U.S. DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION

Air Traffic Organization Policy

ORDER
JO 1320.58B

Effective Date:
05/12/2011

SUBJ: Instructions for Writing Notices, Maintenance Technical Handbooks, and System Support Directives

Order 1320.58, Instructions for Writing Notices, Maintenance Technical Handbooks, and System Support Directives, establishes the policy and defines the guidelines for personnel to prepare directives for National Airspace System (NAS) hardware (HW), software (SW), technical data, and facility modifications. These directives are essential to Second Level Engineering (SLE) products, which are presented in the form of notices, Maintenance Technical Handbooks (MTHB) and System Support Directives (SSD). The SSDs include System Support Modifications (SSM), System Documentation Releases (SDR), and System Technical Releases (STR).

The Next Generation Weather Radar (NEXRAD) system uses the Electronic Equipment Modification (EEM) to transmit modification information. The NEXRAD is the only system authorized to use EEMs due to existing multi-agency agreements with the Department of Defense (DoD) and the National Weather Service (NWS).

The Vice President of Technical Operations Services mandates the documentation guidelines contained in this order. These guidelines were created from information gathered and agreed upon by the Technical Operations, En Route and Oceanic, Terminal, and System Operations Services.

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Distribution: Selected Air Traffic Organization Offices; AOV-1; A-Y (ML/AY)-2; A-FAF-0 (LTD)

Initiated By: AJW-1

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Chapter 1. General Information

1. Purpose of This Order. This order describes policies and procedures and provides specific instructions for the preparation and release of Air Traffic Organization (ATO) SLE documentation for equipment and facilities. The SLE documentation covered by this order includes notices, MTHBs, and SSDs.

2. Audience. This order affects the ATO personnel who support Technical Operations, En Route and Oceanic, Terminal, and System Operations Services SLE organizations responsible for the documentation related to equipment and facilities.

3. Where Can I Find This Order? This order is available on the MyFAA Website at: https://employees.faa.gov/tools_resources/orders_notices/.

4. What This Order Cancels. This order cancels Order 1320.58A, Instructions for Writing Notices, Maintenance Technical Handbooks, and System Support Directives.

5. Explanation of Policy Changes. This revision establishes consistency with the guidance provided in the latest editions of:

- Order 1000.36, FAA Writing Standards
- Order JO 1000.37, Air Traffic Organization Safety Management System
- Order 1100.161, Air Traffic Safety Oversight
- Order 1320.1, FAA Directives Management
- Order 1370.82, Information Systems Security Program
- Order 1700.6, FAA Branding Policy, Use of the FAA Logo, FAA Signature, and DOT Seal
- Order 6000.15, General Maintenance Handbook for National Airspace System (NAS) Facilities
- Order JO 6000.50, National Airspace System (NAS) Integrated Risk Management
- Order 6032.1, National Airspace System Modification Program

6. Scope. The information contained herein is applicable to ATO directives only, and augments the general standards governing the organization, preparation, and revision of directives as contained in Order 1320.1.

Chapter 2. Notices

Section 1. General

1. Objective. This chapter provides detailed guidance and instruction on how to prepare notices.

2. General Notice Information.

a. Purpose and Responsibility of Notices. Notices are temporary directives or one time announcements, and expire one year from their effective date or have a cancellation date before one year. If a notice requiring updates to a MTHB needs to be revised, or extended, the information in the notice is to be incorporated into a "change" to the applicable MTHB and the MTHB is assigned a change number. Notices do not take the place of permanent page changes, and are not intended to issue pen-and-ink changes to MTHBs. Types of notices include:

(1) Notices.

(a) Used to send direction or announcements to the field.

(b) Issued by the Office of Primary Responsibility (OPR) for related subject matter.

(2) Notices of intent.

(a) Used to notify organizations that a new, or a major revision to an existing MTHB is forthcoming, and requests recommendations to be included in the new or revised MTHB.

(b) Issued by the SLE OPR for the equipment, system, or facility.

1 Notices of intent prepared within the scope of this chapter may be produced by other organizations on assignment by the OPR, such as service areas or contractors.

2 Refer to section 2, paragraph 2c of this chapter for guidance on handling comments or recommendations resulting from a notice of intent.

(3) Safety notices.

(a) Used to notify the field of potential harm to personnel.

(b) Issued by the OPR.

1 Contain THIS IS A SAFETY NOTICE in the first paragraph.

2 Have a red border on the first page of the notice. Refer to Appendix C, Figure C-3, Sample Safety Notice.

(4) Safety Emergency Notices (SEN).

(a) Used to broadcast information on a work-related incident or hazard to help prevent the incident from happening in the future.

(b) Issued by Technical Operations Air Traffic Control Facilities, EOSH Services Group, AJW-23, via a special email account at 9-ATOW-HQ-EOSH-SEN@faa.gov.

1 The SEN document provides information on the incident's background, action, resolution, and distribution and must be posted in a conspicuous place at all facilities which have the same incident or hazard.

2 The SEN template has a red hash border completely around the page with the title of "Safety Emergency Notice." Refer to Appendix C, Figure C-4, Sample SEN Template.

b. Notices Requiring Special Handling. Certain directives may contain content that requires special handling and coordination, for example, classified, sensitive, safety, or time critical. Order 1320.1 provides guidance on these special cases.

c. Safety Risk Management (SRM) Requirements. In compliance with the latest edition of Orders 1100.161 and JO 1000.37, all NAS changes require an SRM assessment prior to delivery. This applies to all products developed under this order. The SRM documentation development related to the NAS change must be listed, along with a link and/or attachment, in the Risk paragraph of the notice. For further guidance in developing SRM documentation, refer to the latest edition of the Safety Management System (SMS) Manual.

d. Operational Risk Management (ORM) Requirements. In compliance with Order JO 6000.50, all products developed under this order are to be assessed for potential risk to the NAS from an operational perspective. For example, this impact could be in the form of causing delays, excessive financial costs, project schedule delays, political implications, Occupational Safety and Health type impacts, or negative effects on performance metrics.

e. Security Risks. In compliance with Order 1370.82 the FAA must ensure that security controls are implemented and commensurate with the risk and magnitude of the harm that would result from the loss, misuse, denial of service, unauthorized access, or modification of Federal information assets.

> **Note:** SRM, ORM, and security risk paragraphs do not pertain to notices of intent. The related MTHB will address any associated risks.

3. Notice Numbering and Markings.

a. Notice Templates and Samples. Notice samples can be found in Appendix C, Sample Notices. Branding information and templates can be found on the MyFAA Website at https://employees.faa.gov/tools_resources/branding_writing/standards_tools/orders_notices/.

b. Notice Numbering. A notice must be assigned a sequential number through the Directives Management System (DMS) via the Directives Management Office (except SENS; see paragraph 2a(4)(b)). If the originating organization requires assistance obtaining the number, they can send an email to the Directives Management Office at 9-AWA-AIO-Directives@faa.gov.

c. Markings and Format.

(1) Order 1700.6 provides guidance on notice markings.

(2) Order 1320.1 provides guidance for mandatory notice content and format.

Section 2. Preparation of Notices

1. Notice.

a. Paragraph Descriptions.

(1) Purpose of This Notice. Explain the purpose of the notice.

(2) Audience. Insert the appropriate system/equipment type in the (*specify*). Additional information can be added after the mandatory wording if deemed necessary.

(3) Where Can I Find This Notice? Reference the MyFAA Website.

(4) Cancellation. Insert the number and title of the notice being cancelled, when the notice supersedes and cancels a previously issued notice that has not expired.

(5) Action. Explain what action is to be taken.

(6) Background. Explain the reason for issuance of the notice.

(7) Risks. List any operational, safety-related, and security risks associated with the notice.

(8) Status Accounting. Add to the notice if authorizing temporary modifications (refer to Order 6032.1).

b. Paragraph Wording. Use Table 2-1, Notice Paragraph Language and Placement, as guidance in preparing the paragraphs of a notice (refer to appendix C, Figure C-1, Sample Notice).

Table 2-1. Notice Paragraph Language and Placement

Paragraph Placement	Title	Type	Paragraph Language
1	**Purpose of This Notice**	**Mandatory**	This notice (*specify*). or THIS IS A SAFETY NOTICE. This notice (*specify*).
2	**Audience**	**Mandatory**	This notice requires actions by the Airway Transportation System Specialist (ATSS) at operational facilities with Facility, Service, and Equipment Profile (FSEP) equipment: (*specify*).
3	**Where Can I Find This Notice**	**Mandatory**	An electronic version of this notice can be found at https://employees.faa.gov/tools_resources/orders_notices/.

Table 2-1. Notice Paragraph Language and Placement (Continued)

Paragraph Placement	Title	Type	Paragraph Language
4	**Cancellation**	**Mandatory (if being used to cancel a previously issued notice)**	This notice cancels (*specify notice number and title*), dated (*specify*).
5	**Action**	**Mandatory**	(*Specify.*)
6	**Background**	**Mandatory**	(*Specify.*)
7	**Risks**	**Mandatory**	**a. Operational.** In compliance with the latest edition of Order JO 6000.50, National Airspace System (NAS) Integrated Risk Management, activities are to be assessed for potential risk to the NAS from an operational perspective. The following operational risks are associated with this notice. (*Specify.*) or There are no operational risks associated with this notice. **b. Safety.** In compliance with the latest editions of Orders 1100.161, Air Traffic Safety Oversight, and JO 1000.37, ATO Safety Management System, all NAS changes require an SRM assessment for all notices prior to delivery. The SRM information for this notice is available at (s*pecify link and/or attachment*). For further guidance in developing SRM documentation, refer to the latest version of the Safety Management System (SMS) Manual.

Table 2-1. Notice Paragraph Language and Placement (Continued)

Paragraph Placement	Title	Type	Paragraph Language
7 (con't)	**Risks**	**Mandatory**	**c. Security.** In compliance with the latest edition of Order 1370.82, Information Systems Security Program, the FAA must ensure that security controls are implemented and commensurate with the risk and magnitude of the harm that would result from the loss, misuse, denial of service, unauthorized access, or modification of Federal information assets. The following security risks are associated with this notice. (*Specify*.) or There are no security risks associated with this notice.
Optional	**Status Accounting**	**Optional**	a. (*Specify*) has opened a Log Equipment Modification (LEM) record, (*indicate when*), in the Remote Monitoring and Logging System (RMLS) Simplified Automated Logging (SAL) application for this notice. The data that has been entered into the LEM is as follows: Fac Type: Loc Ident: Short Name: (*specify; if unavailable or unknown, enter SYS*) Equip Ident: FA/CA Number (optional): Supplemental Code (as required): Maintenance Action Code (as required): Order#/System: N JO (*notice number*) Chapter/Sequence#: Change:

Table 2-1. Notice Paragraph Language and Placement (Continued)

Paragraph Placement	Title	Type	Paragraph Language
Optional (con't)	**Status Accounting**	**Optional**	CCD (if applicable): Remarks (as required): (*Remove any infomation not needed and insert any additional information/tables as needed.*) b. Upon completion of this notice, you are required to use the RMLS SAL application Modification screen to close the Modification log as follows: **(1)** Select the appropriate Equipment record for the modification. **(2)** Change the Maintenance Action Code (MAC) to a **G** if the action was completed (*specify any additional information*). (*Add any additional information pertaining to the Status Accounting entry, as needed.*)

2. Notice of Intent. MTHBs contain procedural information and guidance that interests or affects the business, program, or functions of other organizational activities. The notice of intent is used to consult organizations at an early stage in the planning and preparation of MTHB material. In addition, when a MTHB is being produced or updated, the MTHB originator must rely on the expertise of SLE, system engineers, program management, system service centers, subject matter experts, and field technical personnel when preparing the content. The originator must use every available resource to advise concerned offices and solicit comments on content for new or major revisions to MTHBs.

a. Paragraph Descriptions. The OPR may include additional paragraphs or append explanatory or background material that assists recipients in preparing comments or recommendations.

(1) Purpose of This Notice. Explain the purpose of the notice of intent.

(2) Audience. Insert the appropriate system/equipment type in the blank. Additional information can be added after the mandatory wording if deemed necessary.

(3) Where Can I Find This Notice? Reference the MyFAA Website.

(4) Action. Give organizations an opportunity to submit recommendations for the new or existing MTHB the notice of intent pertains to.

(5) Background. Explain in detail the need for the revision or new MTHB. For example, cite obsolescence of material, need to convert interim pages to permanent pages, or any other background information.

b. Paragraph Wording. Use Table 2-2, Notice of Intent Paragraph Language and Placement, as guidance in preparing the paragraphs of a notice of intent (refer to appendix C, Figure C-2, Sample Notice of Intent.).

Table 2-2. Notice of Intent Paragraph Language and Placement

Paragraph Placement	Title	Type	Paragraph Language
1	**Purpose of This Notice**	**Mandatory**	This notice (*specify*).
2	**Audience**	**Mandatory**	This notice requires actions by the Airway Transportation System Specialist (ATSS) at operational facilities with Facility, Service, and Equipment Profile (FSEP) equipment: (*specify*).
3	**Where Can I Find This Notice**	**Mandatory**	An electronic version of this notice can be found at https://employees.faa.gov/tools_resources/orders_notices/.
4	**Action**	**Mandatory**	**a.** The recipients of this notice who are concerned with the equipment operation, maintenance, or training are requested to furnish, from their own activities or other sources, their recommendations to be used in the revision of the subject handbook. Actual field experience factors should be cited when recommending changes to existing standards, tolerances, key inspection elements, daily performance check requirements, and maintenance schedules and procedures. Recommendations should be stated in specific terms. However, it is unnecessary to submit recommendations in the exact handbook format as this will be accomplished during the (*writing or revision*) process. **b.** Technical Operations offices should arrange to obtain handbook recommendations and submit them to Technical Operations by (*insert a date at least 60 days after signature date*). **c.** Other offices not included in paragraph 4b should collect, consolidate, and provide input to (*specify title of team*) by (*insert a date 30 days after the date specified in paragraph 4b*).

Table 2-2. Notice of Intent Paragraph Language and Placement (Continued)

Paragraph Placement	Title	Type	Paragraph Language
4 (con't)	**Action**	**Mandatory**	**d.** Our goal is to distribute the (*new or revised*) handbook during the (*specify what quarter, specify the FY-*). Recommendations submitted to (*specify title of team*) later than (*insert the date specified in paragraph 4c*) may be held for future revisions.
5	**Background**	**Mandatory**	(*Specify.*)

c. Coordination, Comments, and Resolution. The OPR incorporates comments that improve or correct information in the MTHB. The following guidelines apply to comments solicited for a change or update to a MTHB through a notice of intent:

(1) A notice of intent is released to notify contributing organizations of a new or major revision to a MTHB and to request recommendations for updating the MTHB.

(2) Early coordination and participation in providing MTHB source data by contributing organizations and any other users are mandatory.

(3) The notice of intent comments are consolidated by the appropriate contributing organizations and sent to the MTHB OPR.

(4) Submission dates for comments are adjusted to accommodate the complexity of the subject and the planned publication date for the MTHB. The collective 90 days cited in paragraph 2c(4)(a) and 2c(4)(b) of this section includes all mail delays. Any recommendations submitted after the 90 days may be held for future revisions.

(a) A 60-day timeframe is allowed for ATO field organizations to submit recommendations.

(b) A 30-day timeframe is allowed for ATO divisions to collect, consolidate, and provide input to each OPR.

(5) Based on information on hand, along with information furnished by contributing organizations, the MTHB is prepared and submitted to the appropriate Configuration Control Board (CCB) for approval. (Refer to Chapter 3, Maintenance Technical Handbooks (MTHB), Section 1, General, paragraph 2d for CCB coordination information and the latest edition of Order 1800.66, Configuration Management Policy.)

Section 3. Clearance and Distribution

1. General Information. Follow the requirements and instructions as specified in Order 1320.1 and the following paragraphs when preparing notices for clearance and final approval.

2. Notice Clearance and Final Approval.

a. Internal Coordination. If coordination is taking place within internal offices, a signature grid, or equivalent, may be used in place of Form FAA 1300-2, Clearance Record for final approval.

b. External Coordination. If a notice is being coordinated with external offices, it is necessary for the OPR to prepare a Clearance Record for comments and signatures for final approval. Refer to Order 1320.1 for detailed information on the coordination required, including responses, deadlines, and the preparation of the Clearance Record.

3. Notice Distribution. Most notices relating to equipment and facilities are distributed in hard copy via the Direct Distribution System (DDS). An annual notice is issued to explain how DDS works and any new functions that have been added to the system.

Chapter 3. Maintenance Technical Handbooks (MTHB)

Section 1. General

1. Objective. This chapter provides detailed guidance for preparing MTHBs. It contains administrative and technical information on guidelines, procedures, standards, and instructions.

2. General MTHB Information.

a. Purpose of MTHBs. The MTHB provides guidance and prescribes technical standards, tolerances, and procedures applicable to the maintenance of NAS equipment, systems, or facilities. Additionally, MTHBs provide information on special methods and techniques, which enable maintenance personnel to achieve optimum performance from the equipment. Information contained in MTHBs augments the technical data available in Technical Instruction Books (TIB), other MTHBs, and complements Order 6000.15.

b. Responsibility for Preparation of MTHBs. The preparation of MTHBs is the responsibility of the OPR for the equipment, system, or facility. The SLE organizations will prepare the content for the MTHBs. MTHBs prepared within the scope of this chapter may be produced by other organizations on assignment by the OPR, such as service areas or contractors.

c. MTHB Source Data.

(1) The MTHB originator must rely on the expertise of system engineers, program management, system service centers, subject matter experts, and field technical personnel when preparing the content for the MTHBs. The originator must use every available resource to produce and update MTHBs as required.

(2) The MTHB originator must consult organizations that are potentially affected by the establishment of a new MTHB or a revision to an existing MTHB. Notification is accomplished at an early stage in the planning and preparation of materials using the notice of intent document (refer to Chapter 2, Notices, Section 2, Preparation of Notices, Paragraph 2, Notice of Intent).

(3) For baselined MTHBs, notification of updates are also accomplished at an early state in the preparation of the MTHB change using the CCB process.

d. Coordination.

(1) MTHB updates or revisions must be coordinated with the CCB to issue a Configuration Control Decision (CCD) approving the change to the baselined MTHB. Refer to chapter 2, section 2, paragraph 2c for information on how to coordinate with these organizations.

(2) In cases where the MTHB is baslined in NAS-MD-001, National Airspace System Master Configuration Index, the originator will prepare and submit an MTHB utilizing all available information, including information furnished by contributing organizations, and submit that product to the appropriate CCB for approval.

e. SRM Requirements. In compliance with Orders 1100.161 and JO 1000.37, all NAS changes require an SRM assessment prior to delivery. This applies to all products developed under this order. The SRM documentation related to the NAS change must be listed, along with a link and/ or attachment, in the Related Publications area of each MTHB, or added as an appendix to the

MTHB. For further guidance in developing SRM documentation, refer to the latest edition of the SMS Manual.

f. ORM Requirements. In compliance with Order JO 6000.50, all products developed under this order are to be assessed for potential risk to the NAS from an operational perspective. For example, this impact could be in the form of causing delays, excessive financial costs, project schedule delays, political implications, Occupational Safety and Health type impacts, or negative effects on performance metrics.

g. Security Risks. In compliance with Order 1370.82, the FAA must ensure that security controls are implemented and commensurate with the risk and magnitude of the harm that would result from the loss, misuse, denial of service, unauthorized access, or modification of Federal information assets.

h. Remote Monitoring Subsystem (RMS) Requirements. Many systems contain an RMS that allows Remote Maintenance Monitoring (RMM) capability for remote monitoring and control of a system. If a system has RMM capability, a technical description of the RMS must be included in chapter 2 of the MTHB.

i. Safety and Critical MTHB Changes. Information on changes involving critical operational matters, or those involving safety, will be issued in the fastest available manner. Such information will normally be made by a notice and followed by inclusion in a permanent MTHB document.

j. Directives Requiring Special Handling. Certain directives may contain content that requires special handling and coordination, for example, classified, sensitive, safety, and time critical. Order 1320.1 provides guidance on these special cases. Order 1320.1 also provides guidance on a Fast Track option, which allows for processing the document within 14 days. The Fast Track option may be used in cases where safety, security, and continuity of operations are time critical. This process must be coordinated with the OPR's Directives Program Manager.

3. MTHB Organization.

a. General. MTHBs:

(1) Provide thorough information and are presented in a manner that ensures usefulness to the field technical personnel;

(2) Provide information not contained in installation handbooks/manuals/TIBs;

(3) Provide information that reflects the equipment configuration resulting from the accomplishment of all appropriate modifications, but do not contain equipment modification instructions; and

(4) Supplement and augment information contained in TIBs without duplicating the information in TIBs.

b. Preparation of Manuscript. Prepare the MTHBs in accordance with guidelines presented in this order, Order 1320.1, Order 6000.15, and Order 6032.1. The MTHB is directed to individuals concerned with the maintenance of equipment systems, or facilities. Include the following if applicable:

(1) Descriptive Titles. Use descriptive titles and include equipment type and model numbers when referring to the equipment.

(2) Illustrative Material. Show complicated and complex instructions using photographs, illustrations, graphs and drawings of circuits, and system equipment components. Illustrations and drawings must be titled and assigned sequential figure numbers.

(3) Tabulations. Arrange tabulations so that horizontal lines of data are easily followed. Avoid excessive white space between columns. Tables must be titled and assigned sequential table numbers.

(4) Equipment Adjustments. Include statements that equipment adjustments are performed to obtain the greatest possible accuracy, availability, and operational safety factor. Overall accuracy is not necessarily obtained by making all adjustments to the exact center of a tolerance placed on a standard.

(5) Component Replacements. Include statements concerning adjustments to replacement components which take into account that some components change their characteristics rapidly during the first few hours of use. The principle to be applied is the same as that discussed in paragraph 3b(4) of this section.

(6) Conditions. Specify that during maintenance procedural adjustments, conditions are duplicated as closely as practicable to those experienced during normal unattended operation. For example, building thermostats are not readjusted; shields are to be kept in place and outside doors are to be closed.

(7) Respect Copyright-Protected Material. Use copyrighted material sparingly. Written permission must be obtained from the owner of the copyright. Include written permission in clearance records and case files. Cite the source, title of document/publication, author, publisher, and date of publication.

(8) Abbreviations and Symbols.

(a) Use the latest edition of the following standards for abbreviations and symbols when preparing MTHBs. The latest edition of Order 6000.5, Facility, Service, and Equipment Profile (FSEP), should be used for facility abbreviations in place of the standards.

1 American National Standards Institute (ANSI) Publications:

a ANSI/ASME Y14.38, Abbreviations and Acronyms;

b ANSI/IEEE Std 268, American National Standard for Metric Practice;

c ANSI Y32.2.3, Graphic Symbols for Pipe Fittings, Valves and Piping;

d ANSI Y32.2.4, Graphic Symbols for Heating Ventilating and Air Conditioning;

e ASME Y14.44, Reference Designations for Electrical and Electronic Parts and Equipment; and

f ANSI/IEEE 260.1, Standard Letter Symbols for Units of Measurement.

2 U.S. Government Printing Office Style Manual, to supplement (but not supersede) the above standards.

(b) The following automated acronym search tools may be used to supplement (but not supersede) the standards listed in paragraph 3.b.(8)(a) of this section:

1 http://technet.faa.gov/ can be utilized to search for acronyms by selecting Home, TechNet Acronyms.

2 http://technet.faa.gov/acronyms/more_acronyms.pdf.

3 https://employees.faa.gov/acronyms.

c. Basic Organization of MTHBs. Standardized organization permits the user to quickly find, refer to, and become familiar with information contained in the MTHB.

(1) Table 3-1, Basic Organization of MTHBs, identifies the basic organization to be used when preparing MTHBs.

(2) There may be occasions when the MTHB organization shown in table 3-1 has to be modified to meet individual subject requirements. Additional major topics may be added as necessary. Certain non-equipment MTHBs (such as maintenance of roads, grounds, structures and buildings, or painting) are exempt from these requirements. However, the MTHB organization is followed to the extent practical.

Table 3-1. Basic Organization of MTHBs

Element	Description
Cover	Use the Long Order template found on the MyFAA Website at: https://employees.faa.gov/tools_resources/branding_writing/legal/directives/media/Long_Order_Template.doc to prepare the cover. Title should be worded as follows: Maintenance of (*specify*). Use of the word handbook in the title is permitted. The cover is signed by the Program Director. Refer to appendix D, Figure D-1, Sample MTHB Cover Page.
Table of Contents	A Table of Contents (TOC) must be prepared for each MTHB, listing all chapters, sections, and paragraphs in the MTHB. Refer to appendix D, Figure D-2, Sample MTHB TOC. The TOC, List of Illustrations, and List of Tables may be combined in short, non-complex directives.
List of Illustrations	The List of Illustrations is part of the TOC, which lists all illustrations/figures in the MTHB. Refer to appendix D, figure D-2.
List of Tables	The List of Tables is part of the TOC, which lists all tables in the MTHB. Refer to appendix D, figure D-2.

Table 3-1. Basic Organization of MTHBs (Continued)

Element	Description
Chapter 1	**General Information and Requirements.** This chapter contains general guidance regarding the subject of the MTHB. Refer to appendix D, Figure D-3, Sample MTHB Chapter 1.
Chapter 2	**Technical Characteristics.** This chapter contains the purpose or function, description, and theory of the system or equipment. Refer to appendix D, Figure D-4, Sample MTHB Chapter 2.
Chapter 3	**Standards and Tolerances.** This chapter contains the prescribed standards and tolerances for the applicable system or equipment and, when printed, is printed on blue paper. Refer to appendix D, Figure D-5, Sample MTHB Chapter 3.
Chapter 4	**Maintenance Requirements.** This chapter contains a list of essential maintenance activities that are required on a periodic, recurring basis and the schedules for their accomplishment. Refer to appendix D, figures D-6 through D-16.
Chapter 5	**Maintenance Procedures.** This chapter contains the procedures that are required for accomplishing the various maintenance activities, both preventive and corrective, and any associated safety precautions. Refer to appendix D, Figure D-17, Sample MTHB Chapter 5.
Chapter 6	**Flight Inspection.** This chapter contains the ground procedures to be followed in connection with flight inspections. (This chapter is only required for the MTHB when flight inspections requiring action by maintenance personnel are conducted on the pertinent equipment or system.) Refer to appendix D, Figure D-18, Sample MTHB Chapter 6.
Chapter 7	**Miscellaneous.** This chapter contains miscellaneous instructions and information not suitable for inclusion in other chapters. Refer to appendix D, Figure D-19, Sample MTHB Chapter 7.
Appendixes	**Appendixes.** Appendixes contain supplementary materials, articles, documents, or other information that supports the MTHB.
Appendix (*specify*)	**Certification Requirements.** This appendix lists all certification requirements for the MTHB (if applicable). Refer to appendix D, Figure D-20, Sample MTHB Certification Requirements.
Appendix (*specify*)	**Glossary.** This appendix is used to introduce new terms or define specific terms/acronyms used in the MTHB. If the list of definitions/acronyms is fewer than 10 items it should be combined into the Administrative Information appendix. Refer to appendix D, Figure D-21, Sample MTHB Glossary Appendix.

Table 3-1. Basic Organization of MTHBs (Continued)

Element	Description
Appendix (*specify*)	**Related Publications.** This appendix lists all documents referenced in the MTHB. If the list of documents is fewer than 10 items, it should be combined into the Administrative Information appendix. Refer to appendix D, Figure D-22, Sample MTHB Related Publications Appendix.
Appendix (*specify*)	**Administrative Information.** This appendix is the last appendix of the MTHB. It may include the following MTHB information: distribution, background, who has authority to change the MTHB, definitions, related publications, and forms and reports. Refer to appendix D, Figure D-23, Sample MTHB Last Appendix (Administrative Information).

Note: An index may be appropriate for certain MTHBs. The office preparing the MTHB is responsible for determining the need for these. If appropriate, include as an appendix.

Section 2. Preparation of MTHBs

1. Cover. Prepare and format the cover of each MTHB as described in Order 1320.1. It must at least contain:

a. Its identifying number;

b. Title (include "Maintenance of" and "Handbook");

c. Effective date (the date the directive was signed);

d. Implementation date (the date the field must be in compliance with all provisions in the directive);

e. The approved FAA logo;

f. An introduction statement no longer than one page;

g. The office distributing the order;

h. A distribution code; and

i. Signature block, the cover is signed by the Program Director.

2. Table of Contents.

a. Prepare a TOC for MTHBs. If the MTHB is large and complex, it is permissible to segregate the lists of tables and illustrations from the chapter, section, and paragraph listing in the TOC.

b. The TOC precedes the text and lists each chapter, section, paragraph, figure, table, and appendix in order of appearance. List the MTHB paragraph and appendix headings, and show the corresponding page number.

3. Chapter 1, General Information and Requirements.

a. Contents. This chapter is in each MTHB. It contains:

(1) Information pertaining to the equipment, system, or facility as a whole, and to the use of the MTHB.

(2) General information and guidance on the subject. It does not duplicate information contained in Order 6000.15, Order 6032.1, or in the other chapters of the MTHB.

(3) Specific information with regards to Order 6000.15 can be shown as a topic with its own paragraph heading and can be divided into subparagraphs.

b. Paragraph Descriptions. Table 3-2, MTHB Chapter 1 Paragraph Language and Placement, shows mandatory paragraph wording. Paragraphs 1 through 3 are required and must appear in the sequence provided in the table. Paragraphs 4 and 5 are only required for MTHB revisions. The sequence of paragraphs 4 through 10 in the MTHB may vary.

(1) Purpose. Insert the appropriate system or equipment type in the (*specify*). Additional text may be added to include brief background material on the directive.

(2) Audience. Insert the appropriate system/equipment type in the (*specify*).

(3) Where Can I Find This Order? Reference the MyFAA Website.

(4) Cancellation. Insert the number, title, and date of the Order being cancelled.

(5) Explanation of Policy Changes. Briefly describe significant changes. Reference the CCD that approved the change to the MTHB.

(6) Certification. Reference Appendix (*specify*), Certification Requirements (if equipment/facilities requires certification) of the subject MTHB. Refer to Order 6000.15 for details on certification requirements.

(7) Aircraft Accident. Include when MTHBs pertain to facilities, systems, or equipment that are directly involved in the generation, transmission, processing, display of information, or guidance provided to aircraft and/or air traffic personnel.

(8) Maintenance Procedure. Insert the appropriate system/equipment type in the (*specify*). Required when the MTHB concerns ATO maintained equipment, systems, or facilities where ATO provides SLE support. Refer to Order 6032.1.

(9) Risks. List any operational, safety-related, and security risks associated with the MTHB.

(10) Implementation Date. Indicate the pre-planned final date that all NAS facilities must comply with all applicable actions in the MTHB.

c. Paragraph Wording. Use table 3-2 as guidance in preparing the initial paragraphs of chapter 1 in the MTHB.

Table 3-2. MTHB Chapter 1 Paragraph Language and Placement

Chapter 1. General Information and Requirements			
Paragraph Placement	**Title**	**Type**	**Paragraph Language**
1	**Purpose**	**Mandatory**	This MTHB provides guidance and prescribes technical standards, tolerances, and procedures applicable to the maintenance and inspection of (*specify*). It also provides information on special methods and techniques, which will enable maintenance personnel to achieve optimum performance from the equipment. This information augments information available in Technical Instruction Books (TIB) and other MTHBs, and complements the latest edition of Order 6000.15.

Table 3-2. MTHB Chapter 1 Paragraph Language and Placement (Continued)

Chapter 1. General Information and Requirements			
Paragraph Placement	**Title**	**Type**	**Paragraph Language**
2	**Audience**	**Mandatory**	This MTHB requires actions by the Airway Transportation System Specialist (ATSS) at operational facilities with Facility, Service, and Equipment Profile (FSEP) equipment: (*specify*).
3	**Where Can I Find This Order**	**Mandatory**	An electronic version of this MTHB can be found at https://employees.faa.gov/tools_resources/orders_notices/.
4	**Cancellation**	**Mandatory (for full revisions only)**	This order cancels (*specify order number and title*), dated (*specify*).
5	**Explanation of Policy Changes**	**Mandatory (if Cancellation is used)**	This MTHB implements Configuration Control Decision (CCD) (*specify CCD number and title*).
6	**Certification**	**Mandatory (for systems requiring certification)**	Refer to Order 6000.15 for general guidance on the certification of systems, subsystems, and equipment. Refer to appendix (*specify*) of this MTHB for the specific certification requirements of the (*specify*) system.
7	**Aircraft Accident**	**Mandatory**	When aircraft accidents or incidents occur, Air Traffic Organization Technical Operations personnel are responsible, when requested by the Technical Operations Aircraft Accident Representative (TOAAR) through the appropriate control center, to evaluate and document the technical performance of the facilities which may have been involved (for some facilities, it may also be necessary to remove them from service, and to conduct flight inspections). This requires that facility operational data be obtained and recorded in the maintenance log and on technical performance records. These records are official documents, and may be used by an aircraft accident investigation board in the determination of facility operational status at the time of the accident.

Table 3-2. MTHB Chapter 1 Paragraph Language and Placement (Continued)

Chapter 1. General Information and Requirements			
Paragraph Placement	**Title**	**Type**	**Paragraph Language**
7 (con't)	**Aircraft Accident**	**Mandatory**	Refer to the latest edition of Order 8020.16, Air Traffic Organization Aircraft Accident and Incident Notification, Investigation, and Reporting, for detailed guidance on requirements and activities following an aircraft accident/incident.
8	**Maintenance Procedure**	**Mandatory**	Order 6000.15, this MTHB, the applicable equipment TIB, and other applicable handbooks are consulted and used together by the maintenance technician in all duties and activities for the maintenance of (*specify*). These documents are considered collectively as the single official source of maintenance policy and direction authorized by Technical Operations Services. References located in the appropriate paragraphs of this handbook entitled Chapter 3, Standards and Tolerances, Chapter 4, Maintenance Requirements, and Chapter 5, Maintenance Procedures, indicate to the user whether this handbook and/or the equipment TIB must be consulted for a particular standard, key inspection element or performance parameter, performance check, maintenance task, or maintenance procedure.
9	**Risks**	**Mandatory**	**a. Operational.** In compliance with the latest edition of Order JO 6000.50, National Airspace System (NAS) Integrated Risk Management, activities are to be assessed for potential risk to the NAS from an operational perspective. The following operational risks are associated with this MTHB. (*Specify.*) or There are no operational risks associated with this MTHB.

Table 3-2. MTHB Chapter 1 Paragraph Language and Placement (Continued)

Chapter 1. General Information and Requirements			
Paragraph Placement	**Title**	**Type**	**Paragraph Language**
9 (con't)	**Risks**	**Mandatory**	**b. Safety.** In compliance with the latest editions of Orders 1100.161, Air Traffic Safety Oversight, and JO 1000.37, ATO Safety Management System, all NAS changes require an SRM assessment for all MTHBs prior to delivery. The SRM information for this MTHB is available at (s*pecify link and/or attachment*). For further guidance in developing SRM documentation, refer to the latest version of the Safety Management System (SMS) Manual. **c. Security.** In compliance with the latest edition of Order 1370.82, Information Systems Security Program, the FAA must ensure that security controls are implemented and commensurate with the risk and magnitude of the harm that would result from the loss, misuse, denial of service, unauthorized access, or modification of Federal information assets. The following security risks are associated with this MTHB. (*Specify*.) or There are no security risks associated with this MTHB.
10	**Implementation Date**	**Mandatory**	This MTHB must be implemented by (*specify*).

4. Chapter 2, Technical Characteristics. This chapter is in each MTHB. It acquaints the reader with the subject system or equipment. It includes the topics described in the following subparagraphs, but does not need to use the exact subparagraph titles shown.

a. Paragraph Descriptions.

(1) Purpose or Function. Include information relating to the purpose or function of the system or equipment and, when applicable, how the system or equipment is used in conjunction with other systems or equipment (including RMM capability).

(2) Description. Include a general physical and technical description of the equipment or system as applicable. Include information on various models or configurations of equipment when necessary for clarification.

(3) Theory. Include:

(a) Sufficient theory of operations of the system or equipment in the discussion to provide a comprehensive understanding of functions.

(b) Detailed equipment theory, similar to that normally given in training manuals and TIBs, should only be included in special instances where it is essential for understanding the operation and maintenance of the equipment.

(c) References to the TIB theory when applicable.

(d) Functional block diagrams when the operation can best be explained by their use. Abstract theory is not included unless justified by a definite requirement.

b. Paragraph Wording. Use Table 3-3, MTHB Chapter 2 Paragraph Language and Placement, as guidance in preparing the initial paragraphs of chapter 2 in the MTHB.

Table 3-3. MTHB Chapter 2 Paragraph Language and Placement

Chapter 2. Technical Characteristics			
Paragraph Placement	**Title**	**Type**	**Paragraph Language**
1	**Purpose or Function**	**Mandatory**	*Examples of typical introductory statements*: - Precision approach radar provides aircraft position information to the airport traffic controller for use in advising pilots flying under Instrument Flight Rules (IFR). - The communications system provides communication links between the aircraft pilot and the air traffic controller. *Recommended language to be included if applicable:* The (*specify*) contains a Remote Monitoring Subsystem (RMS). The RMS interfaces with the Remote Maintenance Monitoring System (RMMS) and allows for maintenance personnel to remotely monitor and control the system. This is known as Remote Maintenance Monitoring (RMM) capability. (*Specify the technical description of the RMM capability of the system*.)

Table 3-3. MTHB Chapter 2 Paragraph Language and Placement (Continued)

Chapter 2. Technical Characteristics			
Paragraph Placement	**Title**	**Type**	**Paragraph Language**
2	**Description**	**Mandatory**	(*Specify.*)
3	**Theory**	**Mandatory**	(*Specify.*)

5. Chapter 3, Standards and Tolerances. This chapter is in each MTHB. It provides a list of the essential system or equipment parameters, the standard value assigned to each parameter, and the initial and operating tolerances/limits imposed on each standard.

a. Formatting of Standards and Tolerances Limits.

(1) The *Standard* is the optimum value assigned to an essential parameter of a system and is compatible with the system as a whole and the design capability of the equipment involved. Often, this will be the FAA Form 6030-17, Technical Reference Data Record value established at facility commissioning.

(2) The *Initial Tolerance/Limit* is the maximum deviation from the standard value of the parameter, or the range, which is permissible when the system or equipment is accepted for use in the NAS at the time of initial commissioning or after any readjustment, modification, or modernization.

(3) The *Operating Tolerance/Limit* is the maximum deviation from the standard value of a parameter, or the range within which normal functioning can continue without adjustment or corrective maintenance, and beyond which remedial action by system specialists is mandatory.

b. Presentation. List the standards and tolerances in tabular form, cross-referenced as appropriate to the paragraph which describes the procedure for checking each of the required parameters. This cross-reference will be to Chapter 5, Maintenance Procedures of the MTHB or the equipment TIB. If the nature of the standards and tolerances do not lend themselves to tabulation, employ paragraph presentation. Refer to appendix D, figure D-5.

c. Emphasis. Place an arrow (→) to the left of key performance or key inspection elements that are considered critical indicators of whether the system or equipment is performing its intended function and is being maintained properly.

d. Paragraph Description.

(1) General. Insert the appropriate system or equipment type in the (*specify*).

Note: The rest of the paragraphs in this chapter may be titled by facility type, by site location, by equipment model, by functional equipment grouping, or by whatever scheme is most convenient. Use numbered paragraphs and lettered/numbered subparagraphs even where the standards and tolerances are presented in tabular form.

e. Paragraph Wording. Use Table 3-4, MTHB Chapter 3 Paragraph Language and Placement, as guidance in preparing the initial paragraph of chapter 3 in the MTHB.

Table 3-4. MTHB Chapter 3 Paragraph Language and Placement

Chapter 3. Standards and Tolerances			
Paragraph Placement	**Title**	**Type**	**Paragraph Language**
1	**General**	**Mandatory**	This chapter prescribes the standards and tolerances for (*specify*), as defined and described in Order 6000.15. All key performance parameters and/or key inspection elements are clearly identified by an arrow (→) placed to the left of the applicable item.

6. Chapter 4, Maintenance Requirements. This chapter is in each MTHB. It enumerates all of the maintenance activities required on a periodic basis, whether on a fixed, scheduled basis, or on an irregular but recurring basis. This enumeration is done in order to ensure top efficiency in system and equipment performance, to minimize unwanted interruption in service, and to eliminate major breakdowns. This chapter must stipulate the schedules for the accomplishment of these activities. The schedules must reflect the maximum permissible intervals between successive accomplishments to ensure that the performance of the system or equipment is reliable and within designated technical tolerances or limits.

> **Note:** The ATO plans to apply Reliability Centered Maintenance (RCM) processes to its core function of maintaining the NAS. SLE organizations will implement these processes over time as they perform RCM analysis and update their MTHBs to reflect RCM principles. The goal of RCM is to provide the stated function of the facility efficiently, with the required level of safety, reliability, and availability. Refer to Order 6000.15 for more information on RCM. The RCM overview outline is shown in appendix D, Figure D-6, Reliability Centered Maintenance Outline.

a. Presentation. Except for the first paragraph of the chapter as described in section 2, paragraph 6c, of this chapter, divide the chapter into two sections. Present both sections in tabular form as shown in appendix D, Figure D-7, Sample MTHB Chapter 4.

(1) Section 1. Performance Checks

(2) Section 2. Other Maintenance Tasks

b. Emphasis. Place a pound sign (#) to the left of all safety-related tasks which have a direct impact to safety of flight within the NAS.

c. Content. Pursuant to Order 6000.15, this chapter must fully delineate all required maintenance activities. Each section must employ one or more of the three maintenance strategies described in paragraphs 6c(1) and 6c(2); whichever is appropriate for the individual MTHB, section

and/or subject. Each section must clearly state which of the techniques is employed. The same technique need not be used in both sections. Current ATO procedure is to include TIB-defined schedules for periodic maintenance tasks in MTHBs.

(1) Performance Checks Content. The section titled Performance Checks must:

(a) List all tests, measurements, and observations of normal operating controls and functions necessary to determine whether a system or equipment is operating within its established tolerances or limits. Each listed activity first describes an action (inspect, observe, measure) and explains what the action is designed to do.

(b) Include cross-references as appropriate to the paragraphs in Chapter 3, Standards and Tolerances and Chapter 5, Maintenance Procedures of the MTHB and/or the equipment TIB, as shown in appendix D, figure D-7.

(c) List examples of Performance Checks.

(2) Other Maintenance Tasks Content. The section titled Other Maintenance Tasks must:

(a) List all tasks other than those listed in chapter 4, section 1 of the MTHB, that are necessary to prevent deterioration and/or to ensure reliable operation of a system or equipment. Each listed activity first describes an action (lubricate, change, adjust) and explains what the action is designed to do.

(b) Include cross-references as appropriate to the paragraphs in Chapter 3, Standards and Tolerances and Chapter 5, Maintenance Procedures of the MTHB and/or the equipment TIB as shown in appendix D, figure D-7.

(c) List examples of Other Maintenance Tasks.

(3) Formatting of Checks and Tasks. Sections must be in tabulation or a series of tabulations listing the required Periodic Maintenance (PM) activities cross-referenced as indicated in appendix D, figure D-7. Employ numbered paragraphs even though the maintenance schedules are presented in tabular form.

(a) If the MTHB covers several facility types, the maintenance schedules may be identified first by individual facility type and then by functional equipment grouping shown in appendix D, Figure D-8, Sample MTHB Chapter 4 Tabulation for Several Facility Types.

(b) If the MTHB covers one facility type, the maintenance schedules may be identified first by equipment model and then by site location and functional equipment grouping as shown in appendix D, Figure D-9, Sample MTHB Chapter 4 Tabulation for a Single Facility Type (Model, Location, and Function Grouping).

(c) If the MTHB covers one facility type, the maintenance schedules may be identified first by equipment type and then by size as shown in appendix D, Figure D-10, Sample MTHB Chapter 4 Tabulation for a Single Facility Type (Model and Size Grouping).

(d) If the MTHB covers one facility type, the maintenance schedules may be identified first by functional equipment grouping and then by equipment type as shown in appendix D, Figure D-11, Sample MTHB Chapter 4 Tabulation for a Single Facility Type (Function and Model Grouping).

(e) If the MTHB covers one functional equipment grouping, the maintenance schedules may be identified just by equipment type as shown in appendix D, Figure D-12, Sample MTHB Chapter 4 Tabulation for Functional Equipment Groups (Type or Model).

(f) If the MTHB covers a subject in which the maintenance schedules need to be identified only by periodicity of time, the tabulation may appear by Period Only as shown in appendix D, Figure D-13, Sample MTHB Chapter 4 Tabulation with Tasks Identified by Period Only.

(g) If the MTHB covers several related systems for which it is likely that the same person or crew will be performing all of the periodic maintenance at any given location, and possibly even at several locations, all of the activities may be grouped first by periodicity of time and then by system as shown in appendix D, Figure D-14, Sample MTHB Chapter 4 Tabulation with Tasks Identified by Period and System.

(h) If the MTHB requires Technical Performance Records (TPR) to be completed as part of the Performance Check or Maintenance Task, incorporate a "measure and record" format. Place the "measure and record" requirement with the specified task number. Incorporate the specific FAA Form 6000 number if applicable.

d. Paragraph Description.

(1) General. Insert the appropriate system or equipment type in the (*specify*).

Note: The FAA Form 6000 Series paragraph is used when applicable to the subject MTHB. The wording is mandatory.

(2) FAA Form 6000 Series. Include instructions for using FAA Form 6000 series (as applicable to specific equipment/systems) in the appropriate MTHBs. These instructions must conform to the general guidance and symbology for making entries included in Order 6000.15.

e. Paragraph Wording. Use Table 3-5, MTHB Chapter 4 Paragraph Language and Placement, as guidance in preparing the initial paragraph of chapter 4 in the MTHB.

Table 3-5. MTHB Chapter 4 Paragraph Language and Placement

Chapter 4. Maintenance Requirements			
Paragraph Placement	**Title**	**Type**	**Paragraph Language**
1	**General**	**Mandatory**	This chapter establishes all the maintenance activities that are required for (*specify*) on a periodic, recurring basis and the schedules for their accomplishment. The chapter is divided into two sections. The first identifies the performance checks (tests, measurements, and observations) of normal operating controls and functions, which are necessary to determine whether operation is within established tolerances/limits.

Table 3-5. MTHB Chapter 4 Paragraph Language and Placement (Continued)

Chapter 4. Maintenance Requirements			
Paragraph Placement	**Title**	**Type**	**Paragraph Language**
1 (Con't)	**General**	**Mandatory**	The second section identifies other tasks that are necessary to prevent deterioration and/or ensure reliable operation. All safety-related checks with direct impact to safety of flight within the NAS are clearly identified by a pound sign (#) placed to the left of the applicable task.
2	**FAA Form 6000 Series**	**Mandatory**	Order 6000.15 contains guidance and detailed instructions for field utilization of FAA Form 6000 series (Trend Analysis), as applicable to the (*equipment/ system/facility*). Make entries in accordance with the instructions published in Order 6000.15 (except as otherwise instructed in the subparagraphs to follow). Forms are available at http://tpr.faa.gov and https:// employees.faa.gov/tools_resources/forms/.

7. Chapter 5, Maintenance Procedures. This chapter is in each MTHB. It includes the procedures that are required for accomplishing the various essential maintenance activities, both periodic and incidental, and any associated safety precautions.

a. Presentation. Except for the first paragraph of the chapter, as described in paragraph 7c of this section, divide the chapter into 3 sections. Present the sections as shown in appendix D, figure D-17.

(1) Section 1. Performance Check Procedures.

(2) Section 2. Other Maintenance Task Procedures.

(3) Section 3. Special Maintenance Procedures.

b. Content. The sections in this chapter must contain procedures for the checks and tasks listed in chapter 4 of the MTHB. They include information and instructions already detailed in equipment TIBs *only* when they relate to overall system procedures. Use the TIB as a guide for equipment troubleshooting and adjustment of internal circuits and/or components. Where system adjustments, standards, or tolerances are involved, provide MTHB procedures in detail. Where additional procedures of proven value have been developed through maintenance experience, they are to be included. Procedures pertaining only to certain models and configurations of equipment are identified and associated with the appropriate unit. Each procedure below must be cross-referenced to the check or task stipulated in chapter 4 of the MTHB. Do not repeat the standards and tolerances as part of the procedures described in chapter 5 of the MTHBs. Make appropriate cross-references to chapter 3 instead.

(1) Performance Check Procedures must contain the procedures or methods for making the performance checks listed in chapter 4, section 1 of the MTHB.

(2) Other Maintenance Task Procedures must contain the procedures or methods for accomplishing the tasks listed in chapter 4, section 2, of the MTHB.

(3) Special Maintenance Procedures must contain the procedures or methods for accomplishing special tasks, usually nonscheduled and not listed in chapter 4 of the MTHB. This includes special adjustment, alignment, or calibration procedures.

> **Note:** When writing the procedures, Warnings and Cautions must precede the text to which it applies, if applicable, to ensure the safety of personnel following the procedures contained in the MTHB. Refer to FAA-D-2494, Technical Instruction Book Manuscript, for additional information on Warnings and Cautions.

c. Paragraph Descriptions.

(1) General. Insert the appropriate system or equipment type in the (*specify*).

> **Note:** Remote Maintenance Monitoring paragraph is used when applicable to the subject MTHB. The wording is mandatory.

(2) Remote Maintenance Monitoring (RMM). Provide information on utilizing RMM to perform maintenance activities when applicable. This paragraph refers to Orders 6000.15 and the latest edition of Order 6000.30, National Airspace System Maintenance Policy.

d. Suggested Paragraph Formatting.

(1) Object.

(2) Discussion.

(3) Test Equipment Required.

(4) Conditions.

(5) Detailed Procedure.

e. Paragraph Wording. Use Table 3-6, MTHB Chapter 5 Paragraph Language and Placement, as guidance in preparing the initial paragraphs of chapter 5 in the MTHB.

Table 3-6. MTHB Chapter 5 Paragraph Language and Placement

Chapter 5. Maintenance Procedures			
Paragraph Placement	**Title**	**Type**	**Paragraph Language**
1	**General**	**Mandatory**	This chapter establishes the procedures for accomplishing the various essential maintenance activities that are required for (*specify*) on either a periodic or incidental basis. The chapter is divided into 3 sections. The first section describes the procedures to be used in making the performance checks listed in chapter 4, section 1. The second section describes the procedures for doing the tasks listed in chapter 4, section 2. The third section describes the procedures for doing special tasks, usually nonscheduled and not listed in chapter 4.
2	**Remote Maintenance Monitoring (RMM)**	**Mandatory**	Technical Operations will identify maintenance activities that can be accomplished via RMM. They include: **a.** Monitoring system status and alarms. **b.** Managing system configuration. **c.** Performing fault isolation and restoration. **d.** Conducting analysis of system performance. **e.** Performing periodic maintenance (if applicable). **f.** Performing certification (if applicable). More information on RMM is provided in the latest editions of Order 6000.30 and Order 6000.15.

8. Chapter 6, Flight Inspection. This chapter is in each MTHB when flight inspections requiring action by maintenance personnel are conducted on the pertinent equipment or system. This chapter must contain information on detailed ground procedures to be accomplished by maintenance personnel prior to, during, and after flight inspection. Appropriate references in the latest edition of Order 8200.1, United States Standard Flight Inspection Manual (USSFIM), may be included. The content of this chapter, however, does not duplicate the contents of Order 6000.15. A sample of chapter 6 is shown in appendix D, figure D-18. Where required for completeness, include additional information applicable only to the system or equipment covered by the MTHB.

9. Chapter 7, Miscellaneous. This chapter may be made a part of the MTHB. It contains topics that do not fit into any of the other chapters. If there are no miscellaneous items to be inserted, the chapter is not required. A sample of chapter 7 is shown in appendix D, figure D-19.

10. Appendix (*specify*), Certification Requirements. Refer to Order 6000.15 for general guidance on the certification of systems, subsystems, and equipment. A sample of the certification requirements table is shown in appendix D, figure D-20.

11. Administrative Information Appendix.

a. Paragraph Descriptions.

(1) Distribution. List the offices that will receive the directive. State where the document is available for general access by FAA personnel (the website address).

(2) Background. Include detailed historical or explanatory information, if applicable.

(3) Definitions/Acronyms. Introduce new terms or define specific terms/acronyms used in the MTHB. If the list of definitions/acronyms is longer than 10 items, or takes up most of the page, put the definitions/acronyms in a separate appendix titled Glossary. Refer to appendix D, figure D-21.

(4) Related Publications. List documents referenced in the MTHB. Include the document numbers, titles, and web links (if electronically available). If the list is longer than 10 items, or takes up most of the page, put the list in a separate appendix titled Related Publications. Refer to appendix D, figure D-22.

(5) Forms and Reports. List forms and reports referenced in the MTHB. Include the form/report numbers, titles and web links (if electronically available). Refer to appendix D, figure D-23.

b. Paragraph Wording. Use Table 3-7, MTHB Administrative Paragraph Language and Placement, as guidance in preparing the initial paragraphs of the administrative appendix.

Table 3-7. MTHB Administrative Paragraph Language and Placement

Appendix (*Specify*). Administrative Information			
Paragraph Placement	**Title**	**Type**	**Paragraph Language**
1	**Distribution**	**Mandatory**	This directive is distributed to selected offices and facilities with the following Facility, Service, and Equipment Profile (FSEP) equipment: (*specify*). **a.** To subscribe to email notifications of issued MTHBs: **(1)** Go to http://dis.faa.gov. Click Subscribe. Click Subscribe to List. Enter your email address. Click Display Subscription Options. Select the series of MTHB for subscription. Click Subscribe.

Table 3-7. MTHB Administrative Paragraph Language and Placement (Continued)

Appendix (*Specify*). Administrative Information			
Paragraph Placement	**Title**	**Type**	**Paragraph Language**
1 (con't)	**Distribution**	**Mandatory**	or **(2)** Go to https://employees.faa.gov/tools_resources/orders_notices. Select the series of MTHB for subscription. Click Go. Enter your email address. Click Go. Confirm email address, click radio button under Optional Password. Enter password if password was selected. Click Save. **b.** For an electronic copy of this MTHB, go to https://employees.faa.gov/tools_resources/orders_notices/.
2	**Background**	**Optional**	(*Specify.*)
3	***Definitions**	**Mandatory**	(*Specify.*)
4	****Related Publications**	**Mandatory**	(*Specify.*)
5	**Forms and Reports**	**Mandatory**	(*Specify.*)
* If the list of definitions is longer than 10 items, or takes up most of the page, put the definitions in a separate appendix titled Glossary. (Refer to appendix D, figure D-21.) ** If the list of related publications is longer than 10 items, or takes up most of the page, put the list in a separate appendix titled Related Publications. (Refer to appendix D, figure D-22.)			

Section 3. MTHB Change Packages

1. Purpose of MTHB Change Packages. The MTHB change package makes permanent page changes to an existing MTHB. Change pages are not to replace more than 40 percent of the entire MTHB. If the page changes affect more than 40 percent of the existing MTHB, a full MTHB revision is required. An unchanged page that shares a physical page with a changed page is referenced as a backup page. Backup pages are included when determining the percentage of changed pages.

2. Responsibility for Preparation of MTHB Change Packages. MTHB change packages are the responsibility of the MTHB OPR.

3. Coordination. Refer to section 1, paragraph 2d, of this chapter.

4. SRM Requirements. Refer to section 1, paragraph 2e, of this chapter.

5. MTHB Change Package Content. The MTHB change package consists of the MTHB transmittal and all updated pages including any backup pages.

6. Preparation of MTHB Change Pages.

a. Make all changes to the MTHB specific and clear. Typically, use the same writing style, numbering, and abbreviations from the original MTHB. Use revision bars or asterisks in the margins at the location of the changed text.

b. Change pages retain the existing Order number, and are assigned a change number from the Directives Management Officer (DMO). The existing Order number, assigned change number, and signature approval date is placed in the MTHB header of each change page.

7. MTHB Transmittal. Prepare the MTHB transmittal of each MTHB change package using the template provided at https://employees.faa.gov/tools_resources/branding_writing/standards_tools/orders_notices/. Refer to appendix D, Figure D-24, Sample MTHB Change Transmittal.

a. Paragraph Descriptions.

(1) Purpose. Describe the purpose of the change, not the purpose of the underlying directive. Include the CCD(s) approving the change.

(2) Who this Change Affects. Identify who the change affects.

(3) Risks. List any operational, safety-related, and security risks associated with the MTHB change package.

(4) Implementation Date. Indicate the pre-planned final date that all NAS facilities must comply with all applicable actions in the MTHB change.

(5) Disposition of Transmittal. Direct the field to retain the MTHB transmittal.

b. Paragraph Wording. Use Table 3-8, MTHB Change Package Transmittal Paragraphs, as guidance in preparing the paragraphs for the MTHB change package transmittal.

Table 3-8. MTHB Change Package Transmittal Paragraphs

Paragraph Placement	Title	Type	Paragraph Language
1	**Purpose**	**Mandatory**	This change transmits revised pages to Order (*specify order number and title*), dated (*specify*). This directive implements Configuration Control Decision (CCD) (*specify CCD number and title*).
2	**Who This Change Affects**	**Mandatory**	This document requires actions by the Airway Transportation System Specialist (ATSS) at operational facilities with Facility, Service, and Equipment Profile (FSEP) equipment: (*specify*).
3	**Risks**	**Mandatory**	**a. Operational.** In compliance with the latest edition of Order JO 6000.50, National Airspace System (NAS) Integrated Risk Management, activities are to be assessed for potential risk to the NAS from an operational perspective. The following operational risks are associated with this MTHB change. (*Specify.*) or There are no operational risks associated with this MTHB change. **b. Safety.** In compliance with the latest editions of Orders 1100.161, Air Traffic Safety Oversight, and JO 1000.37, ATO Safety Management System, all NAS changes require an SRM assessment for all MTHB changes prior to delivery. The SRM information for this MTHB change is available at (s*pecify link and/ or attachment*). For further guidance in developing SRM documentation, refer to the latest version of the Safety Management System (SMS) Manual.

Table 3-8. MTHB Change Package Transmittal Paragraphs (Continued)

Paragraph Placement	Title	Type	Paragraph Language
3 (con't)	**Risks**	**Mandatory**	**c. Security.** In compliance with the latest edition of Order 1370.82, Information Systems Security Program, the FAA must ensure that security controls are implemented and commensurate with the risk and magnitude of the harm that would result from the loss, misuse, denial of service, unauthorized access, or modification of Federal information assets. The following security risks are associated with this MTHB change. (*Specify*.) or There are no security risks associated with this MTHB change.
4	**Implementation Date**	**Mandatory**	This MTHB change must be implemented by (*specify*).
5	**Disposition of Transmittal**	**Mandatory**	Retain the change transmittal after change pages are incorporated into the MTHB. File in front of the MTHB.

c. Page Control Chart (PCC). A PCC is inserted beneath the last paragraph of the MTHB transmittal. The PCC lists all pages that have been changed, added, or deleted from the MTHB. Backup pages must be included in the PCC.

Section 4. MTHB Formatting

1. General Information. Follow the requirements and instructions as specified in Order 1320.1 and in the following paragraphs when preparing MTHBs. Numbering and heading of chapters, sections, and paragraphs must be in accordance with the Order 1320.1, section 2 of this chapter, and the following paragraphs.

2. MTHB Formatting Requirements.

a. MTHB Samples. Samples used to generate MTHBs are included in appendix D.

b. MTHB Numbering. A MTHB must be assigned a classification number, point number, and/or revision level through the DMS via the Directives Management Office. If the originating organization requires assistance obtaining the number, email 9-AWA-AIO-Directives@faa.gov.

c. Formatting Standards. The format, style, and appearance of MTHBs are guided by the requirements of Order 1320.1.

(1) When making change pages to MTHBs, the originator must continue the use of the existing formatting, paragraph numbering, and styling.

(2) When developing new or complete revisions to existing MTHBs, the originator complies with the formatting, paragraphing, and styling defined in Order 1320.1.

(3) When requesting a deviation from the formatting standards, the originator, with management's approval, appeals to the directives program manager at 9-AWA-AIO-Directives@faa.gov to request a waiver from the Order 1320.1 requirements.

> **Note:** If the MTHB is to be delivered in electronic format, the OPR has the option of using Arial font, 11 point pitch, in lieu of Times New Roman font, 12 point pitch. In this case, a waiver is not required from the directives program manager as noted above. If the OPR plans to distribute in electronic format only, the OPR must request facility concurrence with the electronic delivery through a notice solicitation on a system case-by-case basis, until the DDS contains an FSEP MTHB copy count field that will be placed at zero for electronic delivery only.

3. MTHB Clearance and Final Approval. Formal MTHB clearance and approval will be coordinated by Technical Operations in accordance with the procedures provided in Order 1320.1.

4. MTHB Distribution. Most MTHBs (new, revised, or change pages) are distributed in hard copy via the DDS. An annual notice is issued to explain how DDS works and any new functions that have been added to the system.

Chapter 4. System Support Directives (SSD)

Section 1. General

1. Objective. This chapter provides detailed guidance for preparing SSDs. The SSD is a transmittal used to issue system modifications, safety modifications, technical data, and documentation releases for a particular system (or systems). The OPR also uses SSDs to update or modify Technical Issuances (TI). TIs are publications acquired from non-agency sources, or developed within FAA, that directly concern installation, maintenance, or modification of equipment, systems, facilities, or aircraft. Manufacturer TIBs are included in this category, as well as TIBs, contractor publications, military documents, and other agencies' documents. SSDs contain administrative and technical information on guidelines, procedures, standards, and instructions.

2. General SSD Information.

a. The SSD Consists of Three Document Types.

(1) SSMs. Use SSMs to authorize and deliver system HW, SW, both HW and SW, firmware, database updates, new functions to the NAS, or plant modifications to field facilities. SSMs are also used to withdraw/replace existing SSMs. Ideally, all TI pages affected by the SSM should be included as attachments. Refer to section 2 of this chapter.

(2) STRs. Use STRs to deliver directive or non-directive system information that does not change HW, SW, or documentation. STRs are also used to communicate workaround information to address problems prior to a planned delivery of baseline updates/fixes. Refer to section 3 of this chapter.

(a) Non-directive Technical Information RECOMMENDS what should be done. When preparing non-directive technical SW and HW information, use the paragraphs for *Description of Problem* and *Recommended Solution*.

(b) Directive Technical Information tells what ACTION must be done. When preparing directive technical SW and HW information, use the paragraphs for *Description of Problem* and *Directed Action*.

(3) SDRs. Use SDRs to deliver limited-scope changes to previously issued SSDs, new/revised documentation, or change pages for non-modification releases. Refer to section 4 of this chapter.

b. Responsibility for Preparation of SSDs. The preparation of SSDs is the responsibility of the OPR for the system.

c. SSD Authorization and Coordination.

(1) Baseline Changes. Changes to an operational baseline are authorized by a CCD. (Refer to Order 1800.66.)

(2) Non-Baseline Modifications. Modifications not affecting an operational baseline, which are issued to correct deficiencies, are disseminated using an SSM and do not require a CCD.

(3) References. CCDs, Program Technical Reports (PTR), Hardware Discrepancy Reports (HDR) and/or other supporting documentation associated with the SSD are listed by number and title in the SSD paragraph titled *References*.

d. SRM Requirements. In compliance with Orders 1100.161 and JO 1000.37, all NAS changes, including SSDs, require an SRM assessment prior to delivery. The SRM documentation related to the NAS change must be identified with a link and/or attachment in the Risks paragraph of the SSD, and/or as an attachment to the SSD. For further guidance in developing SRM documentation, refer to the latest edition of the SMS Manual.

(1) SSM SRM Risk Paragraph Requirements. The SSM paragraph 22b must explain the risks associated with installing the SW or HW delivered with the SSM. It must also discuss the risks associated with not installing the HW or SW delivered with the SSM.

(2) STR SRM Risk Paragraph Requirements. The STR paragraph 11b must explain the risk associated with following the instructions/procedures described in the STR. It must also discuss the risks associated with not following the instructions/procedures described in the STR.

(3) SDR SRM Risk Paragraph Requirements. The SDR paragraph 7b must explain the risks associated with following the instructions/procedures described in the SDR. It must also discuss the risks associated with not following the instructions/procedures described in the SDR.

e. ORM Requirements. In compliance with Order JO 6000.50, all products developed under this order are to be assessed for potential risk to the NAS from an operational perspective. For example, this impact could be in the form of causing delays, excessive financial costs, project schedule delays, political implications, Occupational Safety and Health type impacts, or negative effects on performance metrics.

f. Security Risks. In compliance with Order 1370.82, the FAA must ensure that security controls are implemented and commensurate with the risk and magnitude of the harm that would result from the loss, misuse, denial of service, unauthorized access, or modification of Federal information assets.

3. Directives Requiring Special Handling. Certain SSDs may contain content that requires special handling and coordination, for example, classified, sensitive, safety, or time critical. Order 1600.2, Safeguarding Classified National Security Information, and Order 1600.75, Protecting Sensitive Unclassified Information (SUI), provide guidance on these special cases.

4. Mandatory Paragraphs.

a. Paragraphs within SSDs follow the same sequence and, in some cases, standardized wording. This facilitates finding specific items of information in a timely manner. All mandatory paragraphs must be used. However, when the mandatory paragraph is not applicable to the SSD insert the words "Not applicable" after the title.

b. Paragraphs may be needed to provide additional information that does not correlate to the mandatory paragraphs. Insert the additional paragraphs after the last mandatory paragraph and follow the SSD formatting style.

5. Basic Organization of SSDs.

a. First Page of an SSD.

(1) First Page Header. Refer to Figure 4-1, Sample SSD Header. The header of the first page of an SSD document includes the fields identified in Table 4-1, SSD Header Elements.

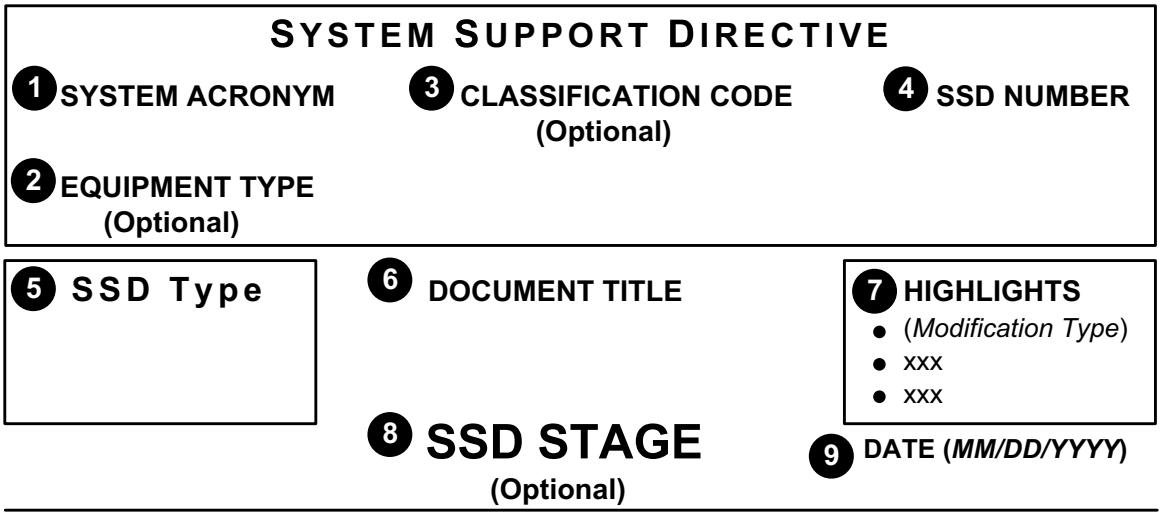

Figure 4-1. Sample SSD Header

Table 4-1. SSD Header Elements

ELEMENT #	ELEMENT DESCRIPTION
1	System Acronym — The system acronym identifies the system as it is known in the NAS. Place the system acronym, left justified, in the upper portion of the directive header bar. When applicable, show the equipment type designation (CA or FA type number or contract number).
2	Equipment Type (Optional) — Place the equipment type under the system acronym.
3	System Classification Code (Optional) — Place the SSD classification number in the middle of the header bar under the System Support Directive title.
4	SSD Number — Place the SSD number, right justified, at the top right of the SSD header bar.

Table 4-1. SSD Header Elements (Continued)

ELEMENT #	ELEMENT DESCRIPTION
❺	SSD Type Box — The SSD type box contains the name of one of the SSD document types. Center the SSD type, horizontally and vertically, in the box and use title case.
❻	Document Title — The document title is uppercased, bolded, and centered. SSD titles are assigned by the OPR SSD author or technical lead. Titles are brief but descriptive of the modification involved. Do not use the word modification in the title.
❼	Highlights Box — Place the highlights box on the right-hand side of the page, under the document number. The box provides three bulleted lines, and is left justified. Identify the type of modification in the highlights box (refer to Order 6032.1 for modification types).
❽	SSD Stage (Optional) — Indicate the stage of the SSD (Draft, Working Copy, Keysite).
❾	Signature Approval Date — Place the signature approval date under the highlights box. The date format is MM/DD/YYYY.

(2) First Page Footer. Identify the distribution of the SSD, on the left-hand side of the footer after DISTRIBUTION. Place the routing symbol of the office that prepared the SSD on the right-hand side of the footer, after INITIATED BY. Refer to Figure 4-2, Sample SSD First Page Footer.

DISTRIBUTION: INITIATED BY:

Figure 4-2. Sample SSD First Page Footer

b. Subsequent SSD Pages.

(1) Paragraphs. Title case and bold the paragraph title; the second and remaining lines are left justified. (Refer to sections 2, 3, and 4 of this chapter for mandatory titles.)

(2) Signature Block. Place the signature block five lines below the last paragraph of the SSD, on the left margin. The signature block does not appear on the last page without at least several

lines of text. The format of the signature block is as shown in Figure 4-3, Sample SSD Signature Block.

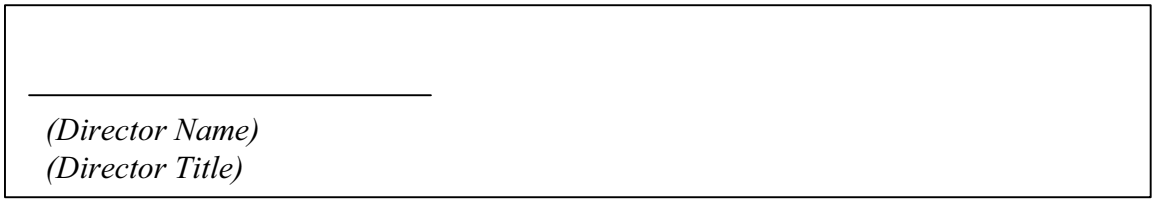

Figure 4-3. Sample SSD Signature Block

(3) List of Appendixes and Attachments Box. Format the list of appendixes and attachments box as shown in Figure 4-4, Sample List of Appendixes and Attachments Box.

(a) If there are no appendixes to the SSD, the box can be changed to read List of Attachments.

(b) The first attachment to each SSD is always the TOC.

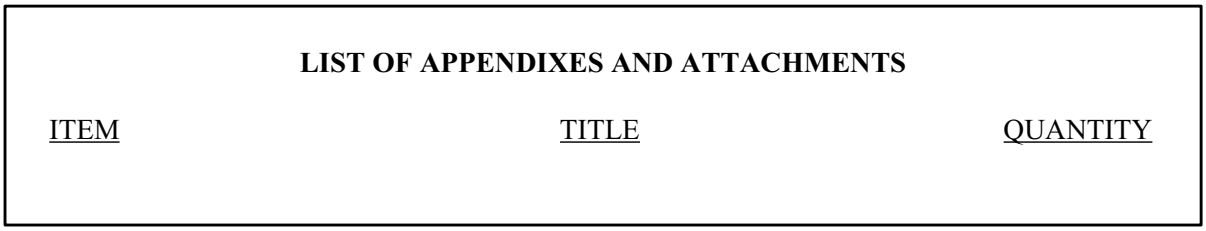

Figure 4-4. Sample List of Appendixes and Attachments Box

(4) SSD Page Numbering. The page number is provided on all but the first page of the SSD. Place page numbering in the center of the footer on each page. Re-sequence page numbering, beginning with 1, for each appendix.

(5) SSD Numbering. The SSD number is provided on all pages of the SSD. The first page of the SSD is formatted as shown in figure 4-1, number 4. Place the SSD number on the right margin, in the header of all additional pages.

(6) SSD Approval Dates. The date format is MM/DD/YYYY. The first page of the SSD is formatted as shown in figure 4-1, number 9. Place the SSD approval date on the left margin, in the header of all additional pages.

c. Appendixes. Appendixes to the SSDs include such things as lengthy modification procedures, figures, or drawings pertinent to the performance of the modification. Place the word *Appendix(es)* in the List of Appendixes and Attachments box header (refer to figure 4-4). Include the title and quantity of the appendix(es) being provided in the List of Appendixes and Attachments box columns labeled *Title* and *Quantity*. Appendixes stay with the SSD.

d. TOC. The TOC is broken down into three sections, one for each of the SSD document types. Within each section, the released documents are ordered sequentially by their document number.

e. Attachments. Attachments to the SSD include such items as the SSD TOC and can include new or replacement pages for TI attachments and other needed items. Attachments to the SSD follow the appendixes. Place the word *Attachment(s)* in the List of Appendixes and Attachments box header (refer to figure 4-4). Include the title and quantity of the attachment(s) being provided in the List of Appendixes and Attachments box columns labeled *Title* and *Quantity*. Attachments can be removed from the SSD.

(1) TI Attachments.

(a) Full Book Revisions. Full book revisions are annotated with the SSD number on the top-right corner of the cover, and noted in the comments area of the Revision History. Each page carries the assigned document number. Revised books also carry a revision letter following the root document number.

(b) Change Pages.

1 Make all changes to TI attachments specific and clear.

a Use the same writing style, numbering, and abbreviations from original TI.

b Use revision bars or asterisks in the margins at the location of changed text.

c Insert the transmittal number and signature date on all updated pages.

2 List affected TIs in SSM, Paragraph 17, Changes to Technical Documentation, or SDR, Paragraph 4, References/Application.

(2) SSD Attachments.

(a) Place the attachment number and title on the top of each attachment page. Place the word (Continued), initial capped and in parenthesis, following the attachment title on all pages starting with the second page.

(b) Each page of the SSD attachment is annotated with the SSD number at the top-right corner of each page.

(c) Each page of the SSD attachment is annotated with the signature date on the top-left margin of each page.

Section 2. System Support Modifications (SSM)

1. SSM Mandatory Paragraphs. The mandatory paragraphs required in the preparation of an SSM are listed in Table 4-2, SSM Mandatory Paragraphs, Descriptions, and Placement, in the order of appearance. Refer to Appendix E, SSD Format Guidance and Examples, Figure E-1, Sample SSM.

Table 4-2. SSM Mandatory Paragraphs, Descriptions, and Placement

Paragraph Placement	Title	Paragraph Description
1	**Purpose**	Describe the purpose of the SSM.
2	**Distribution**	Identify the distribution list to be used for hard copy distribution. Format and word as follows: This SSM requires actions by the Airway Transportation System Specialist (ATSS) at operational facilities with Facility, Service, and Equipment Profile (FSEP) equipment: (*specify*) (*elaborate as needed*). **a.** To subscribe to email notifications of issued SSDs go to the TechNet Portal at http:// technet.faa.gov/. Click on Auto-Notification Services on the home page. Select the Nat'l Modifications Index application and enter your email address to be sent email notifications which will include a hyperlink to where the SSD may be viewed and/or downloaded. **b.** To obtain an electronic copy of this SSM go to the (*specify*) website at (*httpx://xxxx*) (*elaborate as needed*). **c.** (*If applicable*) To obtain additional hard copies of this SSM, contact (*specify*) (*elaborate as needed*). (*Any additional distribution information.*)
3	**Withdrawals**	Identify any previous SSMs that are withdrawn by the new SSM. Use the text SSM-(*specify system acronym*)-(*specify sequence number*), dated (*MM/DD/YYYY*) is being replaced by this SSM. or Not applicable.

Table 4-2. SSM Mandatory Paragraphs, Descriptions, and Placement (Continued)

Paragraph Placement	Title	Paragraph Description
4	**References**	Identify any references to other documents affecting, or referenced in, the SSM. Orders, TIs, CCDs, PTRs, HDRs, or other change vehicles must all be listed including the exact titles.
5	**Background**	Explain the reason for issuance of the SSM. What happened to make this SSM necessary?
6	**Application**	Identify the specific equipment type, locations, and/or conditions that require this modification to be performed. If necessary, use serial numbers or other unique equipment identifiers.
7	**Materials Required**	Identify materials required for site personnel to complete the modification. Use National Stock Numbers (NSN) when available.
8	**Source of Materials**	Identify the method/source from which site personnel receive materials and modification kits (that are listed in paragraph 7).
9	**Special Tools and Test Equipment Required**	Identify tools and test equipment required to perform the modification or maintain the equipment that would not normally be available at the modification site.
10	**Procedure to be Performed By**	Identify the labor source that will be doing the modification in the SSM.
11	**When Modification is to be Performed**	Specify when the modification must be completed. This paragraph must indicate the urgency of modification completion and also identify any associated SW/HW dependencies.
12	**Estimated Time Required**	Estimate the number of employees and amount of time, in employee-hours, for modification completion. The estimate should include prep time, post-modification testing, and documentation updating.
13	**Disposition of Surplus Parts**	Specify instructions for disposing of surplus parts if other than by local regulations.

Table 4-2. SSM Mandatory Paragraphs, Descriptions, and Placement (Continued)

Paragraph Placement	Title	Paragraph Description
14	**Procedure**	Provide the sequential steps for an installer to use to complete the modification in the SSM. Include warning paragraph if applicable. Format and word as follows: **WARNING:** Use local lockout/tagout procedures when energizing, startup, or release of energy can occur. This is necessary to make sure that other personnel cannot start the power source during maintenance. Shock hazards can kill. Such procedures are a requirement from the latest version of Order 3900.19, FAA Occupational Safety and Health.
	Prerequisites (*Optional*)	Describe any required baseline condition, configurations, or documentation prerequisites. It is an optional paragraph that can be included in paragraph 14.
15	**Tests After Modification**	Identify the post-modification testing required to verify the operational state of systems or units.
16	**Result of Modification**	Explain the results of the modification.
	Software Impact (*Optional*)	Define any SW impact that may result from the modification and necessitates changes in operational or maintenance programs. It is an optional paragraph that can be included in paragraph 16.
17	**Changes to Technical Documentation**	Identify any technical documentation being changed resulting from installation of the SSM.
18	**Changes to Installation Drawings**	Identify any facility installation drawings being changed resulting from installation of the SSM.

Table 4-2. SSM Mandatory Paragraphs, Descriptions, and Placement (Continued)

Paragraph Placement	Title	Paragraph Description
19	**Changes to Recorded Data**	Request that the site modification record be changed. Format and word as follows: In accordance with the latest editions of Order 6032.1, National Airspace System Modification Program, and Order 6000.15, General Maintenance Handbook for National Airspace System (NAS) Facilities, modification records must be kept current and accurate to track the modification status of a system, equipment, or Technical Instruction Book (TIB). FAA Form 6032-1, Equipment Modification Record (available at https://employees.faa.gov/tools_resources/forms/), or a printout of the logging screen documenting the completion of this modification, can be used as the modification record. Maintenance personnel must store modification records with the Facility Reference Data (FRD).
20	**Address Changes**	Provide FSEP and Logistic Inventory System (LIS) information for the sites to update their facility address and directive copy count for hard copy distribution. Format and word as follows: The ATSS must keep accurate FSEP records and Logistics Inventory System (LIS) addresses in order to receive the correct corresponding type and number of printed copies. Printed copies are generated by referencing the FSEP's [Facility Code & Class], [Mod Count], and [GSA Address] fields. They are mailed to the ATSS by referencing the LIS "Mailing Address." **a.** To obtain assistance with verifying or updating FSEP information, go to https://intranet.faa.gov/faaemployees/org/linebusiness/ato/operations/technical_operations/ajw1/ajw162/fsep/contacts/.

Table 4-2. SSM Mandatory Paragraphs, Descriptions, and Placement (Continued)

Paragraph Placement	Title	Paragraph Description
20 (con't)	**Address Changes**	**b.** To obtain assistance with verifying or updating LIS information, go to http://impart.faa.gov/impart/home.html. **c.** (*Optional information*.)
21	**Clarification or Comments**	Provide any additional clarification and/or comments. Reference the FAA Operational Control Center (OCC) Help Desk (866) 432-2622, or other designated help desk, to obtain second-level support.
22	**Risks**	List any operational, safety-related, and security risks associated with the SSM. Format and word as follows: **a. Operational.** In compliance with the latest edition of Order JO 6000.50, National Airspace System (NAS) Integrated Risk Management, activities are to be assessed for potential risk to the NAS from an operational perspective. The following operational risks are associated with this SSM (*specify*). or There are no operational risks associated with this SSM. **b. Safety.** In compliance with the latest edition of Orders 1100.161, Air Traffic Safety Oversight, and JO 1000.37, ATO Safety Management System, all NAS changes require an SRM assessment for all SSMs prior to delivery. The SRM information for this SSM is available at (*specify link and/or attachment*). For further guidance in SRM documentation, refer to the latest edition of the Safety Management System (SMS) Manual. (*Explain risks associated with installing, or not installing, the HW/SW delivered with the SSM*.)

Table 4-2. SSM Mandatory Paragraphs, Descriptions, and Placement (Continued)

Paragraph Placement	Title	Paragraph Description
22 (con't)	**Risks**	**c. Security.** In compliance with the latest edition of Order 1370.82, Information Systems Security Program, the FAA must ensure that security controls are implemented and commensurate with the risk and magnitude of the harm that would result from the loss, misuse, denial of service, unauthorized access, or modification of Federal information assets. The following security risks are associated with this SSM (*specify*). or There are no security risks associated with this SSM.
23	**Fallback Procedures**	Provide procedures for restoring the system to the previous version of SW or HW that was running prior to the installation of the new SW or HW delivered with the SSM. These procedures are to be used if the new version of SW or HW malfunctions and the problem can not be resolved in a reasonable amount of time.
24	**Status Accounting**	Provide information on using the RMLS SAL application to close the modification log. (Refer to Order 6000.15.) Format and word as follows: **a.** *(Specify*) has opened a Log Equipment Modification (LEM) record, (*indicate when*), in the Remote Monitoring and Logging System (RMLS) Simplified Automated Logging (SAL) application for this SSM. The data that has been entered into the LEM is as follows: Fac Type: Loc Ident: Short Name: (*specify; if unavailable or unknown, enter SYS*) Equip Ident: FA/CA Number (optional): Supplemental Code (as required):

Table 4-2. SSM Mandatory Paragraphs, Descriptions, and Placement (Continued)

Paragraph Placement	Title	Paragraph Description
24 (con't)	**Status Accounting**	Maintenance Action Code (as required): Order#/System: Chapter/Sequence#: Change: CCD (if applicable): Remarks (as required): (*Remove any information not needed and insert any additional information/tables as needed.*) **NOTE**: If your facility is not listed in the FSEP, a record was not opened. Refer to paragraph 20 of this SSM to add your facility. Open a LEM record with the data found in this paragraph and continue to paragraph 24b. **b.** Upon completion of this SSM, you are required to use the RMLS SAL application Modification screen to close the Modification log as follows: **(1)** Select the appropriate Equipment record for the modification. **(2)** Change the Maintenance Action Code (MAC) to a **G** if the modification was completed (*specify any additional information*). (*Add any additional information pertaining to the Status Accounting entry, as needed.*)
25	**Recommendations for Changes**	Provide procedures for forwarding any recommendations for changes to the SSM through normal channels to the proper groups with their respective routing.

2. SSM Appendixes.

a. Append SSM *Procedure* and *Test After Modification* paragraphs (if 10 pages or more of text) rather than incorporating the lengthy procedures in the main body of the SSM. Use the same basic text format as used in the SSD for paragraphing, numbering, and indentation. Title the appendixes *Modification Procedure* and *Test After Modification*. Reference the appended material in paragraph 14 and/or 15 of the SSM.

b. SSMs require a *Mandatory* appendix 1, which identifies the Test and Evaluation Gold Standards in a Test and Evaluation (T&E) Results Summary (refer to appendix E, Figure E-2, SSM Appendix 1 Guidelines).

3. SSM Attachments.

a. TOC. The TOC is always attachment 1 of the SSD.

b. TI Documentation. Changes to TIs are usually associated with a modification to the corresponding system. In such cases, the directions for changing the TIs are part of a standardized PCC included as an attachment to the SSM. Refer to section 1, paragraph 5e(1), of this chapter, for more information on TI attachments.

(1) Change pages are used for correcting/updating TIs.

(2) If no modification is involved, the directions for changing a TI are delivered by an SDR. Refer to section 4, paragraph 3, of this chapter, for details on issuing TIs with an SDR.

c. Contractor-Developed Documentation. Documentation page changes are attached to the SSM so that all offices concerned (not just field locations) will receive the corrections. When this is not practical, indicate under Paragraph 17, Changes to Technical Documentation, where the corrections can be obtained.

4. Replacing Previously Issued SSMs. If it is necessary to withdraw a previously issued SSM that affects the modification procedures or processes, a new SSM must be created.

a. The SSM title notes which SSM it is withdrawing. Example: Withdrawal of SSM-(*XXX*)-(*###*).

b. The *Purpose* paragraph states why the SSM is being withdrawn and what action is to be taken at the field level upon receipt of the replacement.

c. The *Withdrawals* paragraph of the new SSM identifies the withdrawn SSM. Example: SSM-(*XXX*)-(*###*), dated (*MM/DD/YYYY*) is being replaced by this SSM.

d. Update the SSD TOC by:

(1) Adding a line after the withdrawn SSM title. Example: Withdrawn by SSM-(*XXX*)-(*###*), dated (*MM/DD/YYYY*).

(2) Inserting the new SSM number, date, and SSM title numerically into the TOC.

Note: Do not change the approval date of the original SSM contained in the TOC.

5. Revising Previously Issued SSDs. Refer to section 4, paragraph 2, of this chapter.

Section 3. System Technical Releases (STR)

1. STR Mandatory Paragraphs. The mandatory paragraphs required in the preparation of an STR are listed in Table 4-3, STR Mandatory Paragraphs, Descriptions, and Placement, in the order of appearance. Refer to appendix E, Figure E-3, Sample STR.

Table 4-3. STR Mandatory Paragraphs, Descriptions, and Placement

Paragraph Placement	Title	Paragraph Description
1	**Purpose**	Describe the purpose of the STR.
2	**Distribution**	Identify the distribution list to be used for hard copy distribution. Format and word as follows: This STR requires actions by the Airway Transportation System Specialist (ATSS) at operational facilities with Facility, Service, and Equipment Profile (FSEP) equipment: (*specify*) (*elaborate as needed*). **a.** To subscribe to email notifications of issued SSDs go to the TechNet Portal at http://technet.faa.gov/. Click on Auto-Notification Services on the home page. Select the Nat'l Modifications Index application and enter your email address to be sent email notifications which will include a hyperlink to where the SSD may be viewed and/or downloaded. **b.** To obtain an electronic copy of this STR go to the (*specify*) website at (*httpx://xxxx*) (*elaborate as needed*). **c.** *(If applicable*) To obtain additional hard copies of this STR, contact (*specify*) (*elaborate as needed*). (*Any additional distribution information.*)
3	**References**	Identify any references to other documents affecting, or referenced in, the STR.
4	**Description of Problem**	Describe the problem that is responsible for the issuance of the STR.
5	**Application**	Identify the specific equipment type, locations, and/or conditions for which the STR applies.
6	**Contents**	Identify the contents.

Table 4-3. STR Mandatory Paragraphs, Descriptions, and Placement (Continued)

Paragraph Placement	Title	Paragraph Description
7	**Directed Action (Directive)** **or** **Recommended Solution (Non-Directive)**	Describe what action must be taken. Explain the recommended solution.
8	**Software/Hardware Impact**	Identify any impacts to SW/HW.
9	**Clarification or Comments**	Provide any additional clarification and/or comments. Reference the FAA OCC Help Desk (866) 432-2622, or other designated help desk, to obtain second-level support on the delivery.
10	**Address Changes**	Provide FSEP and LIS system information for the sites to update their facility address and directive copy count for hard copy distribution. Format and word as follows: The ATSS must keep accurate FSEP records and Logistics Inventory System (LIS) addresses in order to receive the correct corresponding type and number of printed copies. Printed copies are generated by referencing the FSEP's [Facility Code & Class], [Mod Count], and [GSA Address] fields. They are mailed to the ATSS by referencing the LIS "Mailing Address." **a.** To obtain assistance with verifying or updating FSEP information, go to https://intranet.faa.gov/faaemployees/org/linebusiness/ato/operations/technical_operations/ajw1/ajw162/fsep/contacts/. **b.** To obtain assistance with verifying or updating LIS information, go to http://impart.faa.gov/impart/home.html. **c.** (*Optional information*.)

Table 4-3. STR Mandatory Paragraphs, Descriptions, and Placement (Continued)

Paragraph Placement	Title	Paragraph Description
11	**Risks**	List any operational, safety-related, and security risks associated with the STR. Format and word as follows: **a. Operational.** In compliance with the latest edition of Order JO 6000.50, National Airspace System (NAS) Integrated Risk Management, activities are to be assessed for potential risk to the NAS from an operational perspective. The following operational risks are associated with this STR (*specify*). or There are no operational risks associated with this STR. **b. Safety.** In compliance with the latest edition of Orders 1100.161, Air Traffic Safety Oversight, and JO 1000.37, ATO Safety Management System, all NAS changes require an SRM assessment for all STRs prior to delivery. The SRM information for this STR is available at (*specify link and/or attachment*). For further guidance in SRM documentation, refer to the latest edition of the Safety Management System (SMS) Manual. (Explain risks with following, or not following, the instructions/ procedures described in the STR.) **c. Security.** In compliance with the latest edition of Order 1370.82, Information Systems Security Program, the FAA must ensure that security controls are implemented and commensurate with the risk and magnitude of the harm that would result from the loss, misuse, denial of service, unauthorized access, or modification of Federal information assets. The following security risks are associated with this STR (*specify*). or There are no security risks associated with this STR.
12	**Fallback Procedures**	Provide procedures for restoring the system/component to its previous operational state, i.e., the state prior to the implementation of the instructions/procedures contained in the STR.

Table 4-3. STR Mandatory Paragraphs, Descriptions, and Placement (Continued)

Paragraph Placement	Title	Paragraph Description
13	**Status Accounting**	Provide information on using the RMLS SAL application to close the modification log. (Refer to Order 6000.15.) Format and word as follows: Not applicable. or **a.** (*Specify*) has opened a Log Equipment Modification (LEM) record, (*indicate when*), in the Remote Monitoring and Logging System (RMLS) Simplified Automated Logging (SAL) application for this STR. The data that has been entered into the LEM is as follows: Fac Type: Loc Ident: Short Name: (*specify; if unavailable or unknown, enter SYS*) Equip Ident: FA/CA Number (optional): Supplemental Code (as required): Maintenance Action Code (as required): Order#/System: Chapter/Sequence#: Change: CCD (if applicable): Remarks (as required): (*Remove any infomation not needed and insert any additional information/tables as needed*.) **NOTE**: If your facility is not listed in the FSEP, a record was not opened. Refer to paragraph 10a of this STR to add your facility. Open a LEM record with the data found in this paragraph and continue to paragraph 13b.

Table 4-3. STR Mandatory Paragraphs, Descriptions, and Placement (Continued)

Paragraph Placement	Title	Paragraph Description
13 (con't)	**Status Accounting**	**b.** Upon completion of this STR, you are required to use the RMLS SAL application Modification screen to close the Modification log as follows: **(1)** Select the appropriate Equipment record for the modification. **(2)** Change the Maintenance Action Code (MAC) to a **G** if the modification was completed (*specify any additional information*). (*Add any additional information pertaining to the Status Accounting entry, as needed.*)

2. STR Appendixes. Refer to section 1, paragraph 5c, of this chapter.

3. STR Attachments. Refer to section 1, paragraph 5e, of this chapter.

Section 4. System Documentation Releases (SDR)

1. SDR Mandatory Paragraphs. The mandatory paragraphs required in the preparation of an SDR are listed in Table 4-4, SDR Mandatory Paragraphs, Descriptions, and Placement, in the order of appearance. Refer to appendix E, Figure E-4, Sample SDR.

Table 4-4. SDR Mandatory Paragraphs, Descriptions, and Placement

Paragraph Placement	Title	Paragraph Description
1	**Purpose**	Describe the purpose of the SDR.
2	**Distribution**	Identify the distribution list to be used for hard copy distribution. Format and word as follows: This SDR requires actions by the Airway Transportation System Specialist (ATSS) at operational facilities with Facility, Service, and Equipment Profile (FSEP) equipment: (*specify*) (*elaborate as needed*). **a.** To subscribe to email notifications of issued SSDs go to the TechNet Portal at http://technet.faa.gov/. Click on Auto-Notification Services on the home page. Select the Nat'l Modifications Index application and enter your email address to be sent email notifications which will include a hyperlink to where the SSD may be viewed and/or downloaded. **b.** To obtain an electronic copy of this SDR go to the (*specify*) website at (*httpx://xxxx*) (*elaborate as needed*). **c.** (*If applicable*) To obtain additional hard copies of this SDR, contact (*specify*) (*elaborate as needed*). (*Any additional distribution information*.)
3	**Withdrawals**	Identify any previous SSDs or documents that will be withdrawn by this SDR.
4	**References/ Application**	Identify any references to other documents affecting, or referenced in, the SDR along with specific equipment type or locations for which the SDR applies.

Table 4-4. SDR Mandatory Paragraphs, Descriptions, and Placement (Continued)

Paragraph Placement	Title	Paragraph Description
5	**Changes to Recorded Data**	Request that the site modification record be changed. Format and word as follows: In accordance with the latest editions of Order 6032.1, National Airspace System Modification Program, and Order 6000.15, General Maintenance Handbook for National Airspace System (NAS) Facilities, modification records must be kept current and accurate to track the modification status of a system, equipment, or Technical Instruction Book (TIB). FAA Form 6032-1, Equipment Modification Record (available at http://employees.faa.gov/tools_resources/forms/), or a printout of the logging screen documenting the completion of this modification, can be used as the modification record. Maintenance personnel must store modification records with the Facility Reference Data (FRD).
6	**Address Changes**	Provide FSEP and LIS systems information for the sites to update their facility address and directive copy count for hard copy distribution. Format and word as follows: The ATSS must keep accurate FSEP records and Logistics Inventory System (LIS) addresses in order to receive the correct corresponding type and number of printed copies. Printed copies are generated by referencing the FSEP's [Facility Code & Class], [Mod Count], and [GSA Address] fields. They are mailed to the ATSS by referencing the LIS "Mailing Address." **a.** To obtain assistance with verifying or updating FSEP information, go to https://intranet.faa.gov/faaemployees/org/linebusiness/ato/operations/technical_operations/ajw1/ajw162/fsep/contacts/. **b.** To obtain assistance with verifying or updating LIS information, go to http://impart.faa.gov/impart/home.html. **c.** (*Optional information*.)

Table 4-4. SDR Mandatory Paragraphs, Descriptions, and Placement (Continued)

Paragraph Placement	Title	Paragraph Description
7	**Risks**	List any operational, safety-related, and security risks associated with the SDR. Format as follows: **a. Operational.** In compliance with the latest edition of Order JO 6000.50, National Airspace System (NAS) Integrated Risk Management, activities are to be assessed for potential risk to the NAS from an operational perspective. The following operational risks are associated with this SDR (*specify*). or There are no operational risks associated with this SDR. **b. Safety.** In compliance with the latest edition of Orders 1100.161, Air Traffic Safety Oversight, and JO 1000.37, ATO Safety Management System, all NAS changes require an SRM assessment for all SDRs prior to delivery. The SRM information for this SDR is available at (*specify link and/or attachment*). For further guidance in SRM documentation, refer to the latest edition of the Safety Management System (SMS) Manual. (*Explain risks with following, or not following, the instructions/procedures described in the SDR*.) **c. Security.** In compliance with the latest edition of Order 1370.82, Information Systems Security Program, the FAA must ensure that security controls are implemented and commensurate with the risk and magnitude of the harm that would result from the loss, misuse, denial of service, unauthorized access, or modification of Federal information assets. The following security risks are associated with this SDR (*specify*). or There are no security risks associated with this SDR.

Table 4-4. SDR Mandatory Paragraphs, Descriptions, and Placement (Continued)

Paragraph Placement	Title	Paragraph Description
8	**Status Accounting**	Provide information on using the RMLS SAL application to close the modification log. (Refer to Order 6000.15.) Format and word as follows: Not applicable. or **a.** (*Specify*) has opened a Log Equipment Modification (LEM) record, (*indicate when*), in the Remote Monitoring and Logging System (RMLS) Simplified Automated Logging (SAL) application for this SDR. The data that has been entered into the LEM is as follows: Fac Type: Loc Ident: Short Name: (*specify; if unavailable or unknown, enter SYS*) Equip Ident: FA/CA Number (optional): Supplemental Code (as required): Maintenance Action Code (as required): Order#/System: Chapter/Sequence#: Change: CCD (if applicable): Remarks (as required): (*Remove any infomation not needed and insert any additional information/tables as needed.*)

Table 4-4. SDR Mandatory Paragraphs, Descriptions, and Placement (Continued)

Paragraph Placement	Title	Paragraph Description
8 (con't)	**Status Accounting**	**NOTE**: If your facility is not listed in the FSEP, a record was not opened. Refer to paragraph 6a of this SDR to add your facility. Open a LEM record with the data found in this paragraph and continue to paragraph 8b. **b.** Upon completion of this SDR, you are required to use the RMLS SAL application Modification screen to close the Modification log as follows: **(1)** Select the appropriate Equipment record for the modification. **(2)** Change the Maintenance Action Code (MAC) to a **G** if the modification was completed (*specify any additional information*). (*Add any additional information pertaining to the Status Accounting entry, as needed.*)

2. Revisions to Previously Issued SSDs. When a previously issued SSD requires a change due to a minimal administrative error or omissions, an SDR is issued. The following applies when considering issuing an administrative revision to a previously issued SSD:

a. The *Purpose* paragraph must state why the SSD is being revised and what action is to be taken at the field level upon receipt of the replacement pages. The *Purpose* paragraph also calls attention to specific paragraph revisions.

b. The *Withdrawals* paragraph of the new SDR identifies the SSD being revised. Example: SSM-*XXX*-###, dated *MM/DD/YYYY* is being revised by this SDR.

> **Note:** An SDR must not be used to make any changes to procedures or processes in a previously issued SSD. SDRs are not used to change the nature of the original SSD.

c. Update the TOC as follows:

(1) Title of updated SSD remains in the TOC for record purposes. Insert a parenthetical note as a line item immediately below the title of the revised SSD. Example: Revised by SDR-*XXX*-###, *MM/DD/YYYY*.

(2) Insert the new SDR number, date, and SDR title numerically into the TOC.

(3) The new SDR title notes which SSD it is revising. Example: Revision to SSM-*XXX*-### dated *MM/DD/YYYY*.

Note: Do not change the approval date of the original SSD contained in the TOC. Refer to Figure E-10, Sample SSD TOC Attachment.

3. New or Revised TIs.

a. The SDR title indicates that the update is to equipment specific TIs.

b. The SDR provides TI change pages or new TIs. Refer to section 1, paragraph 5e, of this chapter, for guidelines on correcting or revising the TIs.

Section 5. SSD Binders

1. SSD Binder. For those issuing hard copies of the SSDs, an SSD binder is required to be distributed (typically with the first issuance of an SSD). The SSD is contained in a three-ring binder and is provided by the OPR Configuration Management (CM) with the initial delivery of a new SSD binder. The binder has pockets on the front and spine for cover and spine inserts.

2. SSD Binder Organization.

a. SSD Binder Cover. The SSD cover consists of:

(1) SSD Title. The title is written as:

SYSTEM SUPPORT DIRECTIVE
(followed by the facility description with the contraction in parenthesis)

Note: Facility contractions are in accordance with Order 6000.5.

(2) Classification Code (optional). The classification number is in accordance with the subject classification codes established in Order 0000.1, FAA Standard Subject Classification System.

(3) Graphic (optional). (For logos, follow branding guidelines per Order 1700.6; you may use a photo on the cover as long as it isn't a photo of a logo.)

(4) Distribution/Initiated By Footer. Refer to appendix E, Figure 5, Sample Binder Outside Cover.

b. SSD Binder Spine Insert. The SSD binder spine insert includes the systems four-digit classification code (optional) and system acronym. Refer to appendix E, Figure 6, Sample Binder Spine Insert.

c. SSD Binder Contents. The SSD binder consists of:

(1) Inside SSD Cover. The inside SSD cover is the same as the SSD binder cover, but will include the SSD approval date (refer to appendix E, Figure 7, Sample Binder Inside Cover). It consists of:

(a) SSD title;

(b) Classification code (optional);

(c) Equipment/system title;

(d) Graphic (optional). (For logos, follow branding guidelines per Order 1700.6; you may use a photo on the cover as long as it isn't a photo of a logo.)

(e) Distribution/Initiated By footer; and

(f) SSD approval date.

(2) Tab Dividers. Tab dividers are provided for each section of the SSD binder. After the initial receipt of the SSD binder, insert documentation received by the facilities into the respective tab sections in accordance with the TOC. The tabs included are:

(a) TOC;

(b) SSM;

(c) STR; and

(d) SDR.

(3) Table of Contents. Issued SSDs within the SSD binders are controlled by a TOC. (The SSD TOC is updated and delivered with each SSD.) The TOC is the first attachment to each SSD. The following also applies:

(a) Refer to appendix E, Figure E-8, Sample SSD TOC Attachment (Cover Page for First Release of TOC).

(b) Refer to appendix E, Figure E-9, Sample SSD TOC Attachment (Cover Page for an Existing TOC).

(c) Refer to appendix E, figure E-10.

(d) Because it is a possibility that SSD documents may be released out-of-sequence (not by document sequence number), the TOC identifies the unreleased documents by placing *TBD* in the *Date Issued* column, and by providing the *Document Number* and *Title*. Refer to appendix E, figure 10.

Section 6. Preparing and Issuing SSDs

1. SSD Preparation.

a. General Preparation. Prepare the SSDs in accordance with guidelines presented in this order. The SSD is directed to those individuals concerned with the maintenance of equipment or system.

b. SSD Document Control Numbering. All SSD numbers are issued sequentially based on document type and system. The use of the SSD number is mandatory. The SSD number is used for tracking the document and status accounting. To ensure the numbering continuity of the SSD documents, the SSD number control is maintained by the individual CM groups for the systems under control of the responsible OPR.

c. SSD Document Identification Filename. As shown in Table 4-5, SSD Numbering Conventions, the SSD document identification filename is made up of three parts:

(1) SSM, STR, or SDR;

(2) System short acronym; and

(3) Sequence number (the first SSD of each type starting with 001).

Table 4-5. SSD Numbering Conventions

SSD Type	System Acronym	Sequence Number	Example
SSM	ECG	030	SSM-ECG-030
STR	STARS	118	STR-STARS-118
SDR	COMM	014	SDR-COMM-014

Note: In some cases the system short acronym contained within the document number will not represent the more common acronym used with a text body (for example, MODES versus MODE-S). Use the expanded (or common) system acronym in the document header field.

d. SSD Text. Samples of the SSDs are found in appendix E of this order. Since this order falls under the guidance of Order 1320.1, the font used in the samples is Times New Roman. Order 1320.1 does not govern the format of SSDs, so it is the descretion of the OPR to determine whether to use Times New Roman font, 12 point pitch or Arial font, 11 point pitch.

e. Abbreviations and Symbols.

(1) Standards. When preparing SSDs, use the standards for abbreviations and symbols described in chapter 3, section 1, paragraph 3b(8).

(2) Exception to Standards. When referring specifically to portions of equipment such as switches or controls, use abbreviations as labeled on the equipment. For example, if a switch on a control panel is labeled AFC, it should be referenced in the text of an SSD as AFC rather than "afc" as indicated in AMSE Y14.38.

Note: Facility contractions are always capitalized. Use Order 6000.5 for the correct form of facility abbreviations in lieu of the above standards.

2. SSD Approvals. All SSDs are issued for release by the signature of the appropriate service OPR Director.

3. Distribution. Most hard copy distribution of SSDs is provided via the DDS. An annual notice is issued to explain how DDS works and any new functions that have been added to the system.

Appendix A. Acronym List

1. Acronyms

The following acronyms are used in this order:

AMS	Acquisition Management System
ANSI	American National Standards Institute
AOV	Air Traffic Safety Oversight Service
ATO	Air Traffic Organization
ATSS	Airway Transportation System Specialist
AVS	Aviation Safety
CCB	Configuration Control Board
CCD	Configuration Control Decision
CD	Condition Directed
CM	Configuration Management
DDS	Direct Distribution System
DMS	Directives Management System
DMO	Directives Management Officer
DoD	Department of Defense
EEM	Electronic Equipment Modification
FAA	Federal Aviation Administration
FRD	Facility Reference Data
FSEP	Facility, Service, and Equipment Profile
GPO	Government Printing Office
HDR	Hardware Discrepancy Report
HW	Hardware
ISS	Information Systems Security
LEM	Log Equipment Modification
LIS	Logistics Inventory System
MAC	Maintenance Action Code
MTHB	Maintenance Technical Handbook
NAPRS	National Airspace Performance Reporting System
NAS	National Airspace System
NCP	NAS Change Proposal
NEXRAD	Next Generation Weather Radar
NSN	National Stock Number

NWS	National Weather Service
OCC	Operational Control Center
OPR	Office of Primary Responsibility
ORM	Operational Risk Management
PA&I	Predictive Analysis and Intervention
PCC	Page Control Chart
PM	Periodic Maintenance
PTR	Program Technical Report
RCM	Reliability Centered Maintenance
RMLS	Remote Monitoring and Logging System
RMM	Remote Maintenance Monitoring
RMMS	Remote Maintenance Monitoring System
RMS	Remote Monitoring Subsystem
SAL	Simplified Automated Logging
SDR	System Documentation Release
SEN	Safety Emergency Notice
SLE	Second Level Engineering
SMS	Safety Management System
SRM	Safety Risk Management
SSD	System Support Directive
SSM	System Support Modification
STR	System Technical Release
SUI	Sensitive Unclassified Information
SW	Software
T&E	Test and Evaluation
TD	Time Directed
TI	Technical Issuance
TIB	Technical Instruction Book
TOAAR	Technical Operations Aircraft Accident Representative
TOC	Table of Contents
USSFIM	United States Standard Flight Inspection Manual
WJHTC	William J. Hughes Technical Center

2. Definitions

The following definitions are used in this order:

- **CANCELLATION.** Cancellation, in the SSD, refers to canceling a document that has been assigned a document number but has not been issued.
- **CERTIFICATION.** Certification is the determination and validation that a system, subsystem, or service is providing, or is capable of providing, the advertised service to the user. Certification includes an independent determination, which ascertains the quality of advertised services, and a validation, which officially confirms and documents the determination in the maintenance log. Refer to Order 6000.15.
- **CONFIGURATION CONTROL DECISION (CCD).** A record of decision on a proposed change to a baseline configuration item. If a change is approved, a CCD directs the action required implementing the decision. Refer to Order 1800.66.
- **FACILITY.** Used generically in this order to mean FSEP entity. Refer to Order 6000.5 for other uses of this term.
- **FACILITY, SERVICE, AND EQUIPMENT PROFILE (FSEP).** The FSEP provides an accurate inventory of the NAS Operational Infrastructure, pseudo-cost entities, and the National Airspace Performance Reporting System (NAPRS) pseudo-services. Refer to Order 6000.5.
- **INFORMATION SYSTEMS SECURITY (ISS).** The protection of information and information systems from unauthorized access, use, disclosure, disruption, modification, or destruction, and the assurance of confidentiality, integrity, and availability. Refer to Order 1370.82.
- **MAINTENANCE.** Maintenance, as used in connection with NAS systems, subsystems, and equipment, is intended to mean any specified sequence of steps prescribed to accomplish an activity to justify or continue a system or service as operational. As used in maintenance handbooks issued before 1970, the term was more restrictive in that it only applied to corrective maintenance activities; i.e., repair, adjustment, calibration, troubleshooting, or other functions. Refer to Order 6000.15.
- **MAY.** As used in maintenance documentation, MAY denotes permission. For example: at navigational aid facilities, certain maintenance activities MAY be performed without reliance on flight inspection. Refer to Order 1320.1.
- **MODIFICATION.** A configuration-managed change to a NAS baseline for hardware, software, firmware, equipment, or documentation. Modifications are changes to the record documents (e.g., schematic, wiring diagrams, physical outline, floor plan, plot layout, structural details FAA directives, equipment TIBs, parts list or catalog etc.) and in existing standards and tolerances/limits, or the need for establishing new standards and tolerances/limits. Refer to Order 6032.1.
- **MUST.** As used in maintenance documentation, "MUST" denotes compulsory or mandatory action that the person being directed is obliged to take. For example: Maintenance personnel MUST adjust parameters to operate in accordance with directive tolerances. Refer to Order 1320.1.

- **NAS CHANGE PROPOSAL (NCP).** The means for proposing changes to NAS configuration items, FAA Form 1800-2. Refer to Order 1800.66.
- **NAS INFRASTRUCTURE.** The physical components of the NAS, excluding people, which provide for safe separation and control over aircraft.
- **OFFICE OF PRIMARY RESPONSIBILITY (OPR).** The organizational element held accountable for taking appropriate action or for making a decision between alternatives at a specific turn of events is considered the office of primary responsibility.
- **OPERATIONAL RISK MANAGEMENT.** Operational risk management is the process used to quantify and mitigate the probability or severity of an undesired event which may have a significant impact to NAS availability, reliability capacity, budget or schedules. Refer to Order JO 6000.50.
- **OPERATIONAL RISKS.** Operational risks are any activities that have the potential to cause risks to the NAS from an operational perspective. Refer to Order JO 6000.50.
- **PERFORMANCE CHECKS.** As used in maintenance handbooks issued in 1970 and later, a performance check is a periodic scheduled test, measurement, or observation of normal operating controls and functions, which is necessary to determine whether a system is operating within its established tolerances and limits. PM activities prescribed in the later maintenance handbooks are separated into "performance checks" and "other maintenance tasks." This term is also used in maintenance handbooks issued before 1970, but in these handbooks it means a procedure required evaluating the performance of a system rather than just the description of the activity.
- **PERIODIC MAINTENANCE (PM).** As used in maintenance handbooks issued in 1970 and later, any scheduled PM activities that include performance checks and/or maintenance tasks are periodic maintenance activities. Refer to Order 6000.15.
- **PREVENTIVE MAINTENANCE.** The routine maintenance designed to preserve the equipment or to reduce the chance of failure. As used in handbooks issued prior to 1970, it covers all mandatory activities. Preventive maintenance may be used as a generic term discussing all kinds of tasks, including even nonscheduled tasks the performance of which meets the general definition. Refer to Order 6000.15.
- **RELIABILITY CENTERED MAINTENANCE (RCM).** RCM is an industry standard engineering process used to determine the most efficient mixture of maintenance methods that will reduce the probability of failure and extend the equipment lifetime. Refer to Order 6000.15.
- **SAFETY MANAGEMENT SYSTEM (SMS).** Safety Management System (SMS) is an integrated collection of processes, procedures, and programs that ensure a formalized and proactive approach to system safety through risk management. Risk assessments are required for all changes that could impact NAS safety. The SMS is a closed-loop process, ensuring that all changes are documented and all problems or issues are tracked to conclusion.
- **SAFETY-RELATED CHECKS.** Safety-related checks are maintenance tasks that have a direct relation to safety of flight. Safety-related checks are indicated with a pound sign (#) in the maintenance handbook. Refer to Order 6000.15.

- **SAFETY RISK MANAGEMENT (SRM).** Safety Risk Management (SRM) is a fundamental component of the SMS. It is a systematic, explicit, and comprehensive approach for managing safety risk at all levels and throughout the entire scope of an operation and lifecycle of a system. It requires the disciplined assessment and management of safety risk. The SRM process ensures that safety significant changes are documented; risk is assessed and analyzed; unacceptable risk is mitigated; hazards are identified and tracked to resolution; the effectiveness of the risk mitigation strategies is assessed and monitored; and the performance of the change is monitored throughout its lifecycle. Refer to Orders 1100.161 and JO 1000.37.

- **SECURITY RISKS.** Security risks are any activities that would cause risk and harm resulting from the loss, misuse, denial of service, unauthorized access, or modification of Federal information assets. Refer to Order 1370.82.

- **SECOND LEVEL ENGINEERING (SLE).** All engineering activities in support of the delivery of service, to include development of modifications, documentation, testing, and configuration management. It includes the evaluation, prototype, test and implementation of technology refresh initiatives, as well as FAA and contractor staffing and travel as applicable.

- **SHOULD.** As used in maintenance documentation, "SHOULD" denotes an action that is desirable but not mandatory. For example: The equipment SHOULD be shut down if, in the opinion of the system specialist, a failure is imminent. Refer to Order 1320.1.

- **TECHNICAL INSTRUCTION BOOK (TIB).** Provides quick and precise access to system, subsystem, and equipment details; improved comprehension of NAS technology; methods of troubleshooting, corrective, and periodic maintenance; elimination of redundant training material; and guidance assisting field technical personnel to successfully maintain FAA systems, subsystems, and equipment to FAA standards with minimal training. Refer to Order 6000.15.

- **TECHNICAL ISSUANCE (TI).** Publications acquired from non-agency sources or developed within the FAA that directly concern installation, maintenance, or modification of equipment, systems, facilities, or aircraft. Includes manufacturer instruction books, TIBs, contractor publications, military documents, and other agency documents. Refer to Order 6000.15.

- **TECHNICAL PERFORMANCE RECORD (TPR).** Used to document information on trend analysis and troubleshooting for a system or equipment over a specified period of time. Refer to Order 6000.15.

- **WAIVER.** A written authorization to change an item not under configuration management. Waivers are requested in the form of a local NCP. Refer to Order 6000.15.

- **WITHDRAW/WITHDRAWAL.** Withdraw, in the SSD, refers to retracting and replacing an issued document.

Appendix B. Related Publications

1. Related Publications

a. FAA Orders. The latest editions of the following FAA Orders are referenced in this document. These publications can be viewed at https://employees.faa.gov/tools_resources/orders_notices/.

- **Order 0000.1**, FAA Standard Subject Classification System. Prescribes the FAA Standard Subject Classification System used in classifying correspondence, directives, files, forms, and reports by subject and code number. The numbering system enables agency employees and contract personnel to identify the subject of a directive, file, form, or report.
- **Order 1000.36**, FAA Writing Standards. Establishes clear, effective, plain language writing standards for all FAA documents.
- **Order JO 1000.37**, Air Traffic Organization Safety Management System. Defines the policy, application, and supporting documents of the Safety Management System (SMS) in the ATO. Identifies the strategic and tactical safety responsibilities of all of the ATO Service Units; discusses the requirements, safety standards, and guidance under which the ATO operates; and establishes the SMS policy that all ATO personnel must follow.
- **Order 1100.161**, Air Traffic Safety Oversight. Specifies the manner by which safety oversight will be conducted by the Air Traffic Safety Oversight Service (AOV), within the Office of the Associate Administrator for Aviation Safety (AVS), on the ATO and other organizations within the FAA regarding Safety Management of the air traffic system.
- **Order 1320.1**, FAA Directives Management. Prescribes the FAA Directives System as the means for issuing policy and procedures within the FAA, and establishes policy; delegates authority; and assigns responsibility for ensuring compliance with this order within each organization.
- **Order 1370.82**, Information Systems Security Program. Provides guidance to ensure all information and information systems are protected from threats to integrity, availability, and confidentiality.
- **Order 1600.2**, Safeguarding Classified National Security Information. Sets up the FAA's program for classifying, declassifying, and safeguarding classified national security information and materials.
- **Order 1600.75**, Protecting Sensitive Unclassified Information (SUI). Provides guidance for identifying and protecting SUI.
- **Order 1700.6**, FAA Branding Policy, Use of the FAA Logo, FAA Signature and DOT Seal. Establishes the FAA Brand Identity Program and sets policies for a program to maintain a consistent and uniform look and style in all publications (print and electronic) and other materials to visually convey to all audiences we are all part of one unified organization.

- **Order 1800.66**, Configuration Management Policy. Prescribes CM policy and processes required across the FAA.

- **Order 3900.19**, FAA Occupational Safety and Health Program. Establishes the policy framework and assigns responsibility for an effective agencywide employee safety and health program.

- **Order 6000.5**, Facility, Service, and Equipment Profile (FSEP). Sets forth policy, roles and responsibilities for the maintenance of the FSEP. Prescribes data elements, classification structure and codes used in the collection, classification, and reporting of facility data in FAA data systems.

- **Order 6000.15**, General Maintenance Handbook for National Airspace System (NAS) Facilities. Establishes the ATO maintenance program for Technical Operations.

- **Order 6000.30**, National Airspace System Maintenance Policy. Establishes maintenance policy for the NAS. It defines the role of Technical Operations in integrating, managing, maintaining and operating the NAS infrastructure as well as determining outsourcing requirements.

- **Order JO 6000.50**, National Airspace System (NAS) Integrated Risk Management. Establishes policies regarding SRM and ORM in the Technical Operations organization. Both SRM and ORM policy have been integrated into one document to assist field managers in risk management activities.

- **Order 6032.1**, National Airspace System Modification Program. Prescribes the FAA requirements regarding development and implementation and modifications to all NAS equipment, software, hardware, firmware, associated documentation and procedures used in administering the modification program.

- **Order 8020.16**, Air Traffic Organization Aircraft Accident and Incident Notification, Investigation, and Reporting. Prescribes FAA ATO procedures and responsibilities for aircraft accident and incident notification, investigation, and reporting. Provides direction and guidance to ATO service units, service areas, offices and facilities when they are called upon to perform accident investigations.

- **Order 8200.1**, United States Standard Flight Inspection Manual (USSFIM). Prescribes standardized procedures for flight inspection of air navigation services.

b. Other FAA Publications. The policies in this document are affected by the latest editions of the following FAA publications.

- **FAA-D-2494**, Technical Instruction Book Manuscript: Electronic, Electrical, and Mechanical Equipment, Requirements for Preparation of Manuscripts and Production of Books. http://nasdigitallibrary.amc.faa.gov/

- **FAA Acquisition Management System (AMS)**. Establishes policy and guidance for all aspects of lifecycle acquisition management for the FAA. Defines how the FAA manages its resources — money / people / assets — to fulfill its mission. http://fast.faa.gov/
- **NAS-MD-001**, National Airspace System Master Configuration Index. Lists all baselined NAS subsystems/facilities currently operational or under procurement for the NAS. It includes a listing of currently approved baseline documentation for these subsystems/facilities. https://repcon.faa.gov/md001/mdmenu2.asp

c. American National Standards Institute (ANSI) and Institute of Electrical and Electronics Engineers, Inc. Publications. The latest editions of the following ANSI/IEEE publications are referenced in this document.

- **ANSI/ASME Y14.38**, Abbreviations and Acronyms. Contains abbreviations and acronyms used on engineering drawings and related documentation. http://webstore.ansi.org/
- **ANSI/IEEE Std 268**, American National Standard for Metric Practice. Guides the application of the metric system. http://ieeexplore.ieee.org/
- **ANSI Y32.2.3**, Graphic Symbols for Pipe Fittings, Valves and Piping. Provides a standard method of indicating pipe fittings, valves piping, and allied items. http://webstore.ansi.org/
- **ANSI Y32.2.4**, Graphic Symbols for Heating Ventilating and Air Conditioning. Provides a standard method of indicating heating, air conditioning, and allied items. http://webstore.ansi.org/
- **ASME Y14.44**, Reference Designations for Electrical and Electronic Parts and Equipment. Covers the formation and application of reference designations for electrical and electronics parts and equipment. http://webstore.ansi.org/
- **ANSI/IEEE 260.1**, Standard Letter Symbols for Units of Measurement. Covers letter symbols for units of measurement. http://webstore.ansi.org/ and http://ieeexplore.ieee.org/

d. Other Publications

- **U.S. Government Printing Office Style Manual**. Provides a standardized design to achieve uniform word and type treatment. http://www.gpoaccess.gov/stylemanual/index.html
- **Safety Management System (SMS) Manual**. Integrates ATO's safety-related operational processes, procedures, policies, and programs. https://employees.faa.gov/org/linebusiness/ato/safety/os/

2. DOT/FAA Related Forms and Templates

a. DOT/FAA Forms. The following DOT/FAA Forms are referenced in this document:

- **FAA 1300-2**, Clearance Record. https://employees.faa.gov/tools_resources/forms/index.cfm/go/document.information/documentID/184342

- **FAA 1320-19**, Directive Feedback Information. https://employees.faa.gov/tools_resources/forms/index.cfm/go/document.information/documentID/184323
- **FAA 6000-8**, Technical Performance Record. https://employees.faa.gov/tools_resources/forms/index.cfm/go/document.information/documentID/184228
- **FAA 6030-17**, Technical Reference Data Record. https://employees.faa.gov/tools_resources/forms/index.cfm/go/document.information/documentID/185471
- **FAA 6032-1**, Equipment Modification Record. https://employees.faa.gov/tools_resources/forms/index.cfm/go/document.information/documentID/185989

b. FAA Templates. The following FAA Templates are referenced in this document:

- **Notice Template**. https://employees.faa.gov/tools_resources/branding_writing/standards_tools/orders_notices/
- **Long Order Template**. https://employees.faa.gov/tools_resources/branding_writing/legal/directives/media/Long_Order_Template.doc
- **Change Template**. https://employees.faa.gov/tools_resources/branding_writing/legal/directives/media/Order_Change_Template.doc

Appendix C. Sample Notices

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Air Traffic Organization Policy

N JO (####.##)

Effective Date:
(*Signature Date*)

Cancellation Date:
(*One year from sig*)

SUBJ:(*Title*)

1. Purpose of This Notice. This notice (*specify*).

2. Audience. This notice requires actions by the Airway Transportation System Specialist (ATSS) at operational facilities with Facility, Service, and Equipment Profile (FSEP) equipment: (*specify*).

3. Where Can I Find This Notice? An electronic version of this notice can be found at https://employees.faa.gov/tools_resources/orders_notices/.

4. Cancellation. This notice cancels (*specify notice number and title*), dated (*specify*).

5. Action. (*Specify*).

6. Background. (*Specify*).

7. Risks.

a. Operational. In compliance with the latest edition of Order JO 6000.50, National Airspace System (NAS) Integrated Risk Management, activities are to be assessed for potential risk to the NAS from an operational perspective. The following operational risks are associated with this notice (*specify*) or There are no operational risks associated with this notice.

b. Safety. In compliance with the latest editions of Orders 1100.161, Air Traffic Safety Oversight, and JO 1000.37, ATO Safety Management System, all NAS changes require an SRM assessment for all notices prior to delivery. The SRM information for this notice is available at (*specify link and/or attachment*). For further guidance in SRM documentation, refer to the latest version of the Safety Management System (SMS) Manual.

c. Security. In compliance with the latest edition of Order 1370.82, Information Systems Security Program, the FAA must ensure that security controls are implemented and commensurate with the risk and magnitude of the harm that would result from the loss, misuse, denial of service, unauthorized access, or modification of Federal information assets. The following security risks are associated with this notice (*specify*) or There are no security risks associated with this notice.

Distribution: (*FSEP Codes*) Initiated By: (*Routing*)

SAMPLE

Figure C-1. Sample Notice (Sheet 1)

***8. Status Accounting.**

a. (*Specify*) has opened a Log Equipment Modification (LEM) record, (indicate when), in the Remote Monitoring and Logging System (RMLS) Simplified Automated Logging (SAL) application for this notice. The data that has been entered into the LEM is as follows:

Fac Type:

Loc Ident:

Short Name: (*specify; if unavailable or unknown, enter SYS*)

Equip Ident:

FA/CA Number (optional):

Supplemental Code: (as required)

Maintenance Action Code (as required):

Order#/System: N JO (*notice number*)

Chapter/Sequence#:

Change:

CCD (if applicable):

Remarks (as required):

(*Remove any information not needed and insert any additional information/tables as needed*.)

b. Upon completion of this notice, you are required to use the RMLS SAL application Modification screen to close the Modification log as follows:

(1) Select the appropriate Equipment record for the modification.

(2) Change the Maintenance Action Code (MAC) to a **G** if the modification was completed (*specify any additional information*).

(*Any additional information pertaining to the Status Accounting entry, as needed*.)

(*Director Name*)
(*Director Title, Organization*)

*Only used if authorizing a temporary modification.

SAMPLE

Figure C-1. Sample Notice (Sheet 2)

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Air Traffic Organization Policy

NOTICE OF INTENT

N JO (####.##)

Effective Date:
(*Signature Date*)

Cancellation Date:
(*One year from sig*)

SUBJ:(*Title*)

1. Purpose of This Notice. This notice (*specify*).

2. Audience. This notice requires actions by the Airway Transportation System Specialist (ATSS) at operational facilities with Facility, Service, and Equipment Profile (FSEP) equipment: (*specify*).

3. Where Can I Find This Notice? An electronic version of this notice can be found at https://employees.faa.gov/tools_resources/orders_notices/.

4. Action.

a. The recipients of this notice who are concerned with the equipment operation, maintenance, or training are requested to furnish, from their own activities or other sources, their recommendations to be used in the revision of the subject handbook. Actual field experience factors should be cited when recommending changes to existing standards, tolerances, key inspection elements, daily performance check requirements, and maintenance schedules and procedures. Recommendations should be stated in specific terms. However, it is unnecessary to submit recommendations in the exact handbook format as this will be accomplished during the revision process.

b. Technical operations offices should arrange to obtain handbook recommendations and submit them to Technical Operations by (*insert a date at least 60 days after signature date*).

c. Other offices not included in paragraph 4b should collect, consolidate, and provide input to (*specify title of team*) by (*insert a date 30 days after the date specified in paragraph 4b*).

d. Our goal is to distribute the revised handbook during the (*specify what quarter, specify the FY-*). Recommendations submitted to (*specify title of team*) later than (*insert the date specified in paragraph 4c*) may be held for future revisions.

5. Background. (*Specify*).

(*Director Name*)
(*Director Title, Organization*)

Distribution: (*FSEP Codes*) Initiated By: (*Routing*)

SAMPLE

Figure C-2. Sample Notice of Intent

NOTICE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

N JO (####.##)

Air Traffic Organization Policy

Effective Date:
(*Signature Date*)

Cancellation Date:
(*One year from sig*)

SUBJ:(*Title*)

1. Purpose of This Notice. THIS IS A SAFETY NOTICE. This notice (*specify*).

2. Audience. This notice requires actions by the Airway Transportation System Specialist (ATSS) at operational facilities with Facility, Service, and Equipment Profile (FSEP) equipment: (*specify*).

3. Where Can I Find This Notice? An electronic version of this notice can be found at https://employees.faa.gov/tools_resources/orders_notices/.

4. Action. (*Specify*).

5. Background. (*Specify*).

6. Risks.

a. Operational. In compliance with the latest edition of Order JO 6000.50, National Airspace System (NAS) Integrated Risk Management, activities are to be assessed for potential risk to the NAS from an operational perspective. The following operational risks are associated with this notice (*specify*) *or* There are no operational risks associated with this notice.

b. Safety. In compliance with the latest editions of Orders 1100.161, Air Traffic Safety Oversight, and JO 1000.37, ATO Safety Management System, all NAS changes require an SRM assessment for all notices prior to delivery. The SRM information for this notice is available at (*specify link and/or attachment*). For further guidance in SRM documentation, refer to the latest version of the Safety Management System (SMS) Manual.

c. Security. In compliance with the latest edition of Order 1370.82, Information Systems Security Program, the FAA must ensure that security controls are implemented and commensurate with the risk and magnitude of the harm that would result from the loss, misuse, denial of service, unauthorized access, or modification of Federal information assets. The following security risks are associated with this notice (*specify*) *or* There are no security risks associated with this notice.

(***Director Name***)
(***Director Title, Organization***)

Distribution: (*FSEP Codes*) Initiated By: (*Routing*)

SAMPLE

Figure C-3. Sample Safety Notice

Safety Emergency Notice

SEN Title:

Date:

Distribution:

Summary:

Background:

Action:

Resolution:

Expiration Date:

Point of Contact for this SEN:

SEN Originator:

SAMPLE

Figure C-4. Sample SEN Template

Appendix D. Sample MTHB and MTHB Change Package

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

ORDER NUMBER

Air Traffic Organization Policy

Effective Date:
(*Signature Date*)

Implementation Date:

SUBJ: (*Title*)

(*Introduction statement*)

SAMPLE

(*Director Name*)
(*Director Title, Organization*)

Distribution: (*FSEP Codes*) Initiated By: (*Routing*)

Figure D-1. Sample MTHB Cover Page

Table of Contents

Chapter 1. General Information and Requirements

Chapter 2. Technical Characteristics

Chapter 3. Standards and Tolerances

Chapter 4. Maintenance Requirements

Section 1. Performance Checks

Section 2. Other Maintenance Tasks

Chapter 5. Maintenance Procedures

SAMPLE

Figure D-2. Sample MTHB TOC (Sheet 1)

Section 1. Performance Check Procedures

Section 2. Other Maintenance Task Procedures

Section 3. Special Maintenance Task Procedures

Appendix 1. Certification Requirements

Appendix 2. List of Acronyms

Appendix 3. Related Publications

Appendix 4. Administrative Information

SAMPLE

Figure D-2. Sample MTHB TOC (Sheet 2)

List of Illustrations

List of Tables

SAMPLE

Figure D-2. Sample MTHB TOC (Sheet 3)

Chapter 1. General Information and Requirements

1-1. Purpose. This MTHB provides guidance and prescribes technical standards, tolerances, and procedures applicable to the maintenance and inspection of (*specify*). It also provides information on special methods and techniques, which will enable maintenance personnel to achieve optimum performance from the equipment. This information augments information available in Technical Instruction Books (TIB) and other MTHBs, and complements the latest edition of Order 6000.15.

1-2. Audience. This MTHB requires actions by the Airway Transportation System Specialist (ATSS) at operational facilities with Facility, Service, and Equipment Profile (FSEP) equipment: (*specify*).

1-3. Where Can I Find This Order? An electronic version of this MTHB can be found at https://employees.faa.gov/tools_resources/orders_notices/.

1-4. Cancellation. This order cancels (*specify order number and title*), dated (*specify*).

1-5. Explanation of Policy Changes. This MTHB implements Configuration Control Decision (CCD) (*specify CCD number and title*).

1-6. Certification. Refer to Order 6000.15 for general guidance on the certification of systems, subsystems, and equipment. Refer to Appendix 1 of this MTHB for the specific certification requirements of the (*specify*) system.

1-7. Aircraft Accident. When aircraft accidents or incidents occur, Air Traffic Organization Technical Operations personnel are responsible, when requested by the Technical Operations Aircraft Accident Representative (TOAAR) through the appropriate control center, to evaluate and document the technical performance of the facilities which may have been involved (for some facilities, it may also be necessary to remove them from service, and to conduct flight inspections). This requires that facility operational data be obtained and recorded in the maintenance log and on technical performance records. These records are official documents, and may be used by an aircraft accident investigation board in the determination of facility operational status at the time of the accident. Refer to the latest edition of Order 8020.16, Air Traffic Organization Aircraft Accident and Incident Notification, Investigation, and Reporting, for detailed guidance on requirement and activities following an aircraft accident/incident.

1-8. Maintenance Procedure. Order 6000.15, this MTHB, the applicable equipment TIB, and other applicable handbooks are consulted and used together by the maintenance technician in all duties and activities for the maintenance of (*specify*). These documents are considered collectively as the single official source of maintenance policy and direction authorized by Technical Operations Services. References located in the appropriate paragraphs of this handbook entitled Chapter 3, Standards and Tolerances, Chapter 4, Reliability Centered Maintenance, and Chapter 5, Maintenance Procedures, indicate to the user whether this handbook and/or the equipment TIB must be consulted for a particular standard, key inspection element or performance parameter, performance check, maintenance task, or maintenance procedure.

SAMPLE

Figure D-3. Sample MTHB Chapter 1 (Sheet 1)

1-9. Risks.

a. Operational. In compliance with the latest edition of Order JO 6000.50, National Airspace System (NAS) Integrated Risk Management, activities are to be assessed for potential risk to the NAS from an operational perspective. The following operational risks are associated with this MTHB. (*Specify.*)

b. Safety. In compliance with the latest editions of Orders 1100.161, Air Traffic Safety Oversight, and JO 1000.37, ATO Safety Management System, all NAS changes require an SRM assessment for all MTHBs prior to delivery. The SRM information for this MTHB is available at (*specify link and/or attachment*). For further guidance in developing SRM documentation, refer to the latest version of the Safety Management System (SMS) Manual.

c. Security. In compliance with the latest edition of Order 1370.82, Information Systems Security Program, the FAA must ensure that security controls are implemented and commensurate with the risk and magnitude of the harm that would result from the loss, misuse, denial of service, unauthorized access, or modification of Federal information assets. The following security risks are associated with this MTHB. (*Specify.*)

1-10. Implementation Date. This MTHB must be implemented by (*specify*).

SAMPLE

Figure D-3. Sample MTHB Chapter 1 (Sheet 2)

Chapter 2. Technical Characteristics

2-1. Purpose or Function. (*Specify the purpose or function of the equipment or system*.) The (*specify*) contains a Remote Monitoring Subsystem (RMS). The RMS interfaces with the Remote Maintenance Monitoring System (RMMS) and allows for maintenance personnel to remotely monitor and control the system. This is known as Remote Maintenance Monitoring (RMM) capability. (*Specify the technical description of the RMM capability of the system*.)

2-2. Description. (*Specify general physical and technical description of the equipment or system*.)

2-3. Theory. (*Specify theory of operations of system or equipment, equipment theory, and/or references to TIB theory.*)

SAMPLE

Figure D-4. Sample MTHB Chapter 2

Chapter 3. Standards and Tolerances

3-1. General. This chapter prescribes the standards and tolerances for (specify), as defined and described in Order 6000.15. All key performance parameters and/or key inspection elements are clearly identified by an arrow (→) placed to the left of the applicable item.

STANDARDS AND TOLERANCES

Parameter		*Reference Paragraph*	*Standard*	*Tolerance/Limit*	
				Initial	*Operating*
3-2.	**(*Facility type,* ..... *site location, equipment model, or functional equipment grouping*)**	(*Paragraph in Chapter 5 or TIB reference)*	*(optimum value assigned to an essential parameter of a system, subsystem, or equipment)*	*(maximum allowable deviation from the standard value that is acceptable at the time of initial installation, tune up or construction)*	*(maximum deviation from the standard value within which the normal functioning can continue without adjustment or corrective maintenance)*
→ **3-3.**	**(*Critical key*..... *performance or inspection element*)**				

SAMPLE

Figure D-5. Sample MTHB Chapter 3

1. Preventive Maintenance
   a. Condition Directed (CD).
      (1) Inspection.
      (2) Performance checks.
      (3) Situation based.
      (4) Predictive Analyses and Intervention (PA&I).
      (5) As required.
   b. Time Directed (TD).
      (1) Safety related checks.
      (2) Cycle-based checks.
   c. Failure finding.
   d. Servicing.
   e. Lubrication.
2. Corrective Maintenance.
   a. Fault isolation.
   b. Remove and replace.
   c. Repair.
   d. Alignment.
   e. Reset.
3. Alterative Maintenance.

SAMPLE

Figure D-6. Reliability Centered Maintenance Outline

Chapter 4. Maintenance Requirements

4-1. General. This chapter establishes all the maintenance activities that are required for (*specify*) on a periodic, recurring basis and the schedules for their accomplishment. The chapter is divided into two sections. The first identifies the performance checks (tests, measurements, and observations) of normal operating controls and functions, which are necessary to determine whether operation is within established tolerances/limits. The second section identifies other tasks that are necessary to prevent deterioration and/or ensure reliable operation. All safety-related checks with direct impact to safety of flight within the NAS are clearly identified by a pound sign (#) placed to the left of the applicable task.

4-2. FAA Form 6000 Series. Order 6000.15 contains guidance and detailed instructions for field utilization of FAA Form 6000 series (Trend Analysis), as applicable to the (*equipment/system/ facility*). Make entries in accordance with the instructions published in Order 6000.15, (except as otherwise instructed in the subparagraphs to follow). Forms are available at http://tpr.faa.gov and https://employees.faa.gov/tools_resources/forms/.

Section 1. Performance Checks

	Performance Checks	*Reference Paragraph*	
		Standards & Tolerances	*Maintenance Procedures*
	4-3. (*List all tests, measurements, and observations of normal operating controls and functions necessary to determine whether the system or equipment is operating within its established tolerances or limits. First describe an action and then explain what the action is designed to do.)*	*(Reference applicable chapter 3 paragraph or TIB)*	*(Reference applicable chapter 5 paragraph or TIB)*
#	**4-4. (*Safety-related task.*)**		

Section 2. Other Maintenance Tasks

Maintenance Tasks	*Reference Paragraph*	
	Standards & Tolerances	*Maintenance Procedures*
4-5. (*List all tasks other than those in section 1 that are necessary to prevent deterioration and/or to ensure reliable operation of a system or equipment. First describe an action and then explain what the action is designed to do.)*	*(Reference applicable chapter 3 paragraph or TIB)*	*(Reference applicable chapter 5 paragraph or TIB)*

SAMPLE

Figure D-7. Sample MTHB Chapter 4

Performance Check or Maintenance Task	*Reference Paragraph*	
	Standards & Tolerances	*Maintenance Procedures*
4-6. ARTCC. **a. Transmitters**. **(1) Daily**. **(a)** Specify …… **(b)** Specify …… **(2) Weekly.** **(a)** Specify …… **(b)** Specify …… **b. Receivers**. **(1)** Daily …… **(2)** Monthly …… **4-7. RCAG**.	*(Reference applicable chapter 3 paragraph or TIB)*	*(Reference applicable chapter 5 paragraph or TIB)*

SAMPLE

Figure D-8. Sample MTHB Chapter 4 Tabulation for Several Facility Types

Performance Check or Maintenance Task	*Reference Paragraph*	
	Standards & Tolerances	*Maintenance Procedures*
4-8. ASR-9. **a. Transmitters/Receiver Site.** **(1) Transmitters.** **(a) Daily.** **1** Specify ..... **2** Specify ..... **(b) Weekly.** **(2) Receivers.** **b. Indicator Site.** **4-9. ASR-7.**	*(Reference applicable chapter 3 paragraph or TIB)*	*(Reference applicable chapter 5 paragraph or TIB)*

SAMPLE

Figure D-9. Sample MTHB Chapter 4 Tabulation for a Single Facility Type (Model, Location, and Function Grouping)

Performance Check or Maintenance Task	*Reference Paragraph*	
	Standards & Tolerances	*Maintenance Procedures*
4-10. DIESEL EG. **a. Below 125 KVA.** **(1) Monthly.** **(a)** Specify **1** Specify …… **2** Specify …… **(b)** Specify **(2) Quarterly.** **b. 125 KVA and Above.** **(1)** Specify …… **(2)** Specify …… **4-11. GASOLINE EG.**	*(Reference applicable chapter 3 paragraph or TIB)*	*(Reference applicable chapter 5 paragraph or TIB)*

SAMPLE

Figure D-10. Sample MTHB Chapter 4 Tabulation for a Single Facility Type (Model and Size Grouping)

Performance Check or Maintenance Task	*Reference Paragraph*	
	Standards & Tolerances	*Maintenance Procedures*
4-12. LOCALIZER. **a. Mark 1a.** **(1) Biweekly.** **(a)** Specify …… **(b)** Specify…… **(2) Quarterly.** **(a)** Specify…… **(b)** Specify…… **(3) Specify** **b. Mark 1f.**	*(Reference applicable chapter 3 paragraph or TIB)*	*(Reference applicable chapter 5 paragraph or TIB)*

SAMPLE

Figure D-11. Sample MTHB Chapter 4 Tabulation for a Single Facility Type (Function and Model Grouping)

Performance Check or Maintenance Task	*Reference Paragraph*	
	Standards & Tolerances	*Maintenance Procedures*
4-13. AN/GRT-xx. **a. Monthly.** **(1)** Specify…… **(2)** Specify …… **b. Quarterly.** **(1)** Specify …… **(2)** Specify …… **c. Etc.**	*(Reference applicable chapter 3 paragraph or TIB)*	*(Reference applicable chapter 5 paragraph or TIB)*

Figure D-12. Sample MTHB Chapter 4 Tabulation for Functional Equipment Groups (Type or Model)

SAMPLE

Performance Check or Maintenance Task	*Reference Paragraph*	
	Standards & Tolerances	*Maintenance Procedures*
4-14. DAILY. **a.** Specify…… **b.** Specify…… **4-15. WEEKLY.** **a.** Specify…… **b.** Specify……	*(Reference applicable chapter 3 paragraph or TIB)*	*(Reference applicable chapter 5 paragraph or TIB)*

Figure D-13. Sample MTHB Chapter 4 Tabulation with Tasks Identified by Period Only

Performance Check or Maintenance Task	*Reference Paragraph*	
	Standards & Tolerances	*Maintenance Procedures*
4-16. QUARTERLY.		
a. Foundation Systems.		
(1) Specify……	*(Reference applicable chapter 3 paragraph or TIB)*	*(Reference applicable chapter 5 paragraph or TIB)*
(2) Specify……		
b. Floor Systems.		
(1) Specify ……		
(2) Specify ……		
c. Specify		
4-17. SEMIANNUALLY.		

Figure D-14. Sample MTHB Chapter 4 Tabulation with Tasks Identified by Period and System

SAMPLE

Performance Check or Maintenance Task	*Reference Paragraph*	
	Standards & Tolerances	*Maintenance Procedures*
4-18. DAILY (or MONTHLY, etc.).		
a. RMLS……	*(Reference applicable chapter 3 paragraph or TIB)*	*(Reference applicable chapter 5 paragraph or TIB)*
b. Specify (For additional items required daily (or monthly etc.) but not printed on the FAA Form 6000 series.)		

Figure D-15. Sample RMLS Correlation with Performance Checks or Maintenance Tasks on a Unit Schedule

Performance Check or Maintenance Task	*Reference Paragraph*	
	Standards & Tolerances	*Maintenance Procedures*
4-19. DAILY.		
a. Inspect standby equipment. …… (FAA Form 6000 series Item in "Measure and Record" format)	*(Reference applicable chapter 3 paragraph or TIB)*	*(Reference applicable chapter 5 paragraph or TIB)*
b. Specify ……		
4-20. WEEKLY.		
a. Check AC ripple in DC power supplies. ……		
b. Linearity Check …… (FAA Form 6000 series Item in "Measure and Record" format)		

SAMPLE

Figure D-16. Sample FAA Form 6000 Series Correlation with Performance Checks or Maintenance Tasks at Various Intervals

Chapter 5. Maintenance Procedures

5-1. General. This chapter establishes the procedures for accomplishing the various essential maintenance activities that are required for (*specify*) on either a periodic or incidental basis. The chapter is divided into 3 sections. The first section describes the procedures to be used in making the performance checks listed in chapter 4, section 1. The second section describes the procedures for doing the tasks listed in chapter 4, section 2. The third section describes the procedures for doing special tasks, usually nonscheduled and not listed in chapter 4.

5-2. Remote Maintenance Monitoring (RMM). Technical Operations will identify maintenance activities that can be accomplished via RMM. They include:

a. Monitoring system status and alarms

b. Managing system configuration

c. Performing fault isolation and restoration

d. Conducting analysis of system performance

e. Performing periodic maintenance

f. Performing certification

g. More information on RMM is provided in the latest editions of Orders 6000.30 and 6000.15

Section 1. Performance Check Procedures

Contains the procedures or methods for making the performance checks listed in chapter 4, section 1 of the MTHB. Suggested formatting:

5-3. (*Specify Title*.)

a. Object

b. Discussion

c. Test Equipment Required

d. Conditions

e. Detailed Procedure

SAMPLE

Figure D-17. Sample MTHB Chapter 5 (Sheet 1)

Section 2. Other Maintenance Task Procedure

(*Contains the procedures or methods for accomplishing the tasks listed in chapter 4, section 2 of the MTHB*.)

Section 3. Special Maintenance Procedures

(*Contains the procedures or methods for accomplishing special tasks, usually nonscheduled and not listed in chapter 4 of the MTHB. Includes special adjustment, alignment, or calibration procedures*.)

SAMPLE

Figure D-17. Sample MTHB Chapter 5 (Sheet 2)

Chapter 6. Flight Inspection

6-1. (*Used when flight inspections requiring action by maintenance personnel are conducted on the pertinent equipment/system and the information in Order 6000.15 is inadequate. Must contain information on detailed ground procedures to be accomplished by maintenance personnel prior to, during, and after flight inspection. Appropriate references to Order 8200.1 may be included. Must not duplicate the contents of Order 6000.15*.)

Figure D-18. Sample MTHB Chapter 6

SAMPLE

Chapter 7. Miscellaneous

7-1. (*Contains topics that do not fit in any of the other MTHB chapters*.)

Figure D-19. Sample MTHB Chapter 7

Appendix X. Certification Requirements

Table 1. Airport Surface Detection Equipment Service (ASDES)

Service	*Certification Parameter*	*Reference Paragraph* *Standards and Tolerances/Limits*
ASDES	Knowledge that constituent ASDE system is certified	None (go/no go)
	Knowledge that constituent AMASS is certified	None (go/no go)
	AMAS alert check	Par. 3-20
	Normal indications on Monitor and Control	None (go/no go)

CERTIFICATION INTERVAL: Weekly.

ALLOWABLE EXCEPTIONS: No exceptions.

PERSON RESPONSIBLE FOR CERTIFICATION: ATSS with certification authority.

CERTIFICATION ENTRY IN THE ASDES MAINTENANCE LOG:

Without exception:
ASDES certified.

With exception: None.

Removing exception: None.

SAMPLE

Figure D-20. Sample MTHB Certification Requirements

Appendix X. Glossary

ATO	Air Traffic Organization
COO	Chief Operating Officer
DMS	Directives Management System
DOT	Department of Transportation
FAA	Federal Aviation Administration
GPO	Government Printing Office
LOB	Line of Business
NAS	National Airspace System
OPR	Office of Primary Responsibility
SME	Subject Matter Expert
SMS	Safety Management System

SAMPLE

Figure D-21. Sample MTHB Glossary Appendix

Appendix X. Related Publications

The latest editions of the following publications are referenced within this MTHB

- Order 0000.1, FAA Standard Subject Classification System.
  https://employees.faa.gov/tools_resources/orders_notices/
- Order 1000.36, Writing Standards.
  https://employees.faa.gov/tools_resources/orders_notices/
- Order 1320.1, FAA Directives Management.
  https://employees.faa.gov/tools_resources/orders_notices/
- Order 1600.2, Safeguarding Classified National Security Information.
  https://employees.faa.gov/tools_resources/orders_notices/
- Order 1720.18, FAA Distribution System.
  https://employees.faa.gov/tools_resources/orders_notices/
- Order 6000.15, General Maintenance Handbook for National Airspace System (NAS) Facilities.
  https://employees.faa.gov/tools_resources/orders_notices/
- Order 6000.30, National Airspace System Maintenance Policy. Establishes maintenance policy for the NAS.
  https://employees.faa.gov/tools_resources/orders_notices/
- FAA Writing Manual.
  https://employees.faa.gov/tools_resources/branding_writing/media/Correspondence_Manual.pdf
- GPO Style Manual.
  http://www.gpoaccess.gov/stylemanual/browse.html
- Safety Risk Management Document.
  http://nasdoc.faa.gov/ATOP/HBC_6110.13BC1_SRMDM.pdf

SAMPLE

Figure D-22. Sample MTHB Related Publications Appendix

Appendix X. Administrative Information

1. Distribution. This directive is distributed to selected offices and facilities with the following Facility, Service, and Equipment Profile (FSEP) equipment: (*specify*).

a. To subscribe to email notifications of issued MTHBs:

(1) Go to http://dis.faa.gov. Click Subscribe. Click Subscribe to List. Enter your email address. Click Display Subscription Options. Select the series of MTHB for subscription. Click Subscribe.

or

(2) Go to https://employees.faa.gov/tools_resources/orders_notices. Select the series of MTHB for subscription. Click Go. Enter your email address. Click Go. Confirm email address, click radio button under Optional Password. Enter password if password was selected. Click Save.

b. For an electronic copy of this MTHB, go to https://employees.faa.gov/tools_resources/orders_notices/.

2. Background. (*Optional*.)

3. Authority to Change This Order. This MTHB can be modified or changed by (*specify*). The recipients of this MTHB who are involved with the development, modification, and/or publication of this MTHB are requested to furnish recommendations for improvement. Recommendations must be stated in specific terms and submitted to (*specify*) through the (*specify*) mailbox.

4. Definitions/Acronyms. (*Define specific terms/acronyms used in the MTHB. If the list is longer than 10 items, or takes up most of the page, put the list in a separate appendix titled Glossary*.)

5. Related Publications. (*List all documents referenced in and/or related to the MTHB. If the list of related publications is longer than 10 items, or takes up most of the page, put the list in a separate appendix titled Related Publications, include web link if electronically available*.)

6. Forms and Reports. (*List all forms and reports referenced in the MTHB, include web link if electronically available*.)

a. FAA Form 6000-8, Technical Performance Record. https://employees.faa.gov/tools_resources/forms/index.cfm/go/document.information/documentID/184228

b. FAA Form 6850-1, Technical Performance Record – MALS/MALSR/MALSF Voltages. https://employees.faa.gov/tools_resources/forms/index.cfm/go/document.information/documentID/180758

SAMPLE

Figure D-23. Sample MTHB Last Appendix (Administrative Information)

CHANGE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

ORDER
JO ####.## CHG #

Air Traffic Organization Policy

Effective Date:
(*Signature Date*)
Implementation Date:

SUBJ: (*Title*)

1. Purpose. This change transmits revised pages to Order (*specify order number and title*), dated (*specify*). This directive implements Configuration Control Decision (CCD) (*specify CCD number and title*).

2. Who this Change Affects. This document requires actions by the Airway Transportation System Specialist (ATSS) at operational facilities with Facility, Service, and Equipment Profile (FSEP) equipment: (*specify*).

3. Safety Risks.

a. Operational. In compliance with the latest edition of Order JO 6000.50, National Airspace System (NAS) Integrated Risk Management, activities are to be assessed for potential risk to the NAS from an operational perspective. The following operational risks are associated with this MTHB change. (*Specify.*)

b. Safety. In compliance with the latest editions of Orders 1100.161, Air Traffic Safety Oversight, and JO 1000.37, ATO Safety Management System, all NAS changes, require an SRM assessment for all MTHB changes prior to delivery. The SRM information for this MTHB change is available at (s*pecify link and/or attachment*). For further guidance in developing SRM documentation, refer to the latest version of the Safety Management System (SMS) Manual.

c. Security. In compliance with the latest edition of Order 1370.82, Information Systems Security Program, the FAA must ensure that security controls are implemented and commensurate with the risk and magnitude of the harm that would result from the loss, misuse, denial of service, unauthorized access, or modification of Federal information assets. The following security risks are associated with this MTHB change. (*Specify*.)

SAMPLE

4. Implementation Date. This MTHB change must be implemented by (*specify*).

5. Disposition of Transmittal. Retain the change transmittal after change pages are filed. File in front of the MTHB.

PAGE CHANGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated

(*Director Name*)
(*Director Title, Organization*)

Distribution: (*FSEP Codes*) Initiated By: (*Routing*)

Figure D-24. Sample MTHB Change Transmittal

Appendix E. SSD Format Guidance and Examples

SYSTEM SUPPORT DIRECTIVE

(SYSTEM ACRONYM) ***(CLASSIFICATION CODE)*** ***(SSM-XXX-####)***

System Support Modification

(DOCUMENT TITLE)

HIGHLIGHTS

- (*Modification Type*)
- xxx
- xxx

(SSD STAGE) **MM/DD/YYYY**

1. Purpose. This System Support Modification (SSM) (*specify*).

2. Distribution. This SSM requires actions by the Airway Transportation System Specialist (ATSS) at operational facilities with Facility, Service, and Equipment Profile (FSEP) equipment: (*specify*) (*elaborate as needed*).

a. To subscribe to email notifications of issued SSDs go to the TechNet Portal at http://technet.faa.gov/. Click on Auto-Notification Services on the home page. Select the Nat'l Modifications Index application and enter your email address to be sent email notifications which will include a hyperlink to where the SSD may be viewed and/or downloaded.

b. To obtain an electronic copy of this SSM go to the (*specify*) website at (*httpx://xxxx*) (*elaborate as needed*).

c. (*If applicable*) To obtain additional hard copies of this SSM, contact (*specify*) (*elaborate as needed*).

(*Any additional distribution information.*)

3. Withdrawals. SSM-(*XXX-###*), dated (*MM/DD/YYYY*), is being replaced by this SSM or Not applicable.

4. References.

5. Background.

6. Application.

7. Materials Required.

8. Source of Materials.

9. Special Tools and Test Equipment Required.

Distribution: (*FSEP Codes*) Initiated By: (*Routing*)

SAMPLE

Figure E-1. Sample SSM (Sheet 1)

10. Procedure to be Performed By.

11. When Modification is to be Performed.

12. Estimated Time Required.

13. Disposition of Surplus Parts.

14. Procedure.
Prerequisites (*optional*)

WARNING: Use local lockout/tagout procedures when energizing, startup, or release of energy can occur. This is necessary to make sure that other personnel cannot start the power source during maintenance. Shock hazards can kill. Such procedures are a requirement from the latest version of Order 3900.19, FAA Occupational Safety and Health.

15. Tests After Modification.

16. Result of Modification.
Software Impact (*optional*)

17. Changes to Technical Documentation.

18. Changes to Installation Drawings.

19. Changes to Recorded Data. In accordance with the latest editions of Order 6032.1, National Airspace System Modification Program, and Order 6000.15, General Maintenance Handbook for National Airspace System (NAS) Facilities, modification records must be kept current and accurate to track the modification status of a system, equipment, or Technical Instruction Book (TIB). FAA Form 6032-1, Equipment Modification Record (available at https://employees.faa.gov/tools_resources/forms/), or a printout of the logging screen documenting the completion of this modification, can be used as the modification record. Maintenance personnel must store modification records with the Facility Reference Data (FRD).

20. Address Changes. The ATSS must keep accurate FSEP records and Logistics Inventory System (LIS) addresses in order to receive the correct corresponding type and number of printed copies. Printed copies are generated by referencing the FSEP's [Facility Code & Class], [Mod Count], and [GSA Address] fields. They are mailed to the ATSS by referencing the LIS "Mailing Address."

a. To obtain assistance with verifying or updating FSEP information, go to https://intranet.faa.gov/faaemployees/org/linebusiness/ato/operations/technical_operations/ajw1/ajw162/fsep/contacts/.

SAMPLE

Figure E-1. Sample SSM (Sheet 2)

b. To obtain assistance with verifying or updating LIS information, go to http://impart.faa.gov/impart/home.html.

c. (Optional information.)

21. Clarification or Comments.

22. Risks.

a. Operational. In compliance with the latest edition of Order JO 6000.50, National Airspace System (NAS) Integrated Risk Management, activities are to be assessed for potential risk to the NAS from an operational perspective. The following operational risks are associated with this SSM (*specify*) or There are no operational risks associated with this SSM.

b. Safety. In compliance with the latest edition of Orders 1100.161, Air Traffic Safety Oversight, and JO 1000.37, ATO Safety Management System, all NAS changes require an SRM assessment for all SSMs prior to delivery. The SRM information for this SSM is available at (*specify link and/or attachment*). For further guidance in SRM documentation, refer to the latest edition of the Safety Management System (SMS) Manual. (*Explain risks associated with installing, or not installing, the HW/SW delivered with the SSM*.)

c. Security. In compliance with the latest edition of Order 1370.82, Information Systems Security Program, the FAA must ensure that security controls are implemented and commensurate with the risk and magnitude of the harm that would result from the loss, misuse, denial of service, unauthorized access, or modification of Federal information assets. The following security risks are associated with this SSM (*specify*) or There are no security risks associated with this SSM.

23. Fallback Procedures.

24. Status Accounting.

a. (*Specify*) has opened a Log Equipment Modification (LEM) record, (indicate when), in the Remote Monitoring and Logging System (RMLS) Simplified Automated Logging (SAL) application for this SSM. The data that has been entered into the LEM is as follows:

Fac Type:

Loc Ident:

Short Name: (*specify; if unavailable or unknown, enter SYS*)

Equip Ident:

FA/CA Number (optional):

Supplemental Code (as required):

SAMPLE

Figure E-1. Sample SSM (Sheet 3)

Maintenance Action Code (as required):

Order#/System:

Chapter/Sequence#:

Change:

CCD (if applicable):

Remarks (as required):

(*Remove any information not needed and insert any additional information/tables as needed.*)

> **NOTE:** If your facility is not listed in the FSEP, a record was not opened. Refer to paragraph 20 of this SSM to add your facility. Open a LEM record with the data found in this paragraph and continue to paragraph 24.b.

b. Upon completion of this SSM, you are required to use the RMLS SAL application Modification screen to close the Modification log as follows:

(1) Select the appropriate Equipment record for the modification.

(2) Change the Maintenance Action Code (MAC) to a **G** if the modification was completed (*specify any additional information*).

(*Add additional information pertaining to the Status Accounting entry, as needed.*)

25. Recommendations for Changes.

_____
(*Director Name*)
(*Director Title, Organization*)

SAMPLE

LIST OF APPENDIXES AND ATTACHMENTS

ITEM	TITLE	QUANTITY
APPENDIX 1.	TEST AND EVALUATION RESULTS SUMMARY	1
APPENDIX #.	TITLE	#
ATTACHMENT 1.	TABLE OF CONTENTS	1
ATTACHMENT #.	TITLE	#

Figure E-1. Sample SSM (Sheet 4)

APPENDIX 1. TEST AND EVALUATION (T&E) RESULTS SUMMARY

The following four paragraphs are mandatory for all T&E Result Summaries. Formatting and additional information can be presented based on your individual organizational processes.

1. Purpose

The purpose paragraph communicates the type of testing that was performed on the modification. It also gives a brief overview of what is included in the appendix.

Example: This appendix communicates the type of testing that was accomplished on this modification (*specify type of modification, version, and/or revision level*). The scope of the testing conducted on this modification and the test results are provided. Any additional unique testing or evaluation that should be conducted during the field installation, beyond the normal modification tests, is included in the Limitations paragraph.

2. Scope

The scope paragraph provides an overview of the testing that was conducted. It includes information on where the testing was performed, what testing was conducted, and what further testing needs to be completed.

Example: This modification has completed development and system testing. This testing was conducted at the William J. Hughes Technical Center (WJHTC). Key Site testing of this modification was conducted at two other facilities with the same baseline as system test.

3. Results

The results paragraph contains the following information:

- Who conducted the test
- Where the test was conducted
- When the test was conducted
- What systems were used to conduct the testing
- Description of any conditions found during testing (i.e., anomalies)

Example: Modification testing was performed at the WJHTC on xx/xx/xxxx. Testing was successful.

Figure E-2. SSM Appendix 1 Guidelines (Sheet 1)

4. Limitations

The limitation paragraph advises the user of possible activities forthcoming because of test restrictions at the Testing Facility.

Examples:

Limitations - This modification was tested and validated in all known configurations and no additional testing is required.

OR

Limitations - This modification was tested at the testing facilities except for (note the items that still require validation). Additional testing as indicated below is still required at the site.

Tester	On-Site Tests	Test Anomalies	Operational Test Impact	Remarks
Indicate tester's title (i.e., System Specialist).	Describe additional tests to be performed at sites.	List the areas that deviate from the normal testing.	Describe the impact that results from the on-site testing (i.e., system will be unavailable for 4 hours).	List any clarifying or supporting information (i.e., System Specialists are required to perform the test).

Figure E-2. SSM Appendix 1 Guidelines (Sheet 2)

SYSTEM SUPPORT DIRECTIVE

(SYSTEM ACRONYM) *(CLASSIFICATION CODE)* *(STR-XXX-####)*

System Technical Release

(DOCUMENT TITLE)

HIGHLIGHTS

- xxx
- xxx
- xxx

(SSD STAGE) **MM/DD/YYYY**

1. Purpose. This System Technical Release (STR) (*specify*).

2. Distribution. This STR requires actions by the Airway Transportation System Specialist (ATSS) at operational facilities with Facility, Service, and Equipment Profile (FSEP) equipment: (*specify*) (*elaborate as needed*).

a. To subscribe to email notifications of issued SSDs go to the TechNet Portal at http://technet.faa.gov/. Click on Auto-Notification Services on the home page. Select the Nat'l Modifications Index application and enter your email address to be sent email notifications which will include a hyperlink to where the SSD may be viewed and/or downloaded.

b. To obtain an electronic copy of this STR go to the (*specify*) website at (*httpx://xxxx*) (**elaborate as needed**).

c. (*If applicable*) To obtain additional hard copies of this STR, contact (*specify*) (*elaborate as needed*).

(*Any additional distribution information*.)

3. References.

4. Description of Problem.

5. Application.

6. Contents.

7. Directed Action or Recommended Solution.

8. Software/Hardware Impact.

9. Clarification or Comments.

10. Address Changes. The ATSS must keep accurate FSEP records and Logistics Inventory System (LIS) addresses in order to receive the correct corresponding type and number of printed

Distribution: (*FSEP Codes*) Initiated By: (*Routing*)

SAMPLE

Figure E-3. Sample STR (Sheet 1)

copies. Printed copies are generated by referencing the FSEP's [Facility Code & Class], [Mod Count], and [GSA Address] fields. They are mailed to the ATSS by referencing the LIS "Mailing" address.

a. To obtain assistance with verifying or updating FSEP information, go to https://intranet.faa.gov/faaemployees/org/linebusiness/ato/operations/technical_operations/ajw1/ajw162/fsep/contacts/.

b. To obtain assistance with verifying or updating LIS information, go to http://impart.faa.gov/impart/home.html.

c. (*Optional information*.)

11. Risks.

a. Operational. In compliance with the latest edition of Order JO 6000.50, National Airspace System (NAS) Integrated Risk Management, activities are to be assessed for potential risk to the NAS from an operational perspective. The following operational risks are associated with this STR (*specify*) or There are no operational risks associated with this STR.

b. Safety. In compliance with the latest edition of Orders 1100.161, Air Traffic Safety Oversight, and JO 1000.37, ATO Safety Management System, all NAS changes require an SRM assessment for all STRs prior to delivery. The SRM information for this STR is available at (*specify link and/or attachment*). For further guidance in SRM documentation, refer to the latest edition of the Safety Management System (SMS) Manual. (*Explain risks with following, or not following, the instructions/procedures described in the STR*.)

c. Security. In compliance with the latest edition of Order 1370.82, Information Systems Security Program, the FAA must ensure that security controls are implemented and commensurate with the risk and magnitude of the harm that would result from the loss, misuse, denial of service, unauthorized access, or modification of Federal information assets. The following security risks are associated with this STR (*specify*) or There are no security risks associated with this STR.

12. Fallback Procedures.

13. Status Accounting.

a. (*Specify*) has opened a Log Equipment Modification (LEM) record, (*indicate when*), in the Remote Monitoring and Logging System (RMLS) Simplified Automated Logging (SAL) application for this STR. The data that has been entered into the LEM is as follows:

Fac Type:

Loc Ident:

Short Name: (*specify; if unavailable or unknown, enter SYS*)

Equip Ident:

Figure E-3. Sample STR (Sheet 2)

SAMPLE

FA/CA Number (optional):

Supplemental Code (as required):

Maintenance Action Code (as required):

Order#/System:

Chapter/Sequence#:

Change: I

CCD (if applicable):

Remarks (as required):

(*Remove any information not needed and insert any additional information/tables as needed*.)

NOTE: If your facility is not listed in the FSEP, a record was not opened. Refer to paragraph 10.a of this STR to add your facility. Open a LEM record with the data found in this paragraph and continue to paragraph 13b.

b. Upon completion of this STR, you are required to use the RMLS SAL application Modification screen to close the Modification log as follows:

(1) Select the appropriate Equipment record for the modification.

(2) Change the Maintenance Action Code (MAC) to a **G** if the modification was completed (*specify any additional information*).

(*Add additional information pertaining to the Status Accounting entry, as needed*.)

SAMPLE

(***Director Name***)
(***Director Title, Organization***)

LIST OF APPENDIXES AND ATTACHMENTS

ITEM	TITLE	QUANTITY
APPENDIX #.	TITLE	#
ATTACHMENT 1.	TABLE OF CONTENTS	1
ATTACHMENT #.	TITLE	#

Figure E-3. Sample STR (Sheet 3)

SYSTEM SUPPORT DIRECTIVE

(SYSTEM ACRONYM) *(CLASSIFICATION CODE)* *(SDR-XXX-####)*

System Documentation Release

(DOCUMENT TITLE)

HIGHLIGHTS

- xxx
- xxx
- xxx

(SSD STAGE) **MM/DD/YYYY**

1. Purpose. This System Documentation Release (SDR) (*specify*).

2. Distribution. This SDR requires actions by the Airway Transportation System Specialist (ATSS) at operational facilities with Facility, Service, and Equipment Profile (FSEP) equipment: (*specify*) (*elaborate as needed*).

a. To subscribe to email notifications of issued SSDs go to the TechNet Portal at http://technet.faa.gov/. Click on Auto-Notification Services on the home page. Select the Nat'l Modifications Index application and enter your email address to be sent email notifications which will include a hyperlink to where the SSD may be viewed and/or downloaded.

b. To obtain an electronic copy of this SDR go to the (*specify*) website at (*httpx://xxxx*) (*elaborate as needed*).

c. (*If applicable*) To obtain additional hard copies of this SDR, contact (*specify*) (*elaborate as needed*).

(*Any additional distribution information.*)

3. Withdrawals.

4. References/Application.

5. Changes to Recorded Data. In accordance with the latest editions of Order 6032.1, National Airspace System Modification Program, and Order 6000.15, General Maintenance Handbook for National Airspace System (NAS) Facilities, modification records must be kept current and accurate to track the modification status of a system, equipment, or Technical Instruction Book (TIB). FAA Form 6032-1, Equipment Modification Record (available at https://employees.faa.gov/tools_resources/forms/), or a printout of the logging screen documenting the completion of this modification, can be used as the modification record. Maintenance personnel must store modification records with the Facility Reference Data (FRD).

6. Address Changes. The ATSS must keep accurate FSEP records and Logistics Inventory System (LIS) addresses in order to receive the correct corresponding type and number of printed

Distribution: (*FSEP Codes*) Initiated By: (*Routing*)

SAMPLE

Figure E-4. Sample SDR (Sheet 1)

copies. Printed copies are generated by referencing the FSEP's [Facility Code & Class], [Mod Count], and [GSA Address] fields. They are mailed to the ATSS by referencing the LIS "Mailing" address.

a. To obtain assistance with verifying or updating FSEP information, go to https://intranet.faa.gov/faaemployees/org/linebusiness/ato/operations/technical_operations/ajw1/ajw162/fsep/contacts/.

b. To obtain assistance with verifying or updating LIS information, go to http://impart.faa.gov/impart/home.html.

c. (*Optional information*.)

7. Risks.

a. Operational. In compliance with the latest edition of Order JO 6000.50, National Airspace System (NAS) Integrated Risk Management, activities are to be assessed for potential risk to the NAS from an operational perspective. The following operational risks are associated with this SDR (*specify*) or There are no operational risks associated with this SDR.

b. Safety. In compliance with the latest edition of Orders 1100.161, Air Traffic Safety Oversight, and JO 1000.37, ATO Safety Management System, all NAS changes require an SRM assessment for all SDRs prior to delivery. The SRM information for this SDR is available at (*specify link and/or attachment*). For further guidance in SRM documentation, refer to the latest edition of the Safety Management System (SMS) Manual. (*Explain risks with following, or not following, the instructions/procedures described in the SDR.*)

c. Security. In compliance with the latest edition of Order 1370.82, Information Systems Security Program, the FAA must ensure that security controls are implemented and commensurate with the risk and magnitude of the harm that would result from the loss, misuse, denial of service, unauthorized access, or modification of Federal information assets. The following security risks are associated with this SDR (*specify*) or There are no security risks associated with this SDR.

8. Status Accounting. Not applicable.

SAMPLE

(***Director Name***)
(***Director Title, Organization***)

LIST OF APPENDIXES AND ATTACHMENTS

ITEM	TITLE	QUANTITY
APPENDIX #.	TITLE	#
ATTACHMENT 1.	TABLE OF CONTENTS	1
ATTACHMENT #.	TITLE	#

Figure E-4. Sample SDR (Sheet 2)

FAA

System Support Directive
(***Classification code – optional***)

S
S
D

(System and acronym)
(***Equipment number – optional***)

SYSTEM GRAPHIC
(***optional***)

SAMPLE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Distribution: (*FSEP Codes*) Initiated By: (*Routing*)

Figure E-5. Sample Binder Outside Cover

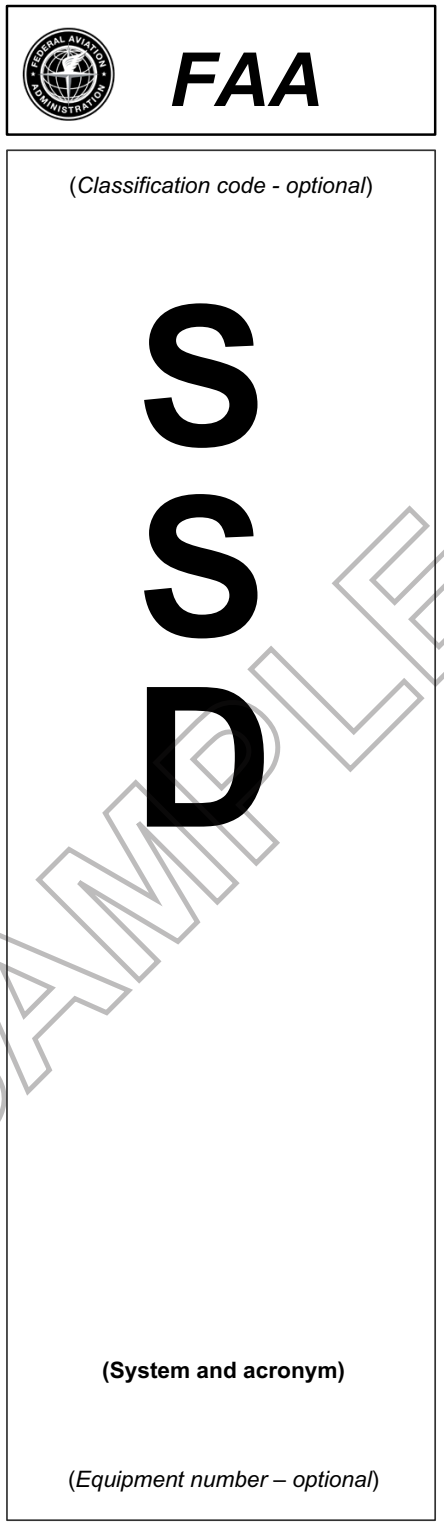

Figure E-6. Sample Binder Spine Insert

System Support Directive
(***Classification code – optional***)

S S D

(System and acronym)
(***Equipment number – optional***)

SYSTEM GRAPHIC
(***optional***)

(***SSD Approval Date***)

SAMPLE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Distribution: (*FSEP Codes*) Initiated By: (*Routing*)

Figure E-7. Sample Binder Inside Cover

(*SSD-XXX-###*)

ATTACHMENT 1. TABLE OF CONTENTS

Insert the attached Table of Contents behind the Table of Contents tab in the (*insert system name and acronym*) System Support Directive (SSD) Binder.

SAMPLE

Figure E-8. Sample SSD TOC Attachment (Cover Page for First Release of TOC)

(*SSD-XXX-###*)

ATTACHMENT 1. TABLE OF CONTENTS

Remove	Replace With
Existing Table of Contents from binder.	Attached Table of Contents.

SAMPLE

Figure E-9. Sample SSD TOC Attachment (Cover Page for an Existing TOC)

SYSTEM SUPPORT DIRECTIVE (SSD)

TABLE OF CONTENTS

(MM/DD/YYYY of issuing SSD)

System Support Modifications (SSM)

Document #	Date Issued	Title
SSM-XXX-001	01/11/2010	TITLE (WITHDRAWN BY SSM-XXX-004)
SSM-XXX-002	TBD	TITLE
SSM-XXX-003	03/18/2010	TITLE (UPDATED BY SDR-XXX-002, DATED 07/13/2010)
SSM-XXX-004	07/02/2010	TITLE

System Technical Releases (STR)

Document #	Date Issued	Title
STR-XXX-001	02/25/2010	TITLE
STR-XXX-002	TBD	TITLE
STR-XXX-003	05/20/2010	TITLE
STR-XXX-004	CANCELLED	TITLE

System Documentation Releases (SDR)

Document #	Date Issued	Title
SDR-XXX-001	08/26/2010	INITIAL RELEASE OF TI XXXX.XX
SDR-XXX-002	07/13/2010	UPDATE TO SSM-XXX-003, DATED 03/18/2010

SAMPLE

WITHDRAWN refers to issued SSDs that have been retracted and replaced.
CANCELLED refers to SSDs that have not been issued but have been assigned numbers and are no longer needed or required.

Figure E-10. Sample SSD TOC Attachment

Appendix F. Administrative Information

1. Distribution. This order is distributed to second level engineering offices within Technical Operations Services, En Route and Oceanic Services, Terminal Services, and System Operations; to director level in the Air Traffic Safety Oversight Office; to group level in the ATO service areas and service centers; to director level at the FAA Logistics Center and FAA Academy at the Mike Monroney Aeronautical Center; and to all Technical Operations field offices with a limited distribution.

2. Authority to Change This Order. The NAS Documentation Sub-Team (AJW-172), as the Office of Primary Responsibility (OPR), plans to review this order yearly. Because this order affects other orders and policies, each review must consider and address the impacts, planned modifications, and newly created orders.

3. Delegation of Authority. This order sets forth the following signature levels for the documents described in chapters 2 through 4.

a. Notices, notices of intent, and safety notices are signed by the OPR group-level manager.

b. MTHBs

(1) New and full book revisions are signed by the OPR director.

(2) Change packages are signed by the OPR group-level manager.

c. SSDs are signed by the OPR group-level manager.

4. Who Should I Contact? The recipients of this order who are involved with the development, modification, and/or publication of notices, MTHBs, and SSDs are requested to furnish recommendations for improvement to this order. Recommendations must be stated in specific terms. Fill out FAA Form 1320-19, Directive Feedback Information, this form is available electronically at https://employees.faa.gov/tools_resources/forms/. Submit the completed Form 1320-19 to the NAS Documentation Sub-Team through the 9-ACT-1320-58@faa.gov mailbox.

FAA Form 1320-19, Directive Feedback Information

*This form is available electronically at: https://employees.faa.gov/tools_resources/forms/

Directive Feedback Information

Please submit any written comments or recommendation for improving this directive, or suggest new items or subjects to be added to it. Also, if you find an error, please tell us about it.

Subject: Order

To: Directive Management Officer

(*Please check all appropriate line items*)

□ An error (procedural or typographical) has been noted in paragraph _____ on page _____.

□ Recommend paragraph _____ on page _____ be changed as follows: (*attached separate sheet if necessary*)

□ In a future change to this order, please include coverage on the following subject? (*briefly describe what you want added*):

□ Other comments:

□ I would like to discuss the above. Please contact me.

Submitted by:_____ Date:

Telephone Number: _____ Routing Symbol:

FAA Form 1320-19 (10-98)