement Schedule
<b>Chapter 4</b>	Repair Restrictions

Print Presentation: The manual shall be prepared in 8 ½ by 11 inch format.

Electronic Presentation: Data for chapters 1 through 4 shall be formatted as a scrolling table viewable by section.

3.2.2.1 Front matter (-6) manual. Front matter shall be prepared in accordance with the requirements of MIL-STD-38784 except that the introduction shall contain the statements shown in figure 1, with appropriate changes for the type of equipment being addressed. The need for additional information applicable to a specific weapon system or any modifications to the introduction shall be as specified by the acquiring activity (see 6.2g).

3.2.2.2 Chapter 1 - Scheduled Inspection and Maintenance Requirements. This chapter shall contain all inspections that must be accomplished at specified intervals. To identify the various intervals, this chapter shall be divided by sections. Unless otherwise specified by the acquiring activity (see 6.2h), all sections listed in paragraphs 3.2.2.2.1 through 3.2.2.2.6 shall be used. When not required, they shall be included and marked “Not Applicable.” When specified by the acquiring activity (see 6.2i), additional sections shall be included and shall begin after the last of the required sections. These additional sections shall be of the type specified by the acquiring activity. Data shall be formatted in accordance with figure 2 with appropriate wording for the type of inspection and equipment.

3.2.2.2.1 Chapter 1, Section I - Preflight/Preoperation. This inspection shall include:

- a. Items that, due to environment, are subject to damage by outside forces, such as ground equipment, maintenance crews, elements of nature, etc.

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- b. Items that, due to design characteristics, normally require service or verification of service prior to the first flight/operation of the day.

3.2.2.2.2 Chapter 1, Section II - End of Runway. This inspection shall include:

- a. Items that are subject to damage during ground operations or are not readily apparent until after operation begins.
- b. Items, such as panels and doors, that must be secure prior to flight/operation.
- c. Items, such as down locks, safety pins, and protective covers, that must be removed prior to flight/operation.

3.2.2.2.3 Chapter 1, Section III - Thrufight. This inspection shall consist of the same type items as the basic postflight/postoperation (see [3.2.2.2.4](#)).

3.2.2.2.4 Chapter 1, Section IV - Basic Postflight/Postoperation. This inspection shall consist primarily of the following:

- a. Items that due to their operational characteristics are subject to loss of lubricant, fluids, air, etc., during flight/operation.
- b. Items that due to flight/operation are subject to damage such as impact, foreign objects, etc., during operation.
- c. Items of critical nature that are subject to developing defects which are not readily apparent to the users during operation.
- d. Items, such as down locks, safety pins, and protective covers, that must be installed prior to maintenance.

3.2.2.2.5 Chapter 1, Section V - Hourly Postflight/Postoperation. This inspection shall augment the basic postflight/postoperation requirements. It shall include requirements that fall in the following categories:

- a. Items that due to their installation characteristics are subject to excessive chafing and insecure mounting.
- b. Items that are subject to extreme heat conditions.
- c. Items that due to their design characteristics are subject to developing leaks or unusual cracks.
- d. Items that require more frequent verification of serviceability or operation than the periodic/phased/isochronal inspection interval.
- e. Items that require more frequent verification of service than the periodic/phased/isochronal inspection interval.

3.2.2.2.6 Chapter 1, Section VI - Periodic, Phased or Isochronal. The inspection (periodic, phased, or isochronal) to be used, shall be as specified by the acquiring activity (see [6.2j](#)). These inspections shall include those requirements to be accomplished at a specified interval or multiples of the specified interval. They shall consist primarily of requirements that are necessary at more extended intervals than the hourly postflight/postoperation inspection; in certain instances are more searching in scope than the hourly postflight/postoperation inspection. Isochronal inspections shall be divided into Home Station Check Inspection, Minor Inspection and Major Inspection. This section shall primarily include requirements that fall in the following categories:

- a. Items that are subject to developing defects after periods of operation in excess of the hourly postflight/postoperation inspection interval and may require disassembly to ascertain wear or deterioration that may cause failure of the unit.
- b. Items that due to their function within a system require a periodic examination or servicing less frequent than the hourly postflight/postoperation interval or in some instances, less frequent than the basic periodic/phased/isochronal inspection interval to detect impending failure or a servicing requirement.

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- c. Items that require periodic removal for bench check to determine functional reliability, extent of physical wear, and evidence of incipient failure.
- d. Items that require less frequent verification of service than the hourly postflight/postoperation interval.

3.2.2.3 Chapter 2 - Special Inspection and Maintenance Requirements. Special inspections shall include those functions to be accomplished at the expiration of a specified number of flying hours, equipment hours of operation, and lapse of calendar time. The special inspections shall also include those functions to be accomplished after the occurrence of a specific or unusual condition or incident, and when accepting an aircraft after extensive modifications. Unless otherwise specified by the acquiring activity (see 6.2k), all sections listed in paragraphs 3.2.2.3.1 through 3.2.2.3.4 shall be used. When not required, they shall be included and marked "Not Applicable." When specified by the acquiring activity (see 6.2l), additional sections shall be included and shall begin after the last required section. They shall be of the type specified by the acquiring activity. Data shall be formatted in accordance with figures 3 through 6 with appropriate wording for the type of inspection and equipment.

3.2.2.3.1 Chapter 2, Section I - Special Inspections after a specific occurrence (see figure 3). These inspections shall be designed to meet the following criteria:

- a. Items that due to their physical characteristics are subject to deterioration after long periods of service.
- b. Items that due to their structural characteristics are subject to fatigue after long periods of service.
- c. Items that due to their function within a system are subject to damage from specific events, such as hard landings, violent maneuvers, hot starts, false starts, etc.

3.2.2.3.2 Chapter 2, Section II - Depot (see figure 4). The depot section shall include inspections and maintenance to be accomplished on a scheduled calendar time cycle basis. Inspection requirements shall insure that all accessible areas and components not afforded coverage at other inspection intervals are given thorough and adequate attention. Work cards to detail these requirements shall be prepared. This chapter and section also includes Programmed Depot Maintenance (PDM).

3.2.2.3.3 Chapter 2, Section III - Acceptance and Functional Check Flight (FCF) inspection requirements (see figure 5). This section shall list those conditions which require a functional check flight to verify maintenance performed on the aircraft or its airworthy condition. Specific conditions for FCFs shall be determined for each aircraft, based upon technical conditions and operational experience. It may also be necessary to prescribe FCFs for component changes such as engines or major flight control surfaces when the possibility of failure or a malfunction of the component is greater during its initial period of operation. These types of requirements shall be related to experience factors on component failures or malfunction rates, the number of like components installed in the aircraft, the number of these items that could be changed simultaneously without creating an unacceptable safety of flight risk, and whether or not an emergency backup system is provided for use in the event of a failure of the main system. This section shall include requirements that fall in the following typical conditions:

- a. After a periodic or specific numbered phase, i.e., sixth and twelfth inspection has been completed. If a complete functional check flight inspection has been accomplished within 150 hours of a sixth or twelfth phased inspection, no functional check flight inspection will be required.
- b. When an aircraft is removed from extended storage.
- c. After fixed flight surfaces have been replaced or removed for repairs and reinstalled.
- d. After replacement or removal and reinstallation of engine main fuel control (single engine aircraft).
- e. After movable flight surfaces have been replaced or removed for repairs and reinstalled.
- f. After flight control cables, rods or actuators have been rerouted, rerigged, readjusted or replaced. A single aileron actuator change does not normally constitute a requirement for a functional check flight.



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- g. On fly-by-wire aircraft, an FCF shall be performed at the discretion of the Logistics Group Commander when work has been performed on the flight control computers.
- h. After a major structural modification or repair is accomplished.
- i. After extensive maintenance or repair is accomplished of such a scope that a test flight is determined to be necessary by the Logistics Group Commander.
- j. After a propeller or propeller governor has been replaced and/or adjusted and reinstalled (single engine aircraft).
- k. After adjustments or changes have been made to the photo system requiring a flight to insure operational capability (although this is normally an "In Flight Check," certain weapon systems may need an FCF to assure all photo systems are working correctly).
- l. After three or more engines, on a four engine aircraft, two or more engines on a three engine aircraft, or one engine on a two engine or less aircraft are replaced by new or completely overhauled engines resulting from a single maintenance action.

3.2.2.3.4 Chapter 2, Section IV - Historical Documents (see figure 6). This section shall contain a listing of specific weapon system components that require preparation of any of the historical documents Air Force Technical Order Forms prescribed by the 00-20-series technical orders. The listing shall be by WUC, nomenclature of components and form required.

3.2.2.4 Chapter 3 - Replacement Schedule (see figure 7). As specified by the acquiring activity (see 6.2m), this chapter shall include those items and components that must be removed and changed for new or overhauled like items at the expiration of a specified number of flying hours, expiration of a number of cycles, or an interval of calendar time. It shall include only those items that are readily identifiable for record purposes and that fall in the following categories:

- a. Items whose failure due to location or function within a system could compromise flight safety beyond reasonable limits and acceptable risk.
- b. Items whose failure due to location or function within a system would cause an operational or support mission to abort.
- c. Items whose cost is high and whose failure might cause damage beyond economical repair.
- d. Items whose physical characteristics are subject to deterioration from calendar time, flying hours, cycles, operation, or usage.
- e. Life sustaining items such as oxygen regulators, pressurization components, egress, or jettison system components.

3.2.2.5 Chapter 4 - Repair Restrictions. These restrictions do not apply to normal preventative maintenance actions such as cleaning, reseating, etc.

NOTE: A part number shall be preceded by the Federal Supply Class (FSC).

3.2.2.5.1 Chapter 4, Section I - Base Level Restrictions (see figure 8). This section shall contain a listing of items by WUC, noun, FSC and part number for which base level (organizational and intermediate) repair restrictions are established. A description of repair restrictions shall be provided. Items listed shall be limited to recoverable type items. Items which are Source, Maintenance and Recoverability (SMR) coded "depot repair only" shall not be listed. The part number shall consist of the basic part number for the preferred item and all substitutes. Dash numbers reflecting modifications shall not be listed.

3.2.2.5.1.1 Item selection. Selection of items to be listed in Chapter 4, Section I - Base Level Restrictions shall be as specified by the acquiring activity (see 6.2n).

3.2.2.5.1.2 Repair limitation. Repair limitations shall be stated in a manner to positively identify the repair restriction within the limitation statement without any requirement for field activities to relate the text of the introduction with the statements of the restrictions. As an example, statements such as "No Repair" and "No Repairs Requiring Disassembly" shall not be used. To permit the intent of the above statements to stand completely on their own content, the terms "No Repair Authorized" and "Repair

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Requiring Disassembly Not Authorized” shall be used. Repair restrictions shall always be worded in the form of limitations. Statements reflecting repair authorizations shall not be used as a substitute for repair restrictions to reduce the amount of coverage required.

3.2.2.5.1.3 Technical manual references. Reference to repair technical manuals is permissible but shall be kept to a minimum. References shall be in accordance with MIL-STD-38784. Where it is practical the preference is to extract repair limitations from the applicable repair technical manuals and present them in a condensed form in Chapter 4, Section I. Where it is impractical to condense repair limitations into a brief but concise statement of repair restrictions, reference to a technical order is permitted.

Electronic Presentation: References shall be linked to the data to which it applies.

3.2.2.5.2 Chapter 4, Section II - Supplemental Repair Restrictions for contingency operations. This section supplements Chapter 4, Section I, by listing additional items of equipment by WUC, noun, FSC and part number for which repair restrictions are established for contingency operations.

### 3.3 Work cards and checklists, general.

3.3.1 System series designation. Print Presentation: When the work card/checklist covers more than one system series and it is necessary to identify the series to which each page applies, the system designator for which the work card/checklist applies shall be placed at the upper binding edge of each page, i.e., F-16C/F-16D.

Electronic Presentation: The system designator (i.e., F-16C/F-16D) for which the work card/checklist applies shall be placed in the header (see 3.4.2).

3.3.2 Work card/checklist introduction. The introduction shall begin with the following standard paragraph:

“This (work card/checklist) is a step-by-step guide in abbreviated form for use as a reference to ensure accomplishment of selected tasks by a predetermined sequence procedure. The intent of this (work card/checklist) is to eliminate the probability of omission of a step in the accomplishment of the intended task. The procedures contained herein are presented in the shortest practical form for use by qualified personnel and are not intended to provide full technical instructions. This (work card/checklist) provides, in an abbreviated form, procedures for (appropriate tasks, inspections, etc.). These procedures are derived from, but do not replace, the detailed procedures contained in Technical Orders (TO). When malfunctions occur reference to the TO shall be made.”

Electronic Presentation: References shall be linked to the data that it applies.

3.3.3 Preliminary instructions. The preliminary instructions shall precede the work card/checklist task and shall contain information pertinent to accomplishment of the task, such as applicable technical manuals, mechanic or Air Force Specialty Code (AFSC) types required, and special tools or equipment required.

3.3.4 Nomenclature. First use of a nomenclature used in a work card/checklist shall be identical with the nomenclature used in any manual to which the work card/checklist applies. Further use of a nomenclature in a work card/checklist may be abbreviated. Abbreviations shall be in accordance with MIL-STD-38784.

### 3.4 Work cards.

3.4.1 Work card requirements. Separate and distinct work card sets, as they apply to the breakout of the inspection requirements chapters of the -6 inspection manual; e.g., system(s) or end item(s) of equipment, etc., shall be prepared for each type of inspection; i.e., Preflight/Preoperation, Basic Postflight/Postoperation, Hourly Postflight/Postoperation, Periodic/Phased/Isochronal, etc. When specified by the acquiring activity (see 6.2o), the preflight/preoperation shall be combined with the basic postflight/postoperation (equipment using the periodic or phased concept) or the thruflight (equipment using the isochronal concept) into one set of work cards. Work cards shall be prepared for supplemental periodic inspection requirements which become due in multiples of the particular periodic (see figure 9). If no inspection requirements manual is prepared, the work cards shall include all inspections, including event orientated special inspections.

3.4.2 Work card format. Print Presentation: Work cards shall be prepared in horizontal, 8 by 5 inch format. Unless otherwise specified by the acquiring activity (see 6.2p), work cards shall be arranged head to head. When specified, work cards shall be arranged head to foot. Spacing and arrangement



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shall be utilized to achieve uniformity. Individual inspection requirements shall be identified by double spacing between each requirement.

Electronic Presentation: Appendix [D](#) provides the directions for obtaining digital tools for the electronic preparation of work cards. Work cards shall be formatted as scrollable tables. The header and footer information (from front card) will stay fixed while the text will scroll inside of the work card. Individual inspection requirements shall be identified by double spacing between each requirement.

3.4.3 Work card arrangement. Work card sets shall be arranged as follows:

- a. Front Matter
- b. Work Area Diagrams
- c. Inspection Requirements
- d. Lubrication Requirements (Lubrication may be included with inspection items)

3.4.3.1 Work card front matter. Front matter shall be prepared in accordance with MIL-STD-38784 except the List of Effective Pages shall be titled List of Effective Cards (see [3.4.4.1](#)).

3.4.3.2 Work area diagram cards. Work area diagram cards (see figure [10](#)) shall be prepared to reflect the work area breakdown for each weapon/support system required for each type of inspection.

3.4.3.3 Inspection requirements (see figure [11](#)). The inspection requirements work cards shall reflect the requirements contained in chapters 1 and 2 of the -6 inspection manual for all areas/parts requiring inspection, lubrication, and servicing. If specified by the acquiring activity, work cards may be developed as self-contained documents and only need to be referenced in the -6 inspection manual (see [6.2q](#)). The card(s) shall cover systems, assemblies, or components logically grouped together to show an easily understood and orderly progression of inspection requirements. The cards shall contain the appropriate inspection requirement statements on the face of the card and inspection illustrations on the reverse side. If specified by the acquiring activity (see [6.2r](#)), and no inspection illustrations exist, the inspection requirement statements may flow to the reverse side of the card. The illustration shall reflect the alphanumerically identified inspection/servicing locations specified on the face of the card. Special enlarged and detailed views shall be used to identify otherwise obscured inspection items. Additional information essential to the work card requirements may be obtained from maintenance manuals and other current technical data. Work card information shall include the listing of specified pressures, torques, clearances, tolerances, fluid levels, notes, cautions, warnings, etc. When an inspected item requires a servicing action, such as hydraulic accumulator servicing, the inspection requirement shall indicate the service reference required, i.e. "Check hydraulic accumulator for proper service (if service is required refer to JG 12-10-05)". Should deviations be specified by the acquiring activity (see [6.2s](#)) (e.g. for different models of equipment) all information of a general nature, such as keys, added symbols, effectivity codes and explanatory notes shall be shown on the introduction cards. Notes shall be brief and explicit.

Electronic Presentation: Graphics shall be linked to the first step it is referencing.

3.4.3.4 Lubrication requirements (see figure [13](#)). The lubrication work cards shall show periodic lubrication requirements for all parts. Cards shall cover systems, assemblies, or components logically grouped together to show an easily understood and orderly progression of lubrication requirements. The cards shall contain the appropriate lubrication requirement statements on the face of the card and lubrication illustrations on the reverse side. The illustration shall reflect the alphanumerically identified lubrication locations specified on the face of the card, the lubricants required for each location, and a symbol indicating the method of application. Special enlarged and detailed views shall be used to identify otherwise obscured lubrication items. Lubrication work cards text shall be brief and explicit, providing the necessary lubrication information and shall present complete lubrication requirements without need for other manuals. Should deviations be specified by the acquiring activity (e.g. for different models of equipment), (see [6.2t](#)), all information of a general nature such as keys, added symbols, effectivity codes and explanatory notes shall be shown on the introduction cards. The lubrication requirement work cards shall be included within specific mechanic type groups.

Electronic Presentation: Graphics shall be linked to the first step it is referencing.

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3.4.4 Work card preparation. Work cards shall be prepared in accordance with 3.4.4.1 through 3.4.4.15 and figures 11 and 13.

Electronic Presentation: The fixed footer row may be left off when it is identical to fixed header row.

3.4.4.1 Card number. Each work card shall be assigned one number which shall appear on the front and back of the card (including front matter cards). If the back of the card has no data it shall be blank. Each card shall be numbered consecutively with a three digit number starting with 001 for the first card of each set, except front matter cards which shall be numbered in accordance with MIL-STD-38784. Where the set is divided into chapters, card numbers shall be preceded by the chapter number. For example: Chapter 1, card 10 would be 1-010; Chapter 2, card 22 would be 2-022. These blocks do not apply to the phased inspection cards (see 3.4.4.1.1).

Electronic Presentation: Work cards shall only be enumerated on new card elements.

3.4.4.1.1 Phased inspection card number. Each card shall be assigned a sequential number which shall appear on the front and back of the card. When specified by the acquiring activity (see 6.2u), card numbers shall be prefixed according to their groupings or applicable phase (e.g. first phase, second phase, etc.).

Electronic Presentation: Data shall be formatted as a scrolling table.

3.4.4.2 Work area(s). These blocks shall list the work area or areas in which the tasks listed on the card shall be performed. The work area numbers shall be obtained from the work area diagram. When more than one work area is involved, the work area numbers shall be listed in the order in which the areas will be occupied.

3.4.4.3 Type mechanic required. This entry shall identify the type mechanic or specialist (e.g., AIRCRAFT, ENGINE, HYDRAULIC, etc.) required to accomplish the tasks listed on the card. Where assistance is required by a type mechanic other than that listed, an "Assisted by mechanic type" note shall be added to the beginning of the task.

3.4.4.4 Mechanic number required. This entry shall identify the number of specialists required to accomplish the tasks outlined on the work card.

3.4.4.5 Card time. This entry shall indicate the amount of time needed to accomplish the tasks prescribed by the card. This shall be the total time required for all items reflected in the body of the card. Time shall be indicated in hours and minutes; i.e., 02:15, 01:40, 00:25, etc. All time shall be reflected to the nearest minute and reflected in four digits.

3.4.4.6 Technical manual identification and change numbers. The technical manual identification number and change number shall be placed in the respective blocks. Neither the publication nor change dates shall be given.

3.4.4.7 Body heading (inspection requirements). An entry shall be made in this block to indicate the type of inspection for which the card set applies. For example: Preflight, Basic Postflight, Periodic, 100 hour, 200 hour, 180 days, etc.

3.4.4.8 Electrical power.

- a. When power is required during the accomplishment of the tasks entered on the card, the word "ON" shall be placed in this block.
- b. When it is mandatory that power be off during the accomplishment of the tasks entered on the card, the word "OFF" shall be placed in this block.
- c. When power may be on or off during the accomplishment of the tasks entered on the card, this block shall be left blank.
- d. Power on and off requirements shall normally not be stated on the same card except when necessary for continuity of the operation, in which case, the word "ON/OFF" shall be placed in this block and each power ON requirement shall be preceded by an "at" (@) symbol in the body of the card.

3.4.4.9 Service. When specified by the acquiring activity (see 6.2v), this block shall be completed, otherwise it shall be left blank. When service must be interrupted to accomplish the tasks on the card, the

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word “OUT” shall be placed in this block. When service need not be interrupted to accomplish the tasks on the card, the word “IN” shall be placed in this block. When there are both in and out of service conditions relating to the tasks on the card, the words “IN/OUT” shall be placed in this block.

3.4.4.10 Figure. Unless otherwise specified by the acquiring activity (see 6.2w), this block shall be left blank. When specified by the acquiring activity, figure numbers or other identifier shall be assigned to the figures on each card and this shall be inserted in the figure block.

3.4.4.11 Man-minutes column. The man-minutes required to accomplish each individual inspection item shall be entered in this column. If work cards contain a series of short time items, a horizontal dash may be placed on the line for the first and last items of the group and the time may be made as a single entry midway between the two horizontal dashes.

3.4.4.12 Work area column. The work area in which each item or items will be accomplished shall be listed in this column.

3.4.4.13 WUC column. Unless otherwise specified by the acquiring activity (see 6.2x), the WUC column shall use two columns, (system and subsystem columns, see 3.4.4.13.1, 3.4.4.13.2, and figure 11). If specified by the acquiring activity, WUC entries into this column shall be in one column utilizing the WUC in its entirety as defined by MIL-DTL-38769 (see figure 12).

3.4.4.13.1 WUC system column. The first two digits of the WUC are used to designate a system. Entries shall be made in this column to denote the system WUC number for each item. Requirements of a general nature, which cannot be coded to a specific system, shall not be coded. Wire bundles are an example of this category.

3.4.4.13.2 WUC subsystem column. Entries shall be made in this column to denote the WUC subsystem and component number for each item. Coding of other requirements shall be accomplished to the appropriate level. This level may be to the third, fourth, or fifth digit. Routine servicing and lubrication items shall not be coded since these items are covered by support general codes.

3.4.4.14 References. All requirements for operational checks or adjustments shall include specified instrument readings, tolerances, etc., or reference to applicable technical manuals in which the information may be found. Requirements to be included in the work cards are not collectively reflected in a single manual. Therefore, these requirements must be obtained from several sources, including service tests, service experience, contractor's recommendations, and technical manuals.

Electronic Presentation: If the capability exists, references to other Technical Manuals shall be linked to the TO that they apply.

3.4.4.15 Lubrication symbols. A lubrication symbol shall consist of a North Atlantic Treaty Organization (NATO) number (reference TO 42B1-1-15) or a specification number, an application symbol (see figure 14), and an alphanumeric identifier corresponding to the lubrication location. Special notes shall be included when necessary. The lubrication symbol shall have a leader line extending to the point on the diagram, or drawing, that requires servicing. The symbol shall designate one point of servicing; however, several leader lines may branch from the main leader to designate adjacent points of servicing.

3.4.5 Inspection requirements cards. If the inspection requirement cards are divided into Preflight, Basic Postflight, etc., each group shall be preceded by a introduction card. The inspection work cards shall be arranged so that preparation requirements precede the inspection requirements. These requirements shall identify the tasks necessary to prepare the system/equipment for each inspection, e.g., listing of special tools, test equipment, etc. Inspection work cards of each set shall be arranged so as to provide distinct groups for each type of mechanic or specialist required to perform the inspection. In the case of periodic/phased/isochronal inspections, the set shall be divided into major groups and subgroups; that is, if predock work cards are provided, they would be the first group, the dock inspection work cards would be the next group and the postdock cards would be the third group, each group subgrouped by mechanic type.

3.4.5.1 Special inspections. Special inspection requirements to be accomplished on an event oriented basis shall not have inspection work cards prepared except as specified in 3.4.1.

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3.4.5.2 Servicing. Servicing work cards shall be prepared to cover all items that require scheduled service, i.e., aircraft batteries, hydraulic reservoirs, etc.

3.4.5.3 Phased inspection work cards.

3.4.5.3.1 Workload requirements. Determination of the total workload requirements shall be as specified by the acquiring activity (see 6.2y) and shall reflect a breakdown of the number of items and man-hours required by interval groupings of basic and hourly postflight and subsequent hourly intervals for which inspections are prescribed. A listing of equipment, by systems, for which there is an inspection requirement, shall be as specified by the acquiring activity (see 6.2z) and shall include the inspection interval, the time required to make the inspection, and the work areas of the aircraft or equipment in which the item is located.

3.4.5.3.2 Interval. Determination of the interval at which phased inspections will be made shall be as specified by the acquiring activity (see 6.2aa).

3.4.5.3.3 Number of packages. Inspection requirements shall be grouped into approximate equal workloads for each package. As far as possible, associated items shall be grouped together. If an area is opened up for inspection or lubrication, then any other necessary inspection or lubrication in the same area shall be phased in at the same time. The workload shall be distributed in such a way as to avoid repeated movement of access or ground support equipment, etc. Care shall be taken to put all items located in the same difficult access area in the same package to minimize time involved in gaining access to the equipment.

3.4.5.3.4 Combining packages. Instructions on whether phased packages can be combined and the number of packages authorized at one time for an approved inspection shall be as specified by the acquiring activity (see 6.2ab) and reflected in the introduction of the phased work cards. Typical statements are: "Accomplishment of multiple packages for interval greater than the basic phased interval is not authorized," or "Combining 2 packages for a 50 hour interval or 4 packages for a 100 hour interval is authorized. Combination of more than 4 packages for other intervals is not authorized."

3.4.5.4 Periodic inspection work cards. Periodic inspection work cards shall reflect the requirements in the inspection manual and shall provide for a complete inspection of the aircraft or equipment.

3.4.5.5 Isochronal inspection work cards. Isochronal inspection work cards shall reflect the requirements in the inspection manual. The following inspection work cards shall be included in isochronal inspections:

- a. Home station check inspection work cards.
- b. Minor inspection work cards.
- c. Major inspection work cards.

3.5 Checklists (see figure 15). Appendix F provides the directions for obtaining digital tools for the electronic preparation of checklists.

3.5.1 Checklist front matter. Front matter shall be prepared in accordance with MIL-STD-38784.

3.5.2 Checklist size and arrangement. Print Presentation: Unless otherwise specified by the acquiring activity, checklists shall be prepared in 5 by 8 inch size (see 6.2ac) and be arranged head to head. When specified by the acquiring activity, checklists shall be prepared in 8 ½ by 11 inch size and/or be arranged head to foot (see 6.2ad). When arranged head to foot, the technical manual identification number shall be at the upper right and, the page and change numbers shall be in the lower right.

Electronic Presentation: Data shall be formatted as a scrolling table.

3.5.3 Style and format of text pages. Text shall be single spaced, except between procedural steps where double spacing shall be used.

Print Presentation: Style, format, and numbering shall be in accordance with MIL-STD-38784 except that if the checklist chapters bear titles such as Normal Procedures, Emergency Procedures, Alert Procedures, etc., the pages of each chapter shall be numbered N-1, N-2; E-1, E-2; A-1, A-2; etc.

Electronic Presentation: Normal Procedures, Emergency Procedures, Alert Procedures, etc., shall be identified in the TOC and linked to the data in which it applies.

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3.5.4 Illustrations. Illustrations shall be included only when absolutely necessary to preclude continuous reference to critical data in applicable maintenance manuals. They shall be limited to charts or graphs that contain information which is variable such as temperature or humidity stabilization prior to testing.

3.5.5 Maintenance/operation (non-flight crew) checklists. The parent manuals shall be used as the source documents for obtaining the basic checklist requirements. Checklists shall condense required tasks. They shall standardize, control, integrate, and time phase tasks. They shall be prepared to prevent potential injury or loss of life to personnel. Tasks shall be listed in the most logical and convenient sequence of accomplishment. Checklists shall tell what to do and when it shall be accomplished. They shall not contain instructions on how to do a task.

3.5.5.1 Maintenance/operation (non-flight crew) checklist format. Checklist tasks shall be presented in a demand/response format, when practical, with the demands at the left and the responses at the right. The responses shall be in upper case letters or figures. Blank lines shall be provided to the right of the responses as check spaces. If insufficient space is available, the blank line shall be entered below each response. Normal readings (and tolerances, if applicable) shall be shown in the response column. Leaders shall be inserted between the columns; e.g. "Demand.....Response". The demand/response presentation need not consist of a complete sentence. The function title shall be in upper case letters and shall be underlined. All controls such as switch names and switch positions shall be as marked on the hardware. All other tasks shall have only the first letter of the first word capitalized. When checklist procedures are written for individual performance (such as motor vehicle inspection and operation), the demand/response format need not be followed.

Print Presentation: Each new function within a checklist shall be started on a new page.

Electronic Presentation: Data shall be formatted as a scrolling table.

3.5.5.2 System/Subsystem/Sub-Subsystem Number (SSSN) (maintenance checklists only). Some checklists are prepared from parent OMMs, the checklists are produced in accordance with MIL-DTL-83495.

Print Presentation: When applicable, SSSN numbers shall be included on the applicable pages in accordance with MIL-STD-38784.

Electronic Presentation: The SSSN shall be marked on the TOC. There are no specific requirements for running footer info regarding a SSSN. If the capability exists, the SSSN shall be placed on the bottom left corner of the viewing area to which it applies.

3.5.5.3 References (other manuals). The applicable maintenance and/or operation manual may be referenced at the end of the task in order to provide additional information to accomplish, amplify or clarify a procedure, or to correct a discrepancy or malfunction that may develop when accomplishing the task. Tasks shall be grouped into major functions.

Electronic Presentation: If the capability exists, references shall be linked to the data to which they apply

3.5.5.4 Emergency procedures. Emergency procedures shall be included within the normal checklist and shall also be contained at the end of the checklist. If the same emergency is likely to occur in more than one phase of the checklist, the emergency procedures shall be repeated for each occurrence. Emergency procedures at the end of the checklist shall be numbered separately as required by 3.5.3.

## **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 accomplished as specified (see 6.2ae and 6.8).

4.2 Compliance. Technical Manuals (TMs) shall meet all requirements of section 3 and the appropriate markup language tools appendix (see appendices A through F, (appendices B, C, and E have been deleted)) of this specification, as specified by the acquiring activity (see 6.2). The requirements set forth in this specification shall become a part of the contractor's overall inspection system or quality program. The absence of any requirements in this specification shall not relieve the contractor of the responsibility of ensuring that all products or supplies, submitted to the government for acceptance, comply with all

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requirements of the contract. Use of sampling inspections shall be at the discretion of the contractor, and in accordance with commercially acceptable quality assurance procedures. However, use of sampling in QA procedures does not authorize submission of known defective material, either indicated or actual, nor does it commit the government to accept defective material.

**5 PACKAGING**

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

**6 NOTES**

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

6.1 Intended use. Technical manuals, work cards, and charts prepared in accordance with this specification are intended for use by Air Force organizational, intermediate and depot maintenance activities as a guide for performing preventative maintenance (i.e., isochronal, programmed depot maintenance, combined type, etc.) found in the 00-20-series technical manuals, on Air Force equipment. Checklists are intended to be used by operations and maintenance personnel to ensure that no step is overlooked. The military unique requirements for the technical data covered by this specification are contained in 00-20-series TOs.

6.2 Acquisition requirements. Acquisition documents should specify the following:

- a. Title, number, and date of this document.
- b. Types of manuals required (see 3.1).
- c. If more than one inspection and maintenance requirements manual may be prepared (see 3.2.1).
- d. Basis for inspection and maintenance requirements (-6) manual (see 3.2.1.1).
- e. Maximum safe interval between inspections of weapon system (see 3.2.1.1.2).
- f. If component coverage will be other than as specified in this document and, if so, items exempt from coverage (see 3.2.1.7).
- g. If additional information applicable to a specific weapon system or any modifications to the introduction is required (see 3.2.2.1).
- h. If any specified sections in chapter 1 of inspection and maintenance requirements (-6) manual will not be used (see 3.2.2.2).
- i. If additional sections in chapter 1 of inspection and maintenance requirements (-6) manual will be included and type required (see 3.2.2.2).
- j. Inspection concept (periodic, phased, or isochronal) to be used (see 3.2.2.2.6).
- k. If any specified sections in chapter 2 of inspection and maintenance requirements (-6) manual will not be used (see 3.2.2.3).
- l. If additional sections in chapter 2 of inspection and maintenance requirements (-6) manual will be included and type required (see 3.2.2.3).
- m. Items and components that must be removed and changed for new or overhauled like items at the expiration of a specified number of flying hours, expiration of a number of cycles, or an interval of calendar time (see 3.2.2.4).
- n. Selection of items to be listed in Chapter 4, Section I - Base Level Restrictions (see 3.2.2.5.1.1).



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- o. If the preflight/preoperation inspection will be combined with the basic postflight/postoperation (periodic or phased concept)/thruflight (isochronal concept) inspection (see 3.4.1).
- p. If work cards will be head to foot (see 3.4.2).
- q. If work cards are to be developed as self-contained documents (see 3.4.3.3).
- r. If inspection requirement statements are to flow to the reverse side of the card (see 3.4.3.3).
- s. If deviations are required for inspection requirements (see 3.4.3.3).
- t. If deviations are required for lubrication requirements (see 3.4.3.4).
- u. If phased inspection card numbers will be prefixed (see 3.4.4.1.1).
- v. If the service block will be completed (see 3.4.4.9).
- w. If the figure block will be completed (see 3.4.4.10).
- x. If WUC column is to use two columns or one column (see 3.4.4.13).
- y. Workload requirements for phased inspection work cards (see 3.4.5.3.1).
- z. A listing indicating equipment, by system, for which there is an inspection requirement (see 3.4.5.3.1).
- aa. Interval at which phased inspections will be made (see 3.4.5.3.2).
- ab. Instructions on whether phased packages can be combined and the number of packages authorized at one time for an approved inspection (see 3.4.5.3.4).
- ac. If checklist size will be 8 1/2 by 11" inch size (see 3.5.2).
- ad. If checklist arrangement will be head to foot (see 3.5.2).
- ae. The requirements for tests, reviews, and verifications specified for manuals developed under this specification (see 4.1).
- af. Packaging requirements (see 5.1).

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

6.4 Coordination. The procuring activity, after coordination with the using command(s), will specify the publication(s) required. An inspection requirements manual and work card set will be developed for each system i.e., aircraft, C-E, support equipment, etc.

6.5 Additional information. Additional information relative to Air Force aircraft, missile and space weapon inspection systems, policies, and procedures may be obtained from the 00-20-series technical orders.

6.6 Definitions. To clarify the terms used throughout this specification, the following definitions are given:

6.6.1 Acceptance inspection. An inspection that will be performed on all newly assigned or extensively modified aircraft, drones, missiles, and support equipment to determine mechanical fitness for flight or use and which usually requires an FCF or Functional Check.

6.6.2 Accessible. A term applied to equipment that may be inspected without further disassembly or removal of covers, cowling, closures, panels, etc, other than those required to accomplish the more specific requirements applicable to the particular inspection.

6.6.3 Basic postflight/postoperation inspection. This inspection is a visual examination of certain components, areas, or systems, to assure that no defect exist which would render the aircraft/equipment unsuitable for flight/use. Primary items check are as follows:

- a. Items that due to their operational characteristics are subject to loss of lubricant, fluids, air, etc., during flight/operation.

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- b. Items that due to and during flight/operation are subject to damage such as impact, foreign objects, etc.
- c. Items of critical nature that are subject to developing defects which are not readily apparent to the users during operation.
- d. Items, such as down locks, safety pins, and protective covers, that must be installed prior to maintenance.

6.6.4 Cautions. A caution is a short message which calls attention to an essential 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.

6.6.5 End item. Entity of hardware which is not to be installed in another piece of equipment. The end item for the weapon/support system could be the aircraft, rocket, drone, training device, etc.

6.6.6 End of Runway inspection. This inspection detects critical defects which may have developed during ground operation. Items checked are those subject to damage during ground operations or are not readily apparent until after operation begins. Also checked are items such as panels and doors, that must be secure prior to flight/operation, and down locks and protective covers, that must be removed prior to flight/operation.

6.6.7 Excessive. Condition which has progressed to the degree that, if not corrected, could result in failure or malfunction of the component prior to the next scheduled accomplishment of the requirement which directed attention to the condition.

6.6.8 Functional system. Those units which make up a system without regard to whether the units are hydraulic, electrical, pneumatic, electronic, or mechanical in nature. The components which comprise a functional system are those components which contribute to the actual function or activation of the system. For example, the components which supply the hydraulic source of power are included under the hydraulic system, whereas a flight control actuator which is hydraulically operated is included under the flight control system, which is a functional system.

6.6.9 Home station check inspection. Home station check inspections are accomplished after return from a long range mission or at expiration of a short term calendar period. Home station check inspections are accomplished in conjunction with the minor and major inspections.

6.6.10 Hourly postflight/postoperation inspection. An inspection which includes those requirements to be accomplished at a specified interval (hours/cycles) or multiples of the specified interval that are necessary to assure no condition exists in a known problem area that would be detrimental to the safety of flight operation. These requirements augment the basic postflight/postoperation requirements. Included are requirements that fall in the following categories:

- a. Items that due to their installation characteristics are subject to excessive chafing and insecure mounting.
- b. Items that are subject to extreme heat conditions.
- c. Items that due to their design characteristics are subject to developing leaks or cracks.
- d. Items that require more frequent verification of serviceability or operation than the periodic/phased/isochronal inspection interval.
- e. Items that require more frequent verification of service than the periodic/phased/isochronal inspection interval.

6.6.11 Isochronal inspections. Isochronal inspections are accomplished based upon calendar periods of equal duration and recurring at regular intervals.

6.6.12 Linear Technical Manual (TM) print versus electronic presentation requirements. Within this detail specification, requirements labeled as electronic or print presentation are defined as follows:

- a. Electronic presentation: Specifies requirements that apply to TM data that are displayed on an electronic/digital system, such as various kinds of work station computers, or portable electronic devices. These requirements only apply to technical data composed as linear Electronic TMs

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(ETMs), i.e., linear structured compositions to be rendered in HTML for display in a browser. Requirements for digital nonlinear data, Interactive ETMs (IETMs) or Interactive Electronic Technical Publications (IETPs), are contained in a separate specification.

- b. **Print presentation:** Specifies requirements that apply only to page-oriented and printed TMs. Print presentation requirements apply overall to PDF TM files, with some exceptions, as specified by the acquiring activity. For example, in the case of references, electronic linking requirements should apply.

6.6.13 **Major inspection.** Major inspections consist of inspections to determine if conditions exist which could result in failures or malfunctions prior to the next scheduled inspection and are more searching in scope than the home station check and minor inspections.

6.6.14 **Minor inspection.** Minor inspections consist of inspections to determine if conditions exist which could result in failures or malfunctions prior to the next scheduled inspection and are more searching in scope than the home station check inspection.

6.6.15 **Notes.** A note is a short message which describes an unusual procedure or condition to which special attention must be paid for any reason (but it may not replace a caution or warning.)

6.6.16 **Parent manuals.** Parent manuals are those that contain complete operational and maintenance instructions and from which checklist items are extracted.

6.6.17 **Periodic inspection.** Periodic inspections are accomplished upon accrual of a number of flying hours, operating hours, or at the expiration of a calendar period.

6.6.18 **Planned inspection concept.** Method of performing specific preventive maintenance and inspection requirements on a scheduled basis and predetermines the numbers and skills of maintenance personnel required to accomplish the predictable portion of the inspection. It effectively utilizes maintenance personnel in accordance with their skills against a time schedule using work cards and sequence charts.

6.6.19 **Preflight/preoperation inspection.** A (flight) preparedness inspection that checks items that, due to environment, are subject to damage by outside forces, such as ground equipment, maintenance crews, elements of nature, etc. This inspection also checks items that, due to design characteristics, normally require service or verification of service prior to the first flight/operation of the day.

6.6.20 **Preventive maintenance.** The normal inspection, upkeep, and lubrication of equipment which may be required to maintain serviceability of equipment which has been subjected to usage, wear and deterioration.

6.6.21 **Special inspection.** An inspection which supplements other inspections (daily, preoperation, periodic, flying hours, operating hours, or calendar) and are accomplished because of specific circumstances or upon occurrence of specific conditions or events. This may also include those requirements having a prescribed interval or frequency which do not coincide with the scheduled periodic, phased or isochronal inspection.

6.6.22 **Special inspection and maintenance requirements.** The special inspection acceptance and functional check flights, depot level inspection, and maintenance level requirements are performed to determine item or weapon system serviceability. Special inspections include the following:

- a. Functions to be accomplished at the expiration of a specified number of flying hours, equipment hours of operation, and lapse of calendar time.
- b. Functions to be accomplished after the occurrence of a specified or unusual condition or incident, and when accepting an aircraft after extensive modifications.

6.6.23 **Support equipment.** All articles required to make a weapon system, command and control system, support system, advanced objective, subsystem, or end item or equipment operational in its intended environment. This includes all equipment required to install, launch, arrest, guide, control, direct, inspect, test, adjust, appraise, gage, measure, assemble, disassemble, handle, transport, safeguard, store, actuate, service, repair, overhaul, maintain, or operate the system, subsystem, end item, or component. This comprises special tools and test devices, including measurement standards required for support of items supporting equipment.

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6.6.24 Thruflight inspection. This inspection is a between flights general visual examination of certain components, areas, or systems, to assure that no defects exist which would render the aircraft unsuitable for flight continuance.

6.6.25 Warnings. A warning is a short message which calls attention to an essential operating or maintenance procedure, practice, condition, statement, etc., which, if not strictly observed, could result in injury to, or death of personnel or long term health hazards.

6.6.26 Work Unit Code. A code used to identify the equipment for a weapon/support system by system, subsystem and component breakout consisting of a combination of five numeric and alphabetic characters. These codes are contained in a WUC (-06) Manual.

6.7 Subject term (key word) listing.

Acceptance Inspection  
Inspection Manual  
Isochronal Inspection  
Periodic Inspection  
Phased Inspection

6.8 TM verification requirements. See 4.1. The Air Force Technical Order Policy and Procedures (AF TOPP) team, AFMC/A4FI, 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).

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

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## INTRODUCTION

1. PURPOSE AND SCOPE.

This manual contains complete requirements for accomplishing scheduled maintenance on this aircraft during its entire service life. It establishes inspection, accessory replacement, and functional check flight requirements for the aircraft and airborne equipment. The requirements prescribed by this manual are primarily those which are technical in nature and the conditions listed are intended to direct attention to known problem areas where defects or malfunctions would prevent the items from performing their designed functions within prescribed limits. These requirements are developed for new aircraft through maintenance engineering experience and comparison of similar installations on in-service aircraft. They are refined and changed during the service life of the aircraft by continually evaluating the performance of the equipment, results of scheduled maintenance, and through study of factual operating data for the primary use of the aircraft. The interval between the accomplishment of a requirement is intended to be the longest period of time that an item or component can safely operate without an inspection or observation. When an aircraft is operated in other than the primary purpose of major use class, the requirements have been adjusted accordingly, if necessary, and the requirements and inspection intervals are the maximum and should never be exceeded. Local conditions (type of missions, special utilization, geographical locations, etc.) may dictate more frequent inspection or replacement, or more thorough inspections. Therefore, commands, local commanders, and their maintenance officers are expected to exercise their prerogative to increase the frequency or scope of any requirement as required.

1.1 Limitations. This manual does not contain detailed instructions for troubleshooting to find causes for malfunctioning, nor does it contain instructions for repair, adjustment, or other means of rectifying defective conditions. Proper installation of a piece of equipment or accessory is not necessarily within the scope of this manual as adequacy and completeness of installation will have been determined at the time of installation. Further, it does not normally contain informative or precautionary data such as notes, cautions, and warnings. Applicable portions of the appropriate maintenance manuals should be consulted to obtain the maintenance instructions as they are beyond the scope of this manual.

1.2 Applicability. This manual may pertain to some or all types and series of a model of aircraft and may, therefore, contain requirements applicable to specific equipment that is not installed on an individual aircraft. When this situation is encountered, those requirements that are not applicable should be disregarded.

1.3 Performance of inspections. The inspections prescribed by this manual will be accomplished at specified periods by Air Force organizational activities with assistance by intermediate maintenance and depot activities when required. Compliance with the provisions of this manual is required to assure that latent defects are discovered and corrected before malfunctions or serious failures occur.

2. INSPECTION REQUIREMENTS.

The inspection requirements establish what equipment is to be inspected, when it is to be inspected, and what conditions are to be sought. The requirements are designed to direct the attention of maintenance personnel to components and areas where defects are suspected to occur as a result of usage under normal operating conditions. They are not intended to provide coverage for routine cleaning, washing, etc, nor are they designed to lead to the detection of isolated discrepancies that are the result of carelessness, abuse, or poor maintenance practices. During accomplishment of the specified requirements directed by this manual, maintenance personnel should observe both the equipment being inspected and the components in the surrounding area for defects or irregularities not within the scope of the requirements. Inspections requiring the use of electrical power for accomplishment are identified by the commercial "at" symbol (@) preceding the requirements. Requirements in this manual are not in sequence; applicable work cards will specify the sequence.

2.1 Replacement Schedule. The replacement schedule lists items whose expected service life has been determined. The failure of these items would compromise safety, mission accomplishment, or cause failure or condemnation of high value components. Items not listed will be known as: "on condition items" and will be replaced only when necessary.

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FIGURE 1. Example Introduction (-6) manual.

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2.2 Functional Check Flight (FCF). In conjunction with TO 1-1-300, this manual provides the conditions requiring a Functional Check Flight. They are designed to assure the aircraft is operational and capable of mission accomplishment after completion of certain scheduled or unscheduled maintenance. Detailed procedures are contained in the applicable Acceptance and Functional Check Flight Procedures manual.

2.3 Repair Restrictions. The repair restrictions chapter lists items (by work unit code, nomenclature, federal stock class (FSC), and part number) for which base level repair restrictions have been established and describes the repairs which are not authorized.

2.4 Historical Documents. The historical documents section of Chapter 2 contains a listing of all airplane components that require preparation of AFTO Forms. The forms provide a permanent record of events or conditions encountered during the use of the equipment. The information documented in these forms will be used to plan required logistic and maintenance procedural support.

2.5 Time Requirements. The Minutes column in Chapters 1, 2, and 3 provides the estimated time in man-minutes for accomplishment of each requirement and reflects only the time required for inspection or replacement. They do not include time required to gain access to the equipment or those factors (personnel and equipment shortages, lack of parts, adverse working conditions, and qualifications of personnel) which could affect the length of time for any maintenance action.

### 3. DEFINITIONS OF TERMS.

For clarification, the following definitions are given:

a. Specified – refers to a definite amount, operation, or limitation which has been established and is contained in applicable directives.

b. Evidence – is an indication of an existing or impending unsatisfactory condition.

c. Security – means the component is properly mounted or attached to related equipment, including applicable safety wiring.

d. Accessible – is the term applied to equipment that may be inspected without further disassembly or removal of panels, cowling, etc., other than those required to accomplish the more specific requirements applicable to the particular inspections.

e. Excessive – is a term used to describe conditions when specific limitations have not been established. A condition is excessive if it has progressed to the degree that, if not corrected, could result in failure or malfunction of the component prior to the next scheduled action which would direct attention to the condition.

### 4. UPDATES.

Changes and supplements to this manual will be published when necessary to add, delete or change frequency or scope of requirements. Such changes will be based on factual data accumulated as a result of maintenance experience with the aircraft and equipment. Recommendations proposing changes to this manual should be submitted on AFTO Form 22 in accordance with TO 00-5-1 to (insert appropriate agency).

**FIGURE 1. Example Introduction (-6) manual - Continued.**



## MIL-DTL-5096H(USAF)

TO 1E-3A-6

**CHAPTER 1**  
**SCHEDULED INSPECTION REQUIREMENTS**  
**SECTION VI**  
**PHASE INSPECTION REQUIREMENTS**

1. THIS INSPECTION WILL BE ACCOMPLISHED ON THE ACCRUAL OF A SPECIFIED NUMBER OF FLYING HOURS AFTER DELIVERY AS DESCRIBED IN THE INTRODUCTION. THE INSPECTION WILL CONSIST PRIMARILY OF CHECKING COMPONENTS, AREAS, AND SYSTEMS OF THE AIRCRAFT WHICH, DUE TO THEIR FUNCTION, REQUIRE LESS FREQUENT INSPECTION THAN POST FLIGHT. THE PURPOSE OF THE INSPECTION IS TO ENSURE THAT NO CONDITION EXISTS WHICH, IF NOT CORRECTED, COULD RESULT IN A COMPONENT FAILURE OR SYSTEM MALFUNCTION PRIOR TO THE NEXT SCHEDULED INSPECTION.
2. THE COMMERCIAL AT (@) CODE USED IN THIS MANUAL INDICATES A POWER-ON REQUIREMENT. LUBRICATIONS TO BE PERFORMED FOLLOWING AIRCRAFT WASHING ARE IDENTIFIED BY THE SYMBOL ({}).
3. WITH THE EXCEPTION OF PREPARATION, BUTTON-UP AND POST-DOCK ACTIONS WHICH ARE EXCLUDED, THE REQUIREMENTS LISTED HEREIN CORRESPOND TO THOSE IN THE INSPECTION WORKCARDS AND THUS PROVIDE A CROSS REFERENCE TO THE PHASE AND WORKCARD NUMBER WHERE THE INSPECTION IS PERFORMED.
4. WHEN EXTENDED MISSION REQUIREMENTS DICTATE, MULTIPLE PHASING OF AIRCRAFT, I.E. ONE OR MORE PHASE INSPECTIONS MAY BE ACCOMPLISHED PER TO 00-20-5 AND IS AUTHORIZED BY THE SPM AND MAJCOM AT THE MAIN OPERATING BASE ONLY.

WORK UNIT CODE	WORK CARD NUMBER	PARA- GRAPH	CHAPTER 1, SECTION VI PHASE INSPECTION REQUIREMENTS	MIN- UTES	WORK AREA
<b>AIRCRAFT (SYSTEM 11000)</b>					
<b>230 HOUR</b>					
11---	A-006	1.	INSPECT ALL REMOVED DOORS AND PANELS FOR CRACKS, CORROSION, AND DELAMINATION. Latching AND ATTACHING MECHANISMS FOR WEAR, DISTORTION AND DAMAGE. SEALS FOR WEAR AND DETERIORATION.	340	AR
11AC	A-018	1.	FLIGHT DECK WINDOWS FOR CRACKS, DELAMINATION, SEALANT FOR DETERIORATION. WINDSHIELD HEAT CONNECTIONS FOR SECURITY, WINDSHIELD HEAT WIRING FOR CUTS, CRACKS, DETERIORATION, AND BARE WIRES	010	B
11---	A-012	1.	FUSELAGE EXTERIOR SKIN FOR (INCLUDING TAIL CONE) FOR DENTS, CRACKS, LOOSE, OR MISSING FASTENERS/RIVETS, ALL DRAIN HOLES OPEN; VHF, UHF ANTENNAS FOR CORROSION, CRACKED, CHIPPED OR MISSING PAINT.	015	C
11--		2.	INSTALLED ACCESS DOORS AND INSPECTION PANELS FOR OBVIOUS DAMAGE, FIT, SECURITY; CONDUCTIVE MATING SURFACE AREAS OF ACCESS DOORS FOR CORROSION, CONTAMINATION; TIN PLATE FOR PEELING, FLAKING PER TO 1E-3A-23.	005	C
11--		3.	AFT FUSELAGE DRAINS FOR OBSTRUCTIONS, ACCUMULATION OF FLUIDS; GALLEY DRAIN LINES AND VENTS FOR OBSTRUCTIONS.	005	C
11CC0		4.	EMERGENCY EXIT DOOR FOR WEAR DAMAGE; SEALS, SEAL CONTACT AREA FOR DAMAGE, DETERIORATION, CORROSION, CONTAMINATION; WIRE MESH IMBEDDED IN SEAL MUST HAVE A VISIBLE METALLIC GLINT OVER 90% OF SEAL LENGTH AND NO DISCONTINUITIES GREATER THAN 2 INCHES, EMP STRAPS, RUB STRIPS; SEAL DEPRESSOR ANGLES, UPPER GATE, LOWER GATE, FREE FROM PAINT, CORROSION, CONTAMINATION, DAMAGE; PLATING FOR PEELING, FLAKING PER TO 1E-3A-23; LOOSE OR MISSING FASTENERS; WINDOW CRACKS, DELAMINATION, DETERIORATED SEALS (INSPECT PER TO 1E-3A-2-7); EMP WINDOW GRID, RETAINERS, SCREWS, NUT PLATES AND WASHERS FOR CORROSION, DAMAGE PER TO 1E-3A-2-7; WINDOW BARRIER FOR DIRT, CORROSION, CONTAMINATION ON PAINTED SURFACES FOR LIGHT LEAKS WHEN CLOSED (OBSERVE FROM INTERIOR WHILE EXTERIOR IS BATHED IN BRIGHT LIGHT).	005	C
11C30		5.	AFT ENTRY DOOR FOR WEAR DAMAGE; SEALS, SEAL CONTACT AREA FOR DAMAGE, DETERIORATION, CORROSION, CONTAMINATION; WIRE MESH EMBEDDED IN SEAL MUST HAVE A VISIBLE METALLIC GLINT OVER 90% OF SEAL LENGTH AND NO DISCONTINUITIES GREATER THAN 2 INCHES; EMP STRAPS, RUB STRIPS, UPPER GATE, LOWER GATE, LOCATOR ANGLE FREE FROM PAINT, CORROSION, CONTAMINATION, DAMAGE; PLATING FOR PEELING, FLAKING PER TO 1E-3A-23; LOOSE OR MISSING FASTENERS; WINDOWS FOR CRACKS, DELAMINATION, DETERIORATED SEALS (INSPECT PER TO 1E-3A-2-7).	040	C
11F--		7.	HORIZONTAL STABILIZER EXTERIOR FOR DAMAGE, CRACKS, LOOSE OR MISSING FASTENERS/RIVETS.	040	C
11EA-		9.	VERTICAL STABILIZER FOR CRACKED SKIN, LOOSE OR MISSING RIVETS, DETERIORATED TIP PROTECTIVE COATING	060	C
11EA-	A-058	10.	PRESSURE LIMITER CONTROL UNIT SUPPORT BRACKET FOR CRACKS IN BEND RADII OR RADIATING FROM MOUNTING FASTENER HOLES.	030	C
11G--		1.	WING UPPER SURFACES, WING TO BODY FAIRINGS, INSTALLED INSPECTION PANELS AND ACCESS DOORS FOR CRACKS, DENTS, LOOSE OR MISSING FASTENERS/RIVETS	030	G
11G		2.	WING VORTEX GENERATORS FOR SECURITY, DAMAGE.	005	G
11G		3.	WING LOWER SURFACES, WING TO BODY FAIRINGS, INSTALLED INSPECTION PANELS AND ACCESS DOORS FOR CRACKS, DENTS, LOOSE OR MISSING FASTENERS/RIVETS; PAINTED SURFACES OF COVE LIP DOORS FOR DAMAGE, SCRATCHES THAT EXCEED HCI PROTECTION LIMITS PER TO 1E-3A-23, SECTION XIII.	030	G
11G		4.	WING LEADING AND TRAILING EDGES FOR CRACKS, DENTS, LOOSE OR MISSING FASTENERS/RIVETS.	015	G

Change 1

1-9

FIGURE 2. Example Chapter 1 page (-6) manual (Phased Inspection Showing Hourly Intervals).

## MIL-DTL-5096H(USAF)

						TO 1E-3A-6	
WORK UNIT CODE	WORK CARD NUMBER	PARA- GRAPH	CHAPTER 1, SECTION VI PHASE INSPECTION REQUIREMENTS			MIN- UTES	WORK AREA
LANDING GEAR (SYSTEM 13000)							
460 HOUR							
	E-065		(CONTINUED)				
13GA-		7.	POSITION ACTUATION SHAFT: ZERK FITTING.	'W'		001	H
13DG-		8.	DOOR CONTROL VALVE ACTUATION LINK: FLUSH FITTING (2 PLACES)	'W'		002	H
13DG-		9.	LOCK BUNGEE: LUBE PER TO 1E-3A-2-7.			015	H
13FA-	E-066	1.	DOOR HINGE REAR OUTBOARD: FLUSH FITTING (2 PLACES).			002	H
13FA-		2.	LINK ROD AFT LOWER DOOR TO CRANK: FLUSH FITTING.			001	H
13FA-		3.	OPERATOR ROD BEARINGS: FLUSH FITTING.			002	H
13FA-		4.	AFT CRANK TO DOOR LINK: FLUSH FITTING (2 PLACES).			002	H
13FA-		5.	CRANK LOWER AFT: FLUSH FITTING (3 PLACES).			002	H
13FA-		6.	DOOR HINGE: APPLY OIL (2 PLACES) AND WIPE OFF EXCESS.	'W'		002	H
13FA-		7.	FORWARD CRANK BEARING: FLUSH FITTING.			001	H
13FA-		8.	LINK ROD FORWARD UPPER DOOR TO CRANK: FLUSH FITTING (2 PLACES).			002	H
13FA-		9.	UPPER FORWARD ACTUATOR ROD: FLUSH FITTING (2 PLACES).			002	H
1380 HOUR							
13GAA	A-025	1.	LANDING GEAR CONTROL LEVER: WIPE CLEAN AND APPLY A FEW DROPS TO SLIDING SURFACE.			002	B
13FAH	A-075	3.	SEAL PAIR INSTALLATION, P/N 2D4-53035-1 IN LH MAIN WHEEL WELL AND P/N 204-53035-2 IN RH WHEEL WELL FOR CONTAMINATION, CORROSION, SECURITY OF FASTENER. IF CORROSION IS PRESENT, PERFORM RESISTANCE CHECK, IF RESISTANCE CHECK IS GREATER THAN 2.5 MILLIOHMS, DISASSEMBLE MATING INTERFACE AND RESTORE SURFACES.			020	H
13GB-	E-040	13.	LANDING GEAR EMERGENCY EXTENSION SYSTEM FOR EVIDENCE OF WEAR, CORROSION, SECURITY OF COMPONENTS.			020	G
13GB-		14.	OPERATION AND RIGGING CHECK OF LANDING GEAR CONTROL SYSTEM PER TO 1E-3A-2-32-1.			045	G
13GB-		15.	OPERATION AND RIGGING CHECK OF EMERGENCY EXTENSION SYSTEM PER TO 1E-3A-2-32-1.			045	G
13D-		19.	RIGHT MAIN GEAR WHEEL WELL TUBING, WIRING, COMPONENTS, AND THROUGH-WALL FITTINGS FOR SECURITY, CORROSION, LEAKS, CHAFFING, AND CONDITION: CABLE SHIELDING FOR SECURITY, CORROSION; CABLE CONNECTORS FOR SECURITY.			020	G
13GB-	E-058	13.	LANDING GEAR EMERGENCY EXTENSION SYSTEM FOR EVIDENCE OF WEAR, CORROSION, SECURITY OF COMPONENTS PER TO 1E-3A-2-32-1.			100	H
13D-		19.	LEFT MAIN GEAR WHEEL WELL TUBING, WIRING, COMPONENTS, AND THROUGH-WALL FITTINGS FOR SECURITY, CORROSION, LEAKS, CHAFFING AND CONDITION: CABLE SHIELDING FOR SECURITY, CORROSION; CABLE CONNECTORS FOR SECURITY, PROPER SAFETY WIRING; COLLETS FOR PROPER INSTALLATION PER TO 1E-3A-2-29-1, CORROSION, CONTAMINATION.			015	H
2700 HOUR							
13-	C-016	1.	LANDING GEAR:			060	A
13-		A.	NOSE LANDING GEAR DOOR RELEASE; WGDR.	'W'		060	A
13-		B.	NOSE WHEEL STEERING; WWSA,WWSB.	'W'			A
13-		2.	LUBRICATION PROCEDURE:				
13-		A.	MOVE CABLE TO LIMIT OF MOTION OVER PULLEY CONTACT AREA.				
13-		B.	WIPE CABLE WITH CLEAN CLOTH TO REMOVE DIRT THAT COULD MIX WITH GREASE				
13-		C.	APPLY A LIGHT COAT OF AEROSHELL 16 (FLAG 1) BY RAG OR BRUSH OVER CABLE IN PULLEY CONTACT AREA MAKING SURE GREASE COMPLETELY FILLS SPIRAL GROOVES, WIPE OFF EXCESS GREASE.				
13-			IF THE PULLEY TURNS ON METAL BEARINGS, LUBRICATE BEARINGS TO ENSURE ROTATION				
13-			APPLY A LIGHT COAT OF AEROSHELL 16 BY RAG OR BRUSH OVER BALANCE OF CABLE VERIFY THAT BOTTOM OF CABLE GROOVES CONTAIN A THIN SPIRAL OF GREASE. WIPE OFF EXCESS.				
13-			WHERE CABLES PASS THROUGH PRESSURE SEALS, FILL SEALS WITH GREASE.				
13-			WIPE CABLE ISOLATOR (REF TO 1E-3A-2-7, SECTION X) WITH CLEAN, DRY CLOTH TO REMOVE GREASE OF OTHER CONTAMINANTS, ENSURE THAT NO METALLIC OBJECTS ARE CONTACTING ISOLATOR				
Change 1						1-11	

FIGURE 2. Example Chapter 1 page (-6) manual (Phased Inspection Showing Hourly Intervals) - Continued.

**MIL-DTL-5096H(USAF)****TO 1E-3A-6**

**CHAPTER 2**  
**SCHEDULED INSPECTION REQUIREMENTS**  
**SECTION I**  
**SPECIAL INSPECTION**

1. THIS PART CONTAINS INSPECTION REQUIREMENTS THAT WILL BE ACCOMPLISHED UPON THE ACCRUAL OF A SPECIFIED NUMBER OF FLYING HOURS, EQUIPMENT HOURS OF OPERATION, A LAPSE OF CALENDAR TIME, OR AFTER OCCURRENCE OF A SPECIFIED OR UNUSUAL CONDITION. THE CALENDAR AND/OR SPECIAL HOURLY REQUIREMENTS, WHEN DUE, MAY BE ADDED TO AND ACCOMPLISHED AT THE NEXT PHASE INSPECTION AS APPROPRIATE. HOWEVER, A REQUIREMENT WHICH REPRESENTS A HEAVY WORKLOAD AND INVOLVES MULTIPLE INSTALLATIONS MAY BE ACCOMPLISHED IN APPROPRIATE SEGMENTS AT CONSECUTIVE INSPECTIONS; THE CONDITIONAL REQUIREMENTS, WHEN DUE, MAY REQUIRE ACCOMPLISHMENT AS SOON AS POSSIBLE AFTER THE OCCURRENCE OF THE CONDITION OR PRIOR TO FURTHER FLIGHT.

<b>WORK UNIT CODE</b>	<b>PARA- GRAPH</b>	<b>CHAPTER 1, SECTION VI PHASE INSPECTION REQUIREMENTS</b>	<b>MIN- UTES</b>
		<b>AIRCRAFT (SYSTEM 11000)</b>	
11—	1.	AFTER MODIFICATION, REMOVAL, ADDITION, OR RELOCATION OF EQUIPMENT CAUSING WEIGHT AND BALANCE CHANGES BEYOND ALLOWABLE LIMITS (TO 1E-3A-5) AND WHEN A FLIGHT CHARACTERISTICS AS REPORTED WHICH MAY INDICATE WEIGHT AND BALANCE RECORDS ARE IN ERROR.	
11—	A.	WEIGH AIRPLANE PER TO 1E-3A-2-7 AND MAKE NECESSARY ENTRIES IN MANUAL OF WEIGHT AND BALANCE DATA.	
11—	2.	WHENEVER AIRPLANE HAS BEEN EXPOSED TO RADIOACTIVE DEBRIS: WASH AIRPLANE WITH COARSE WATER SPRAY AND DETERGENT PER TO 00-110A-1.	
11—	A.	EVERY 30 DAYS: WINDSHIELD RAIN REPELLENT FOR EFFECTIVENESS PER T.O. 42D4-1-4: IF REQUIRED, APPLY PER TO 1E-3A-2-7.	
11AC-	B.	AT TIME OF ENGINE REMOVAL: NUT PLATES INSTALLED ON PYLON AT THROTTLE CABLE ATTACH POINT (IF REQUIRED)	
11—	3.	EVERY 6 MONTHS (OR NEAREST PHASE CLOSEST TO THE 6 MONTH INSPECTION):	
11—	A.	PERFORM PULL CHECK AND CONTINUITY CHECK OF GROUNDING JACKS PER TO 00-25-172.	
11—	4.	WHENEVER FLAPS-DOWN PLACARDS HAVE BEEN EXCEEDED.	
11—	A.	WING REAR SPAR WEB, FROM WING STATION 280 TO 539, STIFFENERS, ADJACENT SKIN FOR DISTORTION, FLAKING PAINT, CRACKS, PULLED OR MISSING RIVETS.	
11—	5.	WHENEVER AIRPLANE IS LANDED AT GROSS WEIGHT IN EXCESS OF 250,000 POUNDS.	
11—	A.	INBOARD NACELLE STRUT SIDE SKIN PANELS FOR BUCKLING, CRACKS, PULLED OR MISSING FASTENERS; DROOP STRIPE FOR MISALIGNMENT.	
11—	B.	WING LEADING EDGE-NACELLE GAP COVERS FOR DISPLACEMENT FASTENER HOLE ELONGATION OR TEAR-OUT, SKIN CRACKS, PULLED OR MISSING FASTENERS.	
11—	C.	UPPER AND LOWER FUSELAGE SKIN PANELS FORWARD AND AFT OF THE WING FOR BUCKLES, WRINKLES OR TEARS	
11—	D.	NOSE WHEEL WELL FOR BUCKLING FLAKING PAINT, CRACKS AND PULLED OR MISSING FASTENERS IN THE WEB OF NOSE WHEEL WELL, PARTICULARLY IN THE VICINITY OF THE TRUNNION SUPPORT FITTINGS	
11—	E.	IF DAMAGE IS DETECTED WHEN ACCOMPLISHING STEPS A THROUGH D ABOVE, CONTINUE INSPECTION PER PARAGRAPH 6.	
11—	6.	WHENEVER AIRPLANE IS SUBJECTED TO HARD LANDING WITH GROUND CONTACT SKIN SPEED IN EXCESS OF ALLOWABLE LIMITS, OR IS LANDED OR TAXIED OFF THE RUNWAY:	
11—	A.	AIRCRAFT FOR ALIGNMENT PER T.O. 1E-3A-3-1 (REQUIRED ONLY IF DAMAGE IS DETECTED WHEN ACCOMPLISHING ITEMS B THROUGH K.).	
11—	B.	WING TO BODY FITTINGS AT STATIONS 600K FOR DISTORTION, FLAKING PAINT, CRACKS, PULLED OR MISSING PARTS	
11—	C.	DRAW ANGLE AT BBL 70.5 BETWEEN STATIONS 600K AND 820 FOR DISTORTION, FLAKING PAINT, PULLED OR MISSING RIVETS.	
11—	D.	MAIN LANDING GEAR TO WING FITTINGS FOR CRACKS.	
11J-	E.	THE FOLLOWING BY NDI (NON-DESTRUCTIVE INSPECTION) PER TO 1E-3A-36:	
11J-	(1)	CONE BOLT ATTACH HOLES (2) AND THRUST LINK FITTING ATTACH HOLE IN FORWARD ENGINE MOUNT FITTING 65-10693.	
11J-	(2)	FORWARD ENGINE MOUNT THRUST LINK FITTING 65-2498, THRUST LINK FITTING ATTACH HOLE IN FORWARD ENGINE MOUNT THRUST CONTROL FITTING 65-11760 (2) ATTACHING 65-2498 TO 65-10693 AND 65-11760 (REMOVE BOLTS TO ACCOMPLISH)	

**2-1****FIGURE 3. Example Chapter 2 Section I Page (-6) manual.**

**MIL-DTL-5096H(USAF)****TO 1E-3A-6****CHAPTER 2****SECTION II  
PROGRAMMED DEPOT MAINTENANCE REQUIREMENTS**

1. THIS PART CONTAINS DEPOT INSPECTION (AND SOME REPLACEMENT) REQUIREMENTS THAT WILL BE ACCOMPLISHED UPON THE ACCRUAL OF A SPECIFIED NUMBER OF FLYING HOURS, EQUIPMENT HOURS OF OPERATION OR A LAPSE OF CALENDAR TIME THESE INSPECTIONS WILL BE PERFORMED DURING DEPOT MAINTENANCE

ADDITIONAL DEPOT MAINTENANCE REQUIREMENTS, NOT LISTED BELOW ARE CONTAINED IN THE ASIP AND ACI PROGRAMS. THESE PROGRAMS ARE REVISED AND IMPLEMENTED ON A YEARLY BASIS BY OC-ALCMMKR.

<b>WORK UNIT CODE</b>	<b>PARA- GRAPH</b>	<b>CHAPTER 1, SECTION VI PHASE INSPECTION REQUIREMENTS</b>	<b>MIN- UTES</b>
		<b>AIRCRAFT (SYSTEM 11000)</b>	
11—	1.	ONE TIME ONLY AND AT INCORPORATION OF TCTO 1E-3A-639.	
11—	A.	ON AIRPLANES 75-0556 THRU 75-0560, 76-1604 THRU 76-1607 AND 77-0351 THRU 77-0353; HORIZONTAL STABILIZER LOWER SURFACE BALANCE PANEL COVERS FOR CORROSION PER TO 1E-3A-23.	
11—	B.	ON AIRPLANES 75-0556 THRU 75-0560, 76-1604 THRU 76-1607 AND 77-0351 THRU 77-0353; HORIZONTAL STABILIZER UPPER SURFACE BALANCE PANEL COVERS FOR CORROSION PER TO 1E-3A-23.	
11—	2.	EVERY 12,000 FLIGHT HOURS	
11—	A.	REMOVE ENGINE STRUTS AND INSPECT THE FOLLOWING BY NDI (NON-DESTRUCTIVE INSPECTION) PER TO 1E-3A-36:	
11—	(1)	INBOARD STRUT FRONT SPAR FITTING 65-42128, BOLT ATTACHING 65-42128 TO WING FITTING; OUTBOARD STRUT FRONT SPAR FITTING 65-11347, BOLT ATTACHING 65-11347 TO WING FITTING.	
11—	(2)	INBOARD STRUT LEFT AND RIGHT MIDSPAR FITTINGS 65-2536, BOLT ATTACHING 65-2536 TO WING FITTINGS; OUTBOARD STRUT LEFT AND RIGHT MIDSPAR FITTINGS 65-2534, BOLT ATTACHING 65-2534 TO WING FITTINGS	
11—	(3)	STRUT DIAGONAL BRACE 69-11789 (OUTBOARD STRUT) AND 69-11796 (OUTBOARD STRUT), LOWER SPAR ATTACH FITTINGS 65-13348 (INBOARD STRUT) AND 65-13349 (OUTBOARD STRUT) BOLTS ATTACHING THE STRUT DIAGONAL BRACE TUBES TO THE LOWER SPAR ATTACH FITTINGS AND THE WING FITTINGS	
11—	3.	EVERY 15,000 OPERATING HOURS REMOVE ANTENNA PEDESTAL AND PEDESTAL TURNABLE PER TO 1E-3A-18 TO PERFORM THE FOLLOWING:	
11—	A.	REMOVE AND VISUALLY INSPECT AZIMUTH TRANSDUCER ASSEMBLY (SYNCHRO ASSEMBLY) FOR CONDITION PER TO 1E-3A-18, AND REWORK/REPLACE AS NECESSARY.	
11—	B.	INSPECT SYNCHRO DRIVE ASSEMBLY PER TO 18W5-6-3, AND REWORK/REPLACE AS NECESSARY.	
11—	C.	REMOVE EACH PEDESTAL DRIVE ASSEMBLY PER TO 1E-3A-18, AND VISUALLY INSPECT FOR FLUID LEAKS, CRACKS AND CORROSION. REWORK/REPLACE AS NECESSARY.	
11—	D.	REMOVE AND INSPECT EACH DRIVE PINION ASSEMBLY PER TO 18W5-6-3 AND REWORK/REPLACE AS NECESSARY.	
11—	E.	REMOVE AND INSPECT UPPER AND LOWER SEAL RETAINER ASSEMBLIES PER TO 18W5-6-3 REWORK/REPLACE AS NECESSARY.	
11—	F.	REMOVE RING GEAR PER TO 18W5-6-3 AND INSPECT FOR CONDITION. REWORK/REPLACE AS NECESSARY.	
11—		INSPECT BEARING RAGES PER TO 18W5-6-3. REWORK/REPLACE AS NECESSARY.	
11—	4.	WHENEVER ROTODOME IS REMOVED:	
11—	A.	INSPECT ATTACHMENT POINTS FOR CRACKS AND CORROSION PER TO 1E-3A-36.	
11—	5.	EVERY 36 MONTHS:	
11—	A.	FIN ANTENNA ABSORBER: VISUALLY INSPECT AT CLOSE RANGE FOR PAINT CRACKS EXTENDING TO ADHESIVE LAYER, SHEET OR SHEET EDGE DELAMINATION, SHEET PART MISSING, AND EROSION OR ABRASION WHICH HAS PENETRATED INTO THE ABSORBER SHEET. ALSO INSPECT FOR LOOSE OR MISSING FAIRING SEAL AND THE PAINT FOR NICKS OR PEELED AREAS WHICH MAY BE TOUCH-UP PAINTED.	

**2-22****FIGURE 4. Example Chapter 2 Section II Page (-6) manual.**

**MIL-DTL-5096H(USAF)****TO 1C-20B-6****CHAPTER 2****SECTION III****ACCEPTANCE AND FUNCTIONAL CHECK FLIGHT REQUIREMENTS**

1. THIS PART CONTAINS THE CONDITIONS WHICH REQUIRE VERIFICATION OF MAINTENANCE PERFORMED BY THE ACCOMPLISHMENT OF A CHECK FLIGHT AND THE INSPECTION REQUIREMENTS THAT ARE TO BE ACCOMPLISHED TO MAKE THE VERIFICATION. THE INSPECTION REQUIREMENTS ARE THOSE CONSIDERED NECESSARY TO ASSURE THE AIRCRAFT IS AIRWORTHY AND CAPABLE OF ACCOMPLISHING ITS MISSION. WHEN A CHECK FLIGHT IS ACCOMPLISHED FOR VERIFICATION OF MAINTENANCE PERFORMED ON SPECIFIC EQUIPMENT OR SYSTEMS, THOSE INSPECTION REQUIREMENTS NOT RELATED TO THAT SPECIFIC EQUIPMENT OR SYSTEM SHOULD BE DISREGARDED. FULL RANGE CHECK FLIGHTS ARE REQUIRED AFTER HEAVY MAINTENANCE.

THIS PART CONSISTS OF FOUR GROUPS. GROUP 1 CONTAINS THE CONDITIONS REQUIRING VERIFICATION BY A CHECK FLIGHT. GROUP 2 CONTAINS THE BEFORE FLIGHT REQUIREMENTS TO BE ACCOMPLISHED PRIOR TO THE CHECK FLIGHT. GROUP 3 CONTAINS THE IN-FLIGHT REQUIREMENTS TO BE ACCOMPLISHED DURING THE CHECK FLIGHT. GROUP 4 CONTAINS THE AFTER FLIGHT REQUIREMENTS TO BE ACCOMPLISHED UPON COMPLETION OF THE CHECK FLIGHT.

<b>PARA- GRAPH</b>	<b>ACCEPTANCE AND FUNCTIONAL CHECK FLIGHT REQUIREMENTS</b>	<b>MIN- UTES</b>
	<b><u>GROUP 1</u></b>	
1.	TO COMPLETE THE APPLICABLE INSPECTION WHEN AIRCRAFT IS REMOVED FROM EXTENDED STORAGE.	
A.	AFTER A MAJOR FIXED FLIGHT SURFACE HAS BEEN REPLACED OR HAS UNDERGONE MAJOR STRUCTURAL REPAIRS WHICH COULD AFFECT THE FLIGHT CHARACTERISTICS OF THE AIRCRAFT.	
B.	AFTER A MOVABLE PRIMARY FLIGHT CONTROL SURFACE (AILERON, ELEVATOR OR RUDDER) HAS BEEN REPLACED OR HAS UNDERGONE MAJOR REPAIRS WHICH COULD AFFECT THE FLIGHT CHARACTERISTICS OF THE AIRCRAFT AND FOR WHICH SATISFACTORY OPERATION CANNOT BE DETERMINED BY GROUND OPERATIONAL CHECKS.	
2.	AFTER ADJUSTMENTS OR CHANGES HAVE BEEN MADE THAT REQUIRE FLIGHT TO ACCOMPLISH OPERATIONAL CHECKS OR CALIBRATION OF ACCESSORIES OR AUXILIARY EQUIPMENT ON WHICH ABSOLUTE CERTIFICATION OF AIRWORTHINESS CANNOT BE VERIFIED BY GROUND OPERATIONAL CHECKS	
A.	AFTER REPLACEMENT OR REMOVAL AND INSTALLATION OF ENGINE; IF BOTH ENGINES ARE CHANGED, A FUNCTIONAL CHECK FLIGHT IS REQUIRED, IF ONE ENGINE IS CHANGED, A FUNCTIONAL CHECK FLIGHT IS NOT REQUIRED.	
(1)	AFTER REPLACEMENT OR REMOVAL AND INSTALLATION OF ENGINE MAIN FUEL CONTROL; IF BOTH FUEL CONTROLS ARE CHANGED, A FUNCTIONAL CHECK FLIGHT IS REQUIRED, IF ONE MAIN FUEL CONTROL IS CHANGED, A FUNCTIONAL CHECK FLIGHT IS NOT REQUIRED.	
(2)	WHEN MAJOR RETROFIT AND STRUCTURAL MODIFICATION ARE ACCOMPLISHED.	
(3)	WHENEVER MAINTENANCE OR REPAIR ARE ACCOMPLISHED OF SUCH SCOPE THAT A CHECK FLIGHT IS DETERMINED TO BE NECESSARY BY THE MAINTENANCE OFFICER.	
3.	AFTER CORRECTING PILOT REPORTED SAFETY OF FLIGHT DISCREPANCIES WHEN IT CANNOT BE DETERMINED THAT THE MAINTENANCE ACTION TAKEN WAS ADEQUATE.	
A.	<b><u>GROUP 2</u></b> BEFORE FLIGHT REQUIREMENTS	
B.	GROUND CREW.	
C.	BEFORE EACH CHECK FLIGHT, PERFORM A PREFLIGHT INSPECTION IN ACCORDANCE WITH TO 1C-20B-8WC-1, PART 1 WORKCARDS.	
D.	<b><u>GROUP 2</u></b> CHECK FLIGHT REQUIREMENTS	
E.	FLIGHT CREW.	
F.	REFER TO TO 1C-20B-8CF-SERIES FOR CHECK FLIGHT REQUIREMENTS.	
G.	<b><u>GROUP 4</u></b> AFTER FLIGHT REQUIREMENTS	
4.	GROUND CREW.	
A.	AFTER EACH CHECK FLIGHT, PERFORM APPLICABLE INSPECTION IN ACCORDANCE WITH TO 1C-20B-8WC-1.	

**FIGURE 5. Example Chapter 2 Section III Page (-6) manual.**

**MIL-DTL-5096H(USAF)****TO 1C-135A-6****CHAPTER 2**

**SECTION IV  
HISTORICAL DOCUMENTS  
AFTO FORMS 34, 44, 95 AND 98**

1. THIS PART CONTAINS A LIST OF SPECIFIC COMPONENTS THAT REQUIRE PREPARATION OF ONE OF THE ABOVE AFTO FORMS.
2. THESE HISTORICAL FORMS PROVIDE A PERMANENT RECORD OR HISTORY OF EVENTS AND CONDITIONS ENCOUNTERED DURING THE USE OF THE EQUIPMENT. THE INFORMATION DOCUMENTED IN THESE FORMS (AS APPLICABLE) WILL BE USED TO PLAN REQUIRED LOGISTIC AND MAINTENANCE PROCEDURAL SUPPORT TO MAINTAIN AND ENHANCE THE OPERATION OF THE TOTAL WEAPON SYSTEM.
3. SPECIFIC INSTRUCTIONS FOR FILLING IN THESE FORMS ARE FOUND IN TO 00-20-5.

<b>WUC</b>	<b>COMPONENT</b>	<b>REQUIRED FORM</b>
13AB0	MAIN LANDING GEAR OLEO STRUT ASSY	AFTO 95
13FC0	NOSE LANDING GEAR OLEO STRUT ASSY	AFTO 95
23000	ENGINE, J57/TF33	AFTO 95
23000	QEC, J57/TF33	AFTO 95
23000	COMPRESSOR, J57/TF33	AFTO 95
23EB0	TURBINE ROTOR (J57/TF33)	AFTO 44
24000	AUXILIARY POWER PLANT	AFTO 95
27000	ENGINE, F108-CF-104	AFTO 95
27000	QEC, F108-CF-100	AFTO 95
27AA0	FAN AND BOOSTER (F108)	AFTO 95
27AB0	NO 1 AND NO 2 BRG SPT (F108)	AFTO 95
27AC0	INLET GEARBOX (F108)	AFTO 95
27AD0	FAN FRAME ASSY (F108)	AFTO 95
27AF0	HP COMPRESSOR ROTOR (F108)	AFTO 95
27AG0	HPC FORWARD STATOR (F108)	AFTO 95
27AH0	HPC REAR STATOR (F108)	AFTO 95
27AJA	COMBUSTION CASING (F108)	AFTO 95
27AK0	COMB CHAMBER ASSY (F108)	AFTO 95
27AL0	HPT NOZZLE ASSY	AFTO 95
27AM0	HP TURBINE ROTOR (F108)	AFTO 95
27AML	HP TURBINE WHEEL (F108)	AFTO 44
27AN0	HPT SHROUD/LPT NOZZLE ASSY	AFTO 95
27AP0	TRANSFER GEARBOX (F108)	AFTO 95
27AQ0	ACCESSORY GEARBOX (F108)	AFTO 95
27AX0	LP TURBINE ROTOR STATOR AND FRAME ASSY (F108)	AFTO 95
27AWG	LP TURBINE NO. 1 WHEEL (F108)	AFTO 44
27AWH	LP TURBINE NO. 2 WHEEL (F108)	AFTO 44
27AWJ	LP TURBINE NO. 3 WHEEL (F108)	AFTO 44
27AWK	LP TURBINE NO. 4 WHEEL (F108)	AFTO 44
27AZ0	LPT SHAFT ASSY (F108)	AFTO 95
27A10	TURBINE FRAME ASSY (F108)	AFTO 95
46421	0 FWD BODY CELL	AFTO 95
46423	1 FWD BODY CELL	AFTO 95
46425	2 FWD BODY CELL	AFTO 95
46427	3 FWD BODY CELL	AFTO 95
46445	1 CENTER WING CELL	AFTO 95
46447	2 CENTER WING CELL	AFTO 95
4645A	3 CENTER WING CELL	AFTO 95
46452	4 CENTER WING CELL	AFTO 95
46454	5 CENTER WING CELL	AFTO 95
46456	6 CENTER WING CELL	AFTO 95
46471	1 AFT BODY CELL	AFTO 95
46473	2 AFT BODY CELL	AFTO 95
46475	3 AFT BODY CELL	AFTO 95
46477	4 AFT BODY CELL	AFTO 95
4648A	5 AFT BODY CELL	AFTO 95
46515	UPPER DECK CELL	AFTO 95
46750	BOOM ASSEMBLY	AFTO 95

**2-22****FIGURE 6. Example Chapter 2 Section IV Page (-6) manual.**



## MIL-DTL-5096H(USAF)

TO 1E-3A-6

### CHAPTER 3 REPLACEMENT SCHEDULE

1. THIS PART LISTS UNITS OF EQUIPMENT THAT ARE TO BE REPLACED UPON THE ACCRUAL OF A SPECIFIED NUMBER OF FLYING HOURS, EQUIPMENT HOURS OF OPERATION, A LAPSE OF CALENDAR TIME, OR AFTER THE OCCURRENCE OF A SPECIFIED OR UNUSUAL CONDITION. REPLACEMENT MEANS REMOVAL OF THE ITEM AND INSTALLATION OF A SERVICEABLE ITEM IN ITS PLACE. THE HOURLY AND CALENDAR REQUIREMENTS WHEN DUE, WILL BE ADDED TO AND BE ACCOMPLISHED AT THE NEXT SCHEDULED INSPECTION. THE CONDITIONAL REQUIREMENTS, WHEN DUE, MAY REQUIRE ACCOMPLISHMENT AS SOON AS POSSIBLE AFTER THE OCCURRENCE OF A CONDITION OF PRIOR TO FURTHER FLIGHT.

WORK UNIT CODE	PARA- GRAPH	CHAPTER 3, REPLACEMENT SCHEDULE	QTY	MIN- UTES
<b>AIRFRAME (SYSTEM 11000)</b>				
11—	1.	EVERY 10 YEARS:		
11—	A.	FIN ANTENNA ABSORBER PER TO 1E-3A-3.		
<b>FUSELAGE COMPARTMENTS (SYSTEM 12000)</b>				
12DBE	1.	EVERY 5 YEARS:		
12DBE	A.	AIR BOTTLE, ESCAPE SPOILER (FOR HYDROSTATIC TESTS).	1	
<b>LANDING GEAR (SYSTEM 13000)</b>				
13DHJ	1.	EVERY 4 YEARS:		
13DHJ	A.	ACCUMULATOR, BRAKE	1	
13DUK	2.	EVERY 5 YEARS:		
13DUK	A.	PNEUMATIC BOTTLE, EMERGENCY BRAKE (FOR HYDROSTATIC TESTS).	1	
<b>FLIGHT CONTROL (SYSTEM 14000)</b>				
14AEG	1.	EVERY 6 YEARS:		
14AEG	A.	ACTUATOR, STABILIZER TRIM.		
<b>TURBOFAN POWER PLANT (SYSTEM 23000)</b>				
23000	1.	EVERY 12000 OPERATING HOURS:		
23000	A.	TURBOFAN ENGINE TF33-PW-100/100A PER TO 1E-3A-2-71-BWC-1	4	
23000	2.	PER TO 2J-TF-33-16, TABLES 7-2 AND 7-4:		
23—	A.	HUBS AND DISCS AT SPECIFIED CYCLES.		
<b>AUXILIARY POWER PLANT (SYSTEM 24000)</b>				
24AAD	1.	EVERY 4 YEARS:		
24AAD	A.	ACCUMULATOR, SURGE DAMPER.	1	
<b>AIR-CONDITIONING, PERSSURIZATION AND SURFACE ICE CONTROL (SYSTEM 41000)</b>				
41HA1	1.	EVERY 3 YEARS:		
41HA1	A.	LIQUID COOLING SYSTEM NITROGEN PRESSURE CYLINDER (FOR RECERTIFICATION TO DOT 3HT CYLINDER REQUIREMENTS PER TITLE 49 CODE OF FEDERAL REGULATIONS PARTS 170 THRU 179).		
<b>ELECTRICAL POWER SUPPLY (SYSTEM 42000)</b>				
42AH0		EVERY 440 FLYING HOURS:		
42AH0		APU GENERATOR (FOR REPLACEMENT OF BEARING, P/N 962A953P1)		
42BC0		EVERY 90 DAYS:		
42BC0		BOTH MAIN AIRCRAFT BATTERIES AND BOTH EMERGENCE BATTERIES (FOR RECONDITIONING PER TO 8D2-28-2)		

3-1

FIGURE 7. Example Chapter 3 Page (-6) manual.

**MIL-DTL-5096H(USAF)****TO 21-LG118A-6****CHAPTER 4****BASE LEVEL REPAIR RESTRICTIONS**

1. THIS SECTION LISTS ITEMS OF EQUIPMENT BY WORK UNIT CODE AND NOUN FOR WHICH BASE LEVEL (INTERMEDIATE MAINTENANCE) REPAIR RESTRICTIONS ARE ESTABLISHED AND DESCRIBES THE REPAIRS THAT ARE NOT AUTHORIZED AT BASE LEVEL FOR THE ITEMS LISTED. ALL OTHER REPAIRS REQUIRED TO RETURN EQUIPMENT TO A SERVICEABLE CONDITION WILL BE ACCOMPLISHED AT BASE LEVEL CONSISTENT WITH THE BASE REPAIR CAPABILITY AND POLICIES OUTLINED IN AFR 86-1. ITEMS WHICH ARE NOT LISTED IN THIS SECTION WILL BE REPAIRED TO THE EXTENT NECESSARY, INCLUDING COMPLETE OVERHAUL, IF REQUIRED, AT BASE LEVEL CONSISTENT WITH THE ABOVE REFERENCED POLICY.
2. THE REPAIR RESTRICTIONS CONTAINED IN THIS SECTION WILL BE REVIEWED PERIODICALLY BY UTILIZING AFI 21-101 DATA AND OTHER MAINTENANCE AND SUPPLY INFORMATION TO DETERMINE WHETHER BASE LEVEL REPAIR AUTHORIZATION CAN BE EXPANDED.
3. FOR AFI 21-101 MAINTENANCE DATA REPORTING PURPOSES, NRTS CODE 1 (REPAIR NOT AUTHORIZED) WILL BE USED ONLY WHEN AN ITEM OF EQUIPMENT AND A RESTRICTED REPAIR FOR THAT ITEM ARE LISTED IN THIS SECTION. LOCATION EFFECTIVITY OF BASE LEVEL REPAIR RESTRICTIONS IS INDICATED BY APPLICABILITY CODES ARE REFERENCED IN PARAGRAPH 10 OF INTRODUCTION.

**NOTE**

NO REPAIR AUTHORIZED ON CONNECTORS OF RECOVERABLE POTTED OR MOLDED CABLES.

4. FOR COMMUNICATIONS EQUIPMENT, THE RESTRICTIONS LISTED IN THIS MANUAL TAKE PRECEDENCE OVER ALL OTHER DIRECTIVES WHEN ANY CONFLICTS OCCUR.

<b>WORK UNIT CODE</b>	<b>PARA - GRAPH</b>	<b>BASE LEVEL REPAIR RESTRICTIONS</b>
<b>LAUNCHER AND LAUNCH FACILITY</b>		
BAB00	1.	ACTUATOR, ELECTRO-MECHANICAL BALLSCREW FSC XXXX PN XXXXX REPAIRS OTHER THAN AS OUTLINED IN THE F/O MANUAL TO 35M1-9-2-2 NOT AUTHORIZED.
BAE00	2.	SECURITY PIT VAULT DOOR FSC XXXX PN XXXXX REPAIRS OTHER THAN REMOVAL AND REPLACEMENT OF COMPONENTS NOT AUTHORIZED.
BAN00	3.	CYLINDER ASSEMBLY, ACTUATING, LINEAR FSC XXXX PN XXXXX REPAIRS OTHER THAN ADJUSTMENT OF ACTUATOR GLAND NUT NOT AUTHORIZED.
<b>LAUNCHER AND LAUNCH FACILITY</b>		
BCD00	1.	MECHANISM LAUNCHER CLOSURE, ACTUATING AND LOCKING FSC XXXX PN XXXXX REPAIRS ON COMPONENTS OTHER THAN MULTIPLYING LINKING AND REPLACEMENT OF BALLISTIC ACTUATOR PISTON SEALS NOT AUTHORIZED.
BDCCA	2.	EXPLOSIVE CARTRIDGE FSC XXXX PN XXXXX NO REPAIR AUTHORIZED.
<b>ENVIRONMENTAL CONTROL SYSTEM</b>		
HABB0	1.	GUIDANCE AND CONTROL CONDITIONING UNIT COMPRESSOR FSC XXXX PN XXXXX REPAIRS OTHER THAN REMOVAL AND REPLACEMENT NOT AUTHORIZED.
HAHBA	2.	MODULATING ASSEMBLY, DUCT HEATER FSC XXX PN XXXXX NO REPAIR AUTHORIZED.
HAHC0	3.	PUMPS, CHILLED WATER, ECU, AC AND DC FSC XXXX PN XXXXX REPAIRS OTHER THAN REMOVAL AND REPLACEMENT OF PACKING SEALS AND IMPELLER NOT AUTHORIZED.
<b>ENVIRONMENTAL CONTROL SYSTEM</b>		
HBA00	1.	CHILLER ASSEMBLY, REFRIGERANT FSC XXXX PN XXXXX REPAIRS OTHER THAN AS OUTLINED IN THE F/O MANUALS NOT AUTHORIZED.
HBAA0	2.	COMPRESSOR ASSEMBLY, REFRIGERANT FSC XXXX PN XXXXX REPAIRS OTHER THAN REMOVAL AND REPLACEMENT OF EXTERNAL COMPONENTS NOT AUTHORIZED.
HBAB0	3.	TANK, EXPANSION, BRINE FSC XXXX PN XXXXX NO REPAIR AUTHORIZED.

**FIGURE 8. Example Chapter 4 Page (-6) manual.**

MIL-DTL-5096H(USAF)

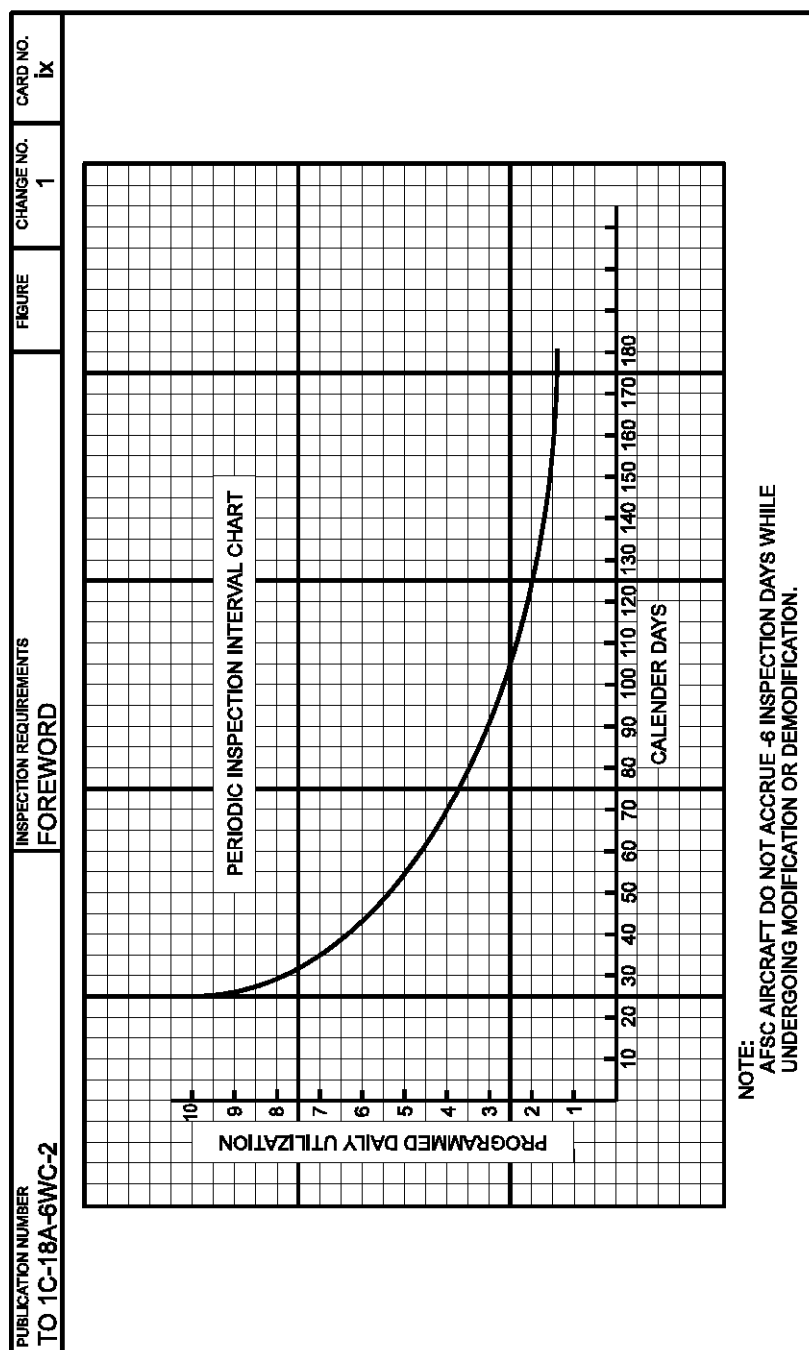


FIGURE 9. Example Inspection Multiples.

MIL-DTL-5096H(USAF)

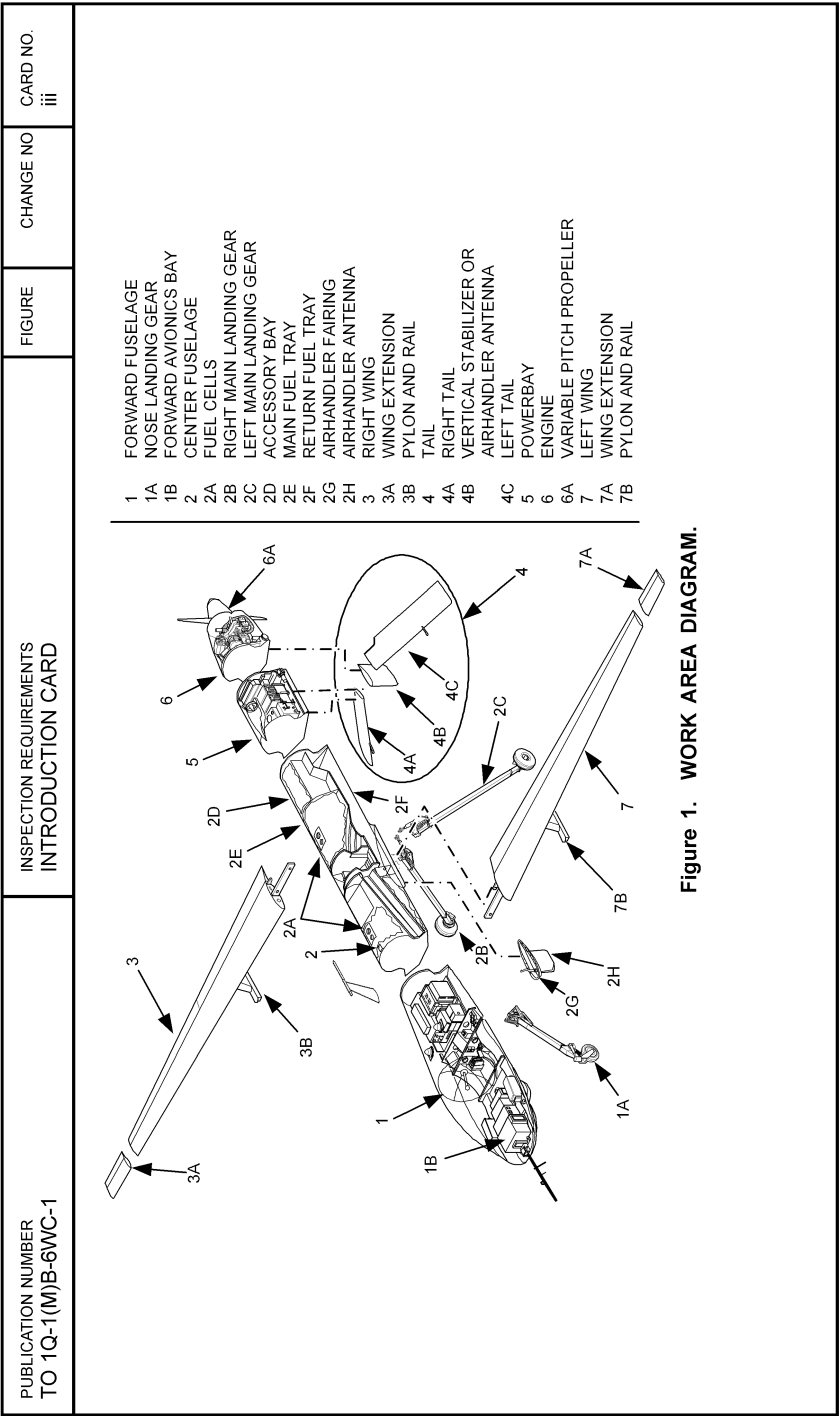


FIGURE 10. Example Work Area Diagram.

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CARD NO. 1-018		WORK AREA(S) 1L,1R,4		TYPE MECH RQR APG	MECH NO.	CARD TIME	PUBLICATION NUMBER TO 1C-9A-6WC-1		CHANGE NO. 1	
MAN MIN	WORK AREA	WORK UNIT CODE SYS SUB		PREFLIGHT		INSPECTION REQUIREMENTS		SERVICE	FIGURE	CARD NO. 1-018
001	1	13	700	<p><b>LANDING GEAR</b></p> <p>1. BRAKES FOR LEAKAGE AND WEAR (SYSTEM PRESSURIZED, BRAKES SET)</p> <p><b>CAUTION</b></p> <p>STAND FORWARD OR AFT OF WHEEL DURING TIRE SERVICING OR PRESSURE CHECKS SERVICING HOSES WILL BE FULLY EXTENDED.</p> <p>2. NOSE GEAR TIRES FOR INFLATION OF 131 (+5 -0) PSI (INCLUDING SPARES)</p> <p><b>CAUTION</b></p> <p>STAND FORWARD OR AFT OF WHEEL DURING TIRE SERVICING. IF SERVICING KIT IS USED, HOSE TO BE FULLY EXTENDED.</p> <p>4. MAIN GEAR STRUTS FOR PROPER EXTENSION.</p> <p>3. MAIN GEAR TIRES FOR INFLATION IAW TO 1C-9A-2-2-1 (INCLUDING SPARES)</p> <p>5. NOSE GEAR STRUTS FOR PROPER EXTENSION.</p> <p>6. RELEASE BRAKES.</p>						
001	4	13	623							
001	1	13	613							
002	1	13	130							
001	4	13	230							
001	1	13	700							
CARD NO. 1-018		WORK AREA(S) 1L,1R,4		TYPE MECH RQR APG	MECH NO.	CARD TIME	PUBLICATION NUMBER TO 1C-9A-6WC-1		CHANGE NO. 1	

FIGURE 11. Example Inspection Work Card (Front).

MIL-DTL-5096H(USAF)

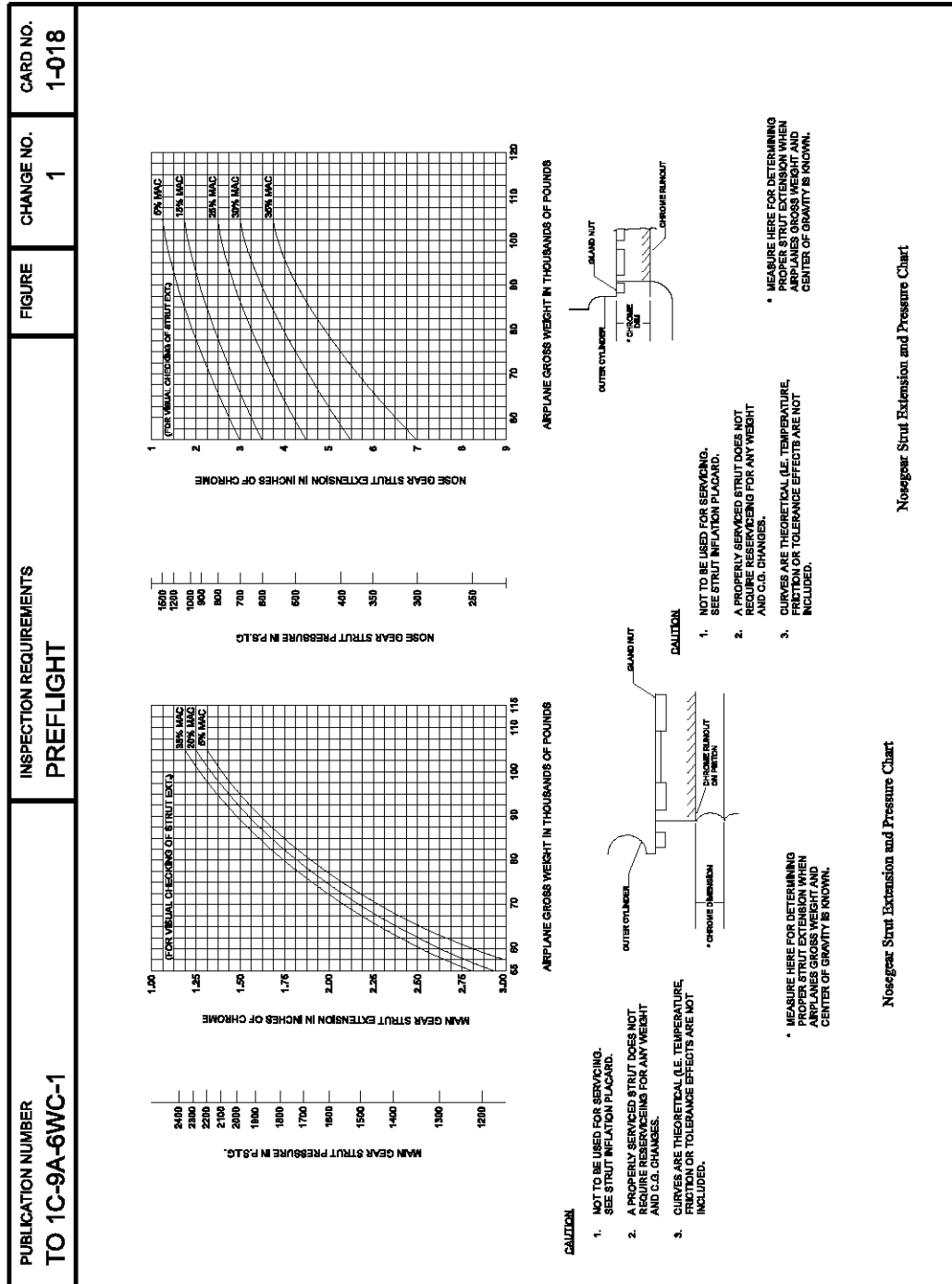


FIGURE 11. Example Inspection Work Card (Front) - Continued.



## MIL-DTL-5096H(USAF)

CARD NO. 1-001	WORK AREA/ZONES ALL	INSPECTION TYPE			TYPE MECH ROR APG	MECH NO. 1	CARD TIME 0:35	PUBLICATION NUMBER TO 1C-130J-6WC-10	CHANGE NO. 3		
MAN MIN	WORK UNIT CODE	P R E	T H	B O/ P P O R	PREPARATION						
005		X	X	X	<b>PREPARATION</b> 1. MAKE AIRCRAFT SAFE FOR MAINTENANCE. REFERENCE 1C-130J-2-10JG-00-1, 10-10-01. 2. FIRE EXTINGUISHER AVAILABLE. 3. AFTO FORM 781 SERIES FOR DISCREPANCIES. 4. NOSE LANDING GEAR SAFETY PIN INSTALLED IAW 1C-130J-2-00JG-00-1, 00-30-01. 5. OPEN MAIN LANDING GEAR WHEEL WELL DOORS IAW 1C-130J-2-00JG-00-1, 00-10-28. 6. ALL PLUGS AND DUST COVERS REMOVED (AS REQUIRED). REFERENCE 1C-130J-2-10JG-00-1, 10-10-01. 7. APPLY EXTERNAL ELECTRICAL POWER IAW 1C-130J-2-00JG-00-1, 00-10-01.					CARD NO. 1-001	
005		X	X	X	SAMPLE-NOT TO SCALE						
005		X	X	X							
002	13200	X	X	X							
003	11270	X	X	X							
005		X	X	X							
010	42DB0	X	X	X	@						
CARD NO. 1-001	WORK AREA/ZONES ALL	INSPECTION TYPE			TYPE MECH ROR APG	MECH NO. 1	CARD TIME 0:35	PUBLICATION NUMBER TO 1C-130J-6WC-10	CHANGE NO. 3		

FIGURE 12. Example Inspection Work Card (Front) WUC Column.

## MIL-DTL-5096H(USAF)

CARD NO. 2-011		WORK AREA(S) 9		TYPE MECH RQR HYD	MECH NO.	CARD TIME :15	PUBLICATION NUMBER TO POSTSCRIPT-WC-1		CHANGE NO. 1	
MAN MIN	WORK AREA	WORK UNIT CODE SYS SUB		SEMI-ANNUALLY		INSPECTION REQUIREMENTS		ELECTRICAL POWER	SERVICE	FIGURE
001	4	13		623		CONTAINER HANDLING SPREADER LUBRICATION (REF. TO 32A34-3-1) 1. CONTAINER HANDLING SPREADER LUBRICATION (1) BOOM PENDANT GREASE FITTING (MIL-G-2-164) (2) AIR MOTOR GEAR BOX PLUG (MIL-G-21164) (3) GAPS BETWEEN WIRE ROPES AND SWAGED FITTINGS (MIL-G-23549)				
CARD NO. 2-011		WORK AREA(S) 9		TYPE MECH RQR HYD	MECH NO.	CARD TIME :15	PUBLICATION NUMBER TO POSTSCRIPT-WC-1		CHANGE NO. 1	

FIGURE 13. Example Lubrication Work Card.

MIL-DTL-5096H(USAF)

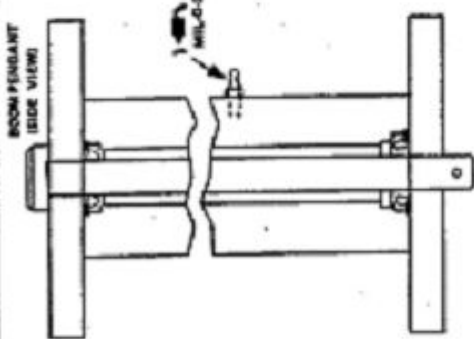
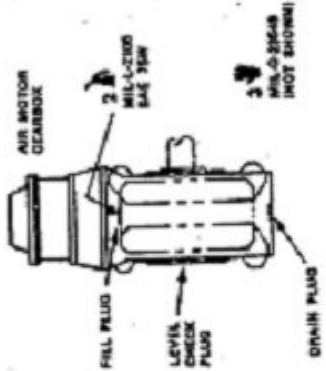
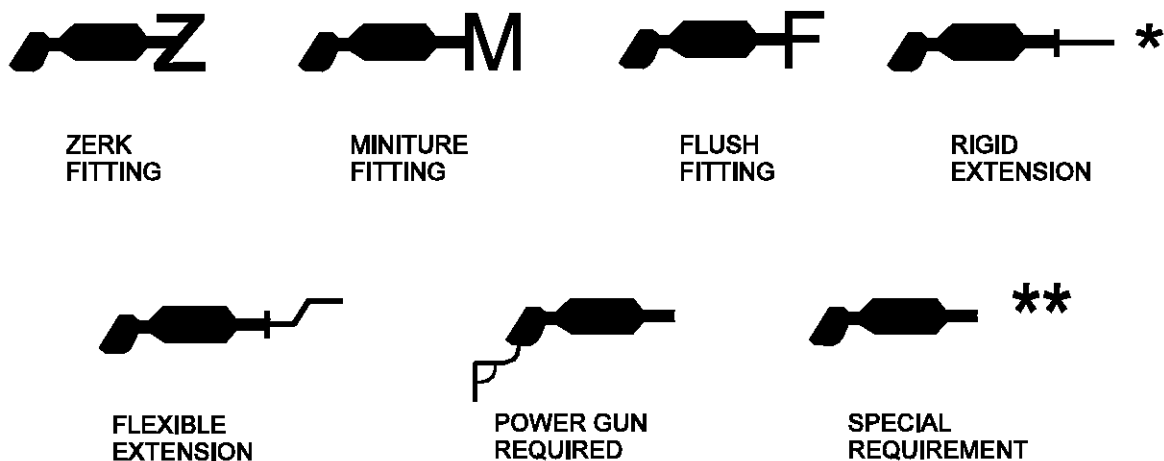
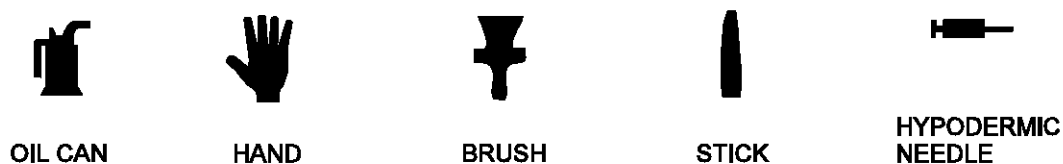
PUBLICATION NUMBER TO POSTSCRIPT-WC-1	INSPECTION REQUIREMENTS SEMI-ANNUALLY		FIGURE	CHANGE NO. 1	CARD NO. 2011					
	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div> <div style="text-align: center; margin-top: 20px;"> <p>APPLICATION SYMBOL</p> <table border="1"> <tr> <td></td> <td>OIL CAN</td> </tr> <tr> <td></td> <td>BOTTLE</td> </tr> <tr> <td></td> <td>HAND</td> </tr> </table> </div>						OIL CAN		BOTTLE	
	OIL CAN									
	BOTTLE									
	HAND									
CONTAINER HANDLING SPREADER					G9000112					

FIGURE 13. Example Lubrication Work Card - Continued.

**MIL-DTL-5096H(USAF)**



**LUBRICATION GUN**



**OTHER METHODS**

\* The applicable fitting symbol shall be attached.

\*\* A note reference number shall be placed in this position. The note shall explain special requirements.

**FIGURE 14. Example Application Symbols.**

**MIL-DTL-5096H(USAF)****TO 1A-10C-6CL-1**

P.5	START ENGINES	( )
P.6	BEFORE TAXI	( )
P.7	TAXI	( )
P.8	BEFORE TAKEOFF	( )
P.9	LINEUP CHECK	( )
P.10	TAKEOFF	( )
P.11	AFTER TAKEOFF AND INITIAL CLIMB	( )
	1. FLT CONTROLS	( )
	2. RADAR ALT	( )
P.12	4,000 FEET AGL	( )
	1. LASTE ANT	( )
P.13	5,000 FEET AGL	( )
	1. RADAR ALT PRIOR TO 10,000 FT	( )
P.14	10,000 FEET	( )
	1. LASTE AUTOPILOT	( )
	2. FUEL	( )
	3. HUD	( )
	4. LANDING GEAR	( )
	5. FLAPS	( )
	6. ENG MAX PWR	( )
	7. PRIMARY FLT CTLS	( )
	a. SAS EMER DISC	( )
	b. PITCH/ROLL TRIM	( )
	c. RUDDER Q	( )
	d. SPEED BRAKE	( )
	e. SPD BRK CLEAN	( )

1-2

**FIGURE 15. Example Typical Checklist Page.**

**MIL-DTL-5096H(USAF)****APPENDIX A****INSPECTION AND MAINTENANCE REQUIREMENTS TECHNICAL MANUAL  
MARKUP LANGUAGE TOOLS****A.1 SCOPE**

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

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

**A.2 DIGITAL SUPPORT SUITES (DSS)**

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

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

A.2.2 Tag Description Table (TDT). The TDT provides detailed descriptions of the elements contained in the DTD. The TDT contains the element tagging structure, parent elements, full element name, source paragraph, attribute descriptions unique to the element, and entities.

**A.3 OBTAINING DSS TOOLS**

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

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

A.3.2 Obtaining files by users with a Public Key Infrastructure (PKI) certificate or a Common Access Card (CAC). The following applies to those interested in obtaining DSS component files who have a PKI certificate or a CAC:

A.3.2.1 AF TMSS SharePoint web site. DTDs, TDTs, and other files in the DSS can be accessed at the AF TMSS SharePoint web site: <https://cs2.eis.af.mil/sites/12316/default.aspx>.

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

A.3.4 TMSS Helpdesk assistance. Address any requests or questions relating to the DSS by E-mail to [SGMLsupport@us.af.mil](mailto:SGMLsupport@us.af.mil) (organizational address: AFLCMC/HIAM-TMSS HLPDSK) or by postal mail to

**MIL-DTL-5096H(USAF)**

**APPENDIX A**

Air Force Technical Manual Specifications and Standards, AFMC/AFLCMC/HIAM, 4170 Hebble Creek Road, Building 280, Door 15, Wright-Patterson AFB OH 45433-5653.



**MIL-DTL-5096H(USAF)**

**APPENDIX D**

**WORK CARDS  
MARKUP LANGUAGE TOOLS**

**D.1 SCOPE**

See [A.1](#).

**D.2 DIGITAL SUPPORT SUITES (DSS)**

See [A.2](#).

D.2.1 Document Type Definition (DTD). The DTD provides the structure and content template in accordance with the content specific requirements of this specification (see [3.4.2](#)).

**D.3 OBTAINING FILES**

See [A.3](#).

**MIL-DTL-5096H(USAF)**

**APPENDIX F**

**CHECKLIST  
MARKUP LANGUAGE TOOLS**

**F.1 SCOPE**

See [A.1](#).

**F.2 DIGITAL SUPPORT SUITES (DSS)**

See [A.2](#).

F.2.1 Document Type Definition (DTD). The DTD provides the structure and content template in accordance with the content specific requirements of this specification (see [3.5](#)).

**F.3 OBTAINING FILES**

See [A.3](#).

**MIL-DTL-5096H(USAF)**

**CONCLUDING MATERIAL**

Custodians:

Air Force - 16

Preparing activity:

Air Force - 16

(Project TMSS-2019-001)

Review activities:

Air Force - 01, 02, 10, 13, 19, 70, 71, 184

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