This Air Force Policy Directive (AFPD) provides direction for air and space maintenance relative to Department of Defense Directive 4151.18, Maintenance of Military Materiel. It designates Headquarters Air Force functional responsibilities for maintenance of air, space, cyberspace, communications, information technology systems and associated equipment (excluding commercial general purpose equipment, commercial business systems and real property installed equipment). It applies to all Air Force military and civilian personnel, members of the Air Force Reserve, members of the Air National Guard, and other individuals or organizations as required by binding agreement or obligation with the Department of the Air Force. This publication may not be supplemented. Any change or waiver must be approved by the Secretary of the Air Force. Refer recommended changes and questions about this publication to the Office of Primary Responsibility using AF Form 847, Recommendation for Change of Publication; route AF Form 847 from the field through the appropriate functional chain of command. Ensure all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual 33-363, Management of Records, and disposed of in accordance with the Air Force Records Disposition Schedule in the Air Force Records Information Management System.

This AFPD interfaces with the following publications: AFPD 10-2, Readiness; AFPD 10-4, Operations Planning, Air and Space Expeditionary Force (AEF); AFPD 10-6, Capability Requirements Development; AFPD 10-9, Lead Command Designation and Responsibilities for Weapon Systems; AFPD 10-21, Air Mobility Lead Command Roles and Responsibilities; AFPD 13-5, Air Force Nuclear Enterprise; AFPD 16-4, Accounting for Units, Installations, and

SUMMARY OF CHANGES

This document has been substantially revised and should be completely reviewed. Included are administrative changes in accordance with Air Force Guidance Memorandum to Air Force Instruction 33-360, Publications and Forms Management, dated 15 February 2018.

1. Air Force Maintenance of Military Materiel. It is Air Force Policy to:

1.1. Maintain organizational, intermediate, and depot levels of maintenance capabilities in order to provide operational readiness and to ensure an effective and timely response to peacetime operations, mobilizations, national defense contingencies, and other emergencies. Each level of maintenance provides a certain minimum amount of capability.

1.1.1. Organizational-level Maintenance. Provides the capability to launch and recover sorties, as well as to maintain and repair materiel coded for organizational level repair.

1.1.2. Intermediate-level Maintenance. Provides the capability to maintain materiel coded for organizational and intermediate level repair in back shops and or centralized repair facilities.

1.1.3. Depot-level Maintenance. Provides the capability to maintain materiel coded for organizational, intermediate and depot levels of maintenance. Includes maintenance requiring the overhaul, upgrading, or rebuilding of parts, assemblies, or subassemblies, and the testing and reclamation of equipment as necessary.

1.2. Perform maintenance at the lowest level of maintenance, consistent with available Technical Manuals, personnel, capacity, infrastructure, equipment and tools.

1.3. Resource maintenance activities at all levels to optimize weapon system readiness and meet mission requirements.

1.4. Standardize maintenance organizations’ tools, equipment, processes and skills to the maximum extent practicable.

1.5. Ensure Government maintenance organizations follow Government verified procedures to accomplish repairs.

1.6. Optimize economies and efficiencies by:

1.6.1. Managing fleet and materiel health to provide long-term capability of equipment.

1.6.2. Utilizing arrangements such as performance based agreements and public-private partnerships.

1.6.3. Allocating existing Government capabilities and inventories that provide best value for meeting mission needs.
1.6.4. Reviewing maintenance workloads and capacity utilization to identify economies of operations or to improve responsiveness.

1.7. Assign skilled personnel to fully support operational and expeditionary air forces.

2. Roles and Responsibilities.

2.1. Assistant Secretary of the Air Force for Acquisition, Technology and Logistics (SAF/AQ)

2.1.1. Develops and implements maintenance policy that provides direction to ensure enterprise business practices, employment of organic and commercial support, management processes, and integrated product support.

2.1.2. Ensures system designs optimize supportability and minimize the total life cycle costs.

2.1.3. Ensures system maintenance performance is validated against design parameters throughout the system life cycle utilizing standardized reportable metrics.

2.1.4. Ensures depot-level maintenance capability compliance with Title 10 as it applies to Air Force depots (Reference Chapter 146, Title 10 United States Code).

2.1.5. Supports development of budget exhibits and documentation.

2.2. Chief, Information Dominance and Chief Information Officer (SAF/CIO A6):

2.2.1. Issues policy implementation direction for maintenance of communications, information technology and cyberspace assets.

2.2.1.1. Provides functional area Career Field Management and issues guidance for training and equipping the maintenance workforce.

2.2.2. Supports development of maintenance strategy, concept and planning for communications, information technology and cyberspace programs that:

2.2.2.1. Provides affordable systems’ operational support.

2.2.2.2. Mitigates risks to operational readiness.

2.2.2.3. Ensures availability of metrics, data systems and guidance for communications, information technology and cyberspace maintenance organizations to measure and report data to evaluate system availability.

2.2.3. Advocates for communications, information technology and cyberspace maintenance resources.

2.3. Assistant Secretary of the Air Force for Financial Management and Comptroller (SAF/FM):

2.3.1. Manages all financial management, comptroller functions and activities to include those associated with the planning, programming, budgeting and execution processes.

2.3.2. Ensures availability of financial management information to maintenance activities.

2.3.3. Provides financial management guidance and policy implementation direction.
2.4. Deputy Chief of Staff, Logistics, Engineering and Force Protection (AF/A4):

2.4.1. Issues policy implementation direction for maintenance of air and space systems, munitions and associated equipment.

2.4.2. Supports development of maintenance policy, strategy, concept and planning for air and space systems, munitions and associated equipment to optimize mission generation and provide affordable and agile operational support.

2.4.3. Oversees air and space systems assets, munitions assets, and associated equipment to:

2.4.3.1. Analyze maintenance trends.
2.4.3.2. Advocate for resources to sustain maintenance operations.
2.4.3.3. Provide functional area Career Field Management and issue guidance for training and equipping the maintenance workforce.
2.4.3.4. Ensure maintenance operations are supported by robust management information.
2.4.3.5. Ensure availability of metrics, data systems and guidance for air and space maintenance organizations to measure and report data to evaluate systems’ availabilities.
2.4.3.6. Mitigate maintenance risks to operational readiness.

2.5. Major Command Commanders:

2.5.1. Provide manpower, resources and training consistent with the assigned mission.

2.5.2. Interface/collaborate with Program Managers in developing and implementing maintenance strategies and concepts that provide for the long term sustainment and enhanced capability of assigned systems and equipment.

2.5.3. Provide interface between operational units and Program Managers to achieve expedient resolution of technical and material deficiencies so as to optimize reliability and maintainability of fielded systems.

2.5.4. Analyze maintenance trends and mitigate inefficiencies or risks to operational readiness and environmental, safety and occupational health risk.

2.5.5. Provide guidance, funding and analysis to optimize systems and equipment availability.

2.5.6. Ensure units within wings are the primary activities executing organizational and intermediate maintenance of assigned air and space systems.

2.5.7. Ensure maintenance activities have the capability to meet mission generation requirements and simultaneously sustain preventative maintenance and training.

2.5.8. Ensure maintenance activities measure and report maintenance data to permit evaluation of maintenance performance and system/equipment availability.

2.5.9. Review maintenance workloads to identify economies of operations and/or improve responsiveness.
2.6. Air Force Materiel Command Commander (In addition to Paragraph 2.5.):

2.6.1. Provides depot maintenance management guidance to the Air Force Sustainment Center.

2.6.1.1. Optimizes efficiencies and effectiveness of depot maintenance activities.

2.6.1.2. Ensures financial planning and budgets for depot maintenance requirements.

2.6.2. Ensures capital investment in depot operations for infrastructure, equipment and process improvement.

2.6.3. Provides engineering, maintenance, corrosion prevention and control, and nondestructive inspection support to Major Commands and the Air National Guard.

2.7. Air Force Space Command Commander (In addition to Paragraph 2.5.):

2.7.1. Ensures space and cyberspace maintenance activities have the capability to meet mission requirements and simultaneously sustain preventive maintenance and training.

2.7.2. Provides engineering and maintenance support to Major Commands and the Air National Guard for space systems.

2.8. Air Education and Training Command Commander (In addition to Paragraph 2.5.):
Provides formal training for equipment maintenance technicians to meet operational requirements.

Heather Wilson
Secretary of the Air Force
Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

Chapter 146 of Title 10 United States Code, Contracting for Performance of Civilian Commercial or Industrial Type Functions

Department of Defense Directive 4151.18, Maintenance of Military Materiel, 31 March 2004

AFPD 10-2, Readiness, 6 November 2012


AFPD 10-6, Capability Requirements Development, 6 November 2013

AFPD 10-9, Lead Command Designation and Responsibilities for Weapon Systems, 8 March 2007

AFPD 10-21, Air Mobility Lead Command Roles and Responsibilities, 30 April 2014

AFPD 13-5, Air Force Nuclear Enterprise, 29 June 2017

AFPD 16-4, Accounting for Units, Installations, and Aerospace Vehicles, 1 July 2014

AFPD 17-1, Information Dominance Governance and Management, 12 April 2016

AFPD 17-2, Cyberspace Operations, 12 April 2016


AFPD 21-2, Munitions, 18 May 2017

AFPD 36-26, Total Force Development, 22 December 2015

AFPD 38-1, Organization and Unit Designation, 24 August 2011

AFPD 90-8, Environment, Safety & Occupational Health Management and Risk Management, 14 March 2017

Air Force Instruction 33-360, Publications and Forms Management, 15 February 2018


Prescribed Forms

None

Adopted Forms

AF Form 847, Recommendation for Change of Publication

Abbreviations and Acronyms

AFPD—Air Force Policy Directive
**Terms**

**Air Assets**—Applicable to this publication, refers to air breathing aerial systems, collateral subsystems and end-items; includes ground-based equipment, data links, mission or user terminals that directly supports air assets.

**Capability**—Ability to execute a specified course of action.

**Communications Assets**—As applicable to this publication, refers to communications and electronics items that are not physically incorporated with or essential to operational readiness of air, space, cyberspace, or munitions assets.

**Cyberspace Assets**—Assets that makeup the global domain within the information environment consisting of the interdependent network of information technology infrastructures; including the internet, telecommunications networks, computer systems, and embedded processors and controllers.

**Depot Maintenance**—Maintenance performed on materiel requiring major overhaul or a complete rebuild of parts, assemblies, subassemblies, and end-items; including the manufacture of parts, modifications, testing, and reclamation. Depot maintenance also serves lower categories of maintenance by providing technical assistance and performing maintenance beyond their capacity. Depot maintenance provides stocks of serviceable equipment by using more extensive facilities for repair than are available in lower level maintenance activities.

**End Item**—Final combination of end products, component parts, and/or materials that is ready for its intended use; e.g., aircraft, mobile machine shop.

**Fleet Health**—Overall condition of air and space systems, equipment, assets, and/or forces to execute a long-term course of action (e.g., number of delayed discrepancies, number of serviceable assets versus requirements, and/or level of training).

Intermediate Maintenance—Repair coded “intermediate” that is beyond essential organizational but below depot capability requirements that may be performed on or off equipment, but generally off-equipment, by organizational, intermediate or depot maintenance activities.

**Life Cycle**—From system concept development through disposal; total phases through which an item passes from the time it is initially developed until it is either consumed in use or disposed.

**Mission Generation**—Cumulative efforts to launch and recover sorties, includes associated activities required to sustain the capability to generate sorties.

**Maintenance**—All action taken to retain materiel in a serviceable condition or to restore it to serviceability. It includes inspection, testing, servicing, classification as to serviceability, repair, rebuilding and reclamation.

**Materiel**—All items necessary to equip, operate, maintain, and support military activities without distinction as to its application for administrative or combat purposes.

**Munition**—Complete device charged with explosive, propellants, pyrotechnics, initiating composition, or nuclear, biological, or chemical material for use in military operations.

**Organizational Maintenance**—Repair coded “organizational” that is below essential intermediate or depot capability requirements that may be performed on or off equipment, but generally on-equipment, by organizational, intermediate or depot maintenance activities.
Preventive Maintenance—Care and servicing by personnel for the purpose of maintaining equipment in satisfactory operating condition by systematic inspection, detection and correction of incipient failures either before they occur or before they develop into major defects.

Product Support—Package of support functions required to field and maintain the readiness and operational capability of major weapon systems, subsystems, and components, including all functions related to weapon system readiness.

Readiness—Ability of US military forces to fight and meet the demands of the national military strategy.

Operational Readiness—The capability of a unit, weapon system, or equipment to perform the mission or functions for which it is organized or designed. Unit readiness—the ability to provide capabilities required by the combatant commanders to execute their assigned missions.

Repair—Restoration of an item to serviceable condition through correction of a specific failure or unserviceable condition.

Risk—Probability and severity of loss linked to hazards.

Risk Management—The process of identifying, assessing, and controlling risks arising from operational factors and making decisions the balance risk cost with mission benefits.

Space Assets—Any individual part of a space system: equipment that is or can be placed in space and/or terrestrially-based equipment that directly supports space activity.

Space Systems—Devices and organizations forming the space network. These consist of: spacecraft; mission packages; ground stations; data links among spacecraft, mission or user terminals; launch systems; and directly related supporting infrastructure.

Sortie—In air operations, an operational flight by one aircraft.

System—A functionally, physically, and/or behaviorally related group of regularly interacting or interdependent elements; group of elements forming a unified whole.

Technical Manual—Document (electronic or non-electronic) information that relates to research, development, engineering, test, evaluation, production, operation, use and maintenance of supplies and equipment. A Technical Manual normally includes operational and maintenance instructions, parts lists or parts breakdown, and related technical information or procedures exclusive of administrative procedures. Technical Orders that meet the criteria of this definition classify as Technical Manuals.