

**BY ORDER OF THE SECRETARY
OF THE AIR FORCE**

AIR FORCE INSTRUCTION 15-182

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Weather

**WEATHER FUNCTIONAL
CAPABILITY MANAGEMENT**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This Air Force Instruction (AFI) implements Air Force Policy Directive (AFPD) 15-1, *Air Force Weather Operations*, and is used in conjunction with AFPD 10-6, *Capabilities-Based Planning & Requirements Development* and AFPD 33-4, *Enterprise Architecting*. This instruction applies to individuals who participate in weather capabilities-based activities within the Air Force (AF), including the Air Force Reserve and Air National Guard (ANG). This publication may be supplemented at any level, but all supplements must be routed to the Office of Primary Responsibility (OPR) listed above for coordination prior to certification and approval. The authorities to waive wing/unit level requirements in this publication are identified with a Tier (“T-0, T-1, T-2, T-3”) number following the compliance statement. See AFI 33-360, *Publications and Forms Management*, Table 1.1 for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the publication OPR for non-tiered compliance items. Ensure that all records created as a result of processes prescribed in this publication are maintained IAW Air Force Manual (AFMAN) 33-363, Management of Records, and disposed of IAW the Air Force Records Disposition Schedule (RDS) in the Air Force Records Information Management System (AFRIMS). The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the AF. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through the appropriate office within the chain of command.

SUMMARY OF CHANGES

This document is substantially revised and must be completely reviewed. Major changes include accounting for a major reorganization realigning AF Weather Agency (AFWA) from a Field Operating Agency under the HQ USAF to a specialized mission wing under Air Combat Command (ACC), and establishing oversight bodies.

Chapter 1

GENERAL GUIDANCE

1.1. Overview. This instruction identifies general roles and responsibilities for AF-wide weather capabilities-based activities to ensure AF units receive adequate equipment and facilities, to include Army equipment and facilities in support of the weather functional Army support mission according to AFI 15-157, Interservice Publication (IP), *Weather Support for the U.S. Army*. Organizational responsibilities outlined in standard Department of Defense (DoD) and AF directives or program-specific agreements are not duplicated in this document. This instruction details roles and responsibilities for management of the AF Weather Weapon System (AFWWS). The AFWWS is a family of systems (FoS) composed of atmospheric sensing, ground-based space environmental sensing, specification and forecast modeling, environmental monitoring satellite and non-traditional source data processing systems programs that provide an integrated, cross-command, cross-service capability to characterize the environment and provide mission-tailored atmospheric and space weather information. This instruction also includes weather functional roles for Space-Based Environmental Monitoring (SBEM) (e.g., Defense Meteorological Satellite Program, Weather System Follow-on) space-based environmental collection systems.

Chapter 2

ROLES AND RESPONSIBILITIES

2.1. Director of Weather (HQ USAF/A3W):

- 2.1.1. Provides guidance to weather functional capability development activities including strategic guidance. The Director chairs the Weather Functional Capability Area Steering Group and the Information System Development Oversight Body, and advocates for weather capabilities through the Capability Development Process and Corporate structure.
- 2.1.2. Provides guidance and assistance for the weather functional capabilities-based analyses to discover and document capability gaps.
- 2.1.3. Facilitates weather functional participation in AF-level analyses.
- 2.1.4. Provides guidance and assistance for weather functional Joint Capabilities Integration and Development System (JCIDS) document development.
- 2.1.5. Serves as HQ USAF/A3 staff focal point for AFWWS and SBEM architectures.
- 2.1.6. Coordinates with Headquarters, Department of the Army (HQ DA), Deputy Chief of Staff (DCS) for Intelligence, Plans and Integration Directorate (DAMI-PI) on AF weather functional capability development and architecture.
- 2.1.7. Oversees AF weather functional resource management.
- 2.1.8. Provides programming, manpower, and systems subject matter expertise during development and execution of AF weather functional JCIDS documents.
- 2.1.9. Develops AF weather functional operational policies based on fielded capabilities.
- 2.1.10. Provides AF weather functional expertise to the Intelligence Community.
- 2.1.11. Coordinates and advocates Intelligence Community weather priorities and requirements.

2.2. Lead Commands for Weather Functional Capabilities.

- 2.2.1. ACC is the AFWWS lead command. AF Space Command (AFSPC) is the Lead Command for SBEM systems. AFPD 10-9, *Lead Command Designation and Responsibilities for Weapon Systems*, AFI 63-101/20-101, *Integrated Life Cycle Management*, and AFI 10-601, *Operational Capability Requirements Development* outline Lead Command roles and responsibilities.

2.3. Implementing Commands. AFI 10601, *Operational Capability Requirements Development*, and AFI 63-101/20-101, *Integrated Life Cycle Management* Roles outline roles and responsibilities of implementing commands for capability management.

- 2.3.1. AF Materiel Command (AFMC) is the Implementing Command and its AF Life Cycle Management Center Battle Management Directorate (AFLCMC/HB) manages implementation of the atmospheric weather portion of AFWWS program. AFMC develops and coordinates AFWWS architecture and acquisition roadmap(s) for the applicable programs.

2.3.2. AFSPC is the Implementing Command and its Space and Missile Systems Center Remote Sensing Systems Directorate (SMC/RS) manages implementation of space weather analysis, forecasting, and ground-based space weather observing systems, and for meteorological satellite direct read-out and processing systems of the AFWWS. Additionally, AFSPC is the Implementing Command for SBEM, managed through SMC/RS. AFSPC develops and coordinates SBEM architecture and acquisition roadmap(s) for the applicable programs.

2.4. Using Commands. Using Commands for AFWWS and SBEM (including the ANG and AF Reserve Command), are identified in AFPD 10-9, *Lead Command Designation and Responsibilities for Weapon Systems*, and AFI 63101, *Integrated Life Cycle Management* in coordination with lead and implementing commands. Using Command weather functional staffs:

2.4.1. Provide weather functional expertise to their respective planning communities during Major Command (MAJCOM) capability development processes, e.g., incorporate appropriate weather strategic planning information in capabilities-based analyses and MAJCOM strategic plans.

2.4.2. Obtain, vet, and validate weather requirements from their command's subordinate units for planning and programming activities at the MAJCOM and Lead Command.

2.4.3. Advocate their command's weather priorities.

2.4.4. Participate in weather functional capabilities-based analyses to discover and document capability gaps.

2.4.5. Participate in AFWWS and SBEM architecture development.

2.4.6. Provide a representative and participate as a member of the Weather Functional Capabilities Area Steering Group and the Information System Development Oversight Body.

Chapter 3

CAPABILITIES-BASED REQUIREMENTS AND IMPLEMENTATION

3.1. Weather Functional Capabilities-Based Requirements and Oversight

3.1.1. Address data, information, and product needs using the support assistance request in accordance with AFMAN 15-129, Volume 2, *Air and Space Weather Operations - Exploitation*.

3.1.2. This instruction does not prescribe or describe the internal requirements processes conducted at combatant commands or MAJCOMs. All requirements for weather support that will involve investment funds (e.g., upgraded capabilities, new sensors, and systems) will be forwarded through command channels for validation (usually by a MAJCOM), and forwarded to the Lead Command (with courtesy copy to HQ USAF/A3W) for assessment and operational capability requirements development.

3.1.3. Requirements from outside the AF, e.g., Federal agencies or the combatant commands, should be staffed through the appropriate organizations, e.g., through Office of the Under Secretary of Defense (OUSD) for Acquisition, Technology, and Logistics (AT&L), or the Joint Staff, respectively. U.S. Army needs will be staffed according to applicable interservice instructions.

3.1.4. Weather Functional Capabilities Area Steering Group (WFCA SG).

3.1.4.1. The WFCA SG is the senior weather functional activity to review and recommend prioritization of cross-command capability needs to the Lead Commands. The WFCA SG is chaired by HQ USAF/A3W and managed/facilitated by the Lead Commands for their respective programs. Using and Implementing Commands and provide representatives to the WFCA SG. This forum enables:

3.1.4.2. The Lead Commands to provide status and use of the AFWWS and SBEM, and associated operational capability requirements development.

3.1.4.3. User Commands to provide feedback and input on the AFWWS and SBEM.

3.1.4.4. Implementing Commands to provide status of integrated life cycle management of the AFWWS and SBEM.

3.1.5. Weather Information System Development Oversight Body.

3.1.5.1. A significant portion of the AFWWS is dependent upon software intensive systems and uses software development, to include models, products, and forecaster tools. JCIDS allows for the evolutionary development of these capabilities using the "Information Technology (IT) Box" model. Part of the model requires the use of a flag-level organization to validate detailed follow-on requirement and solution oversight of these information system programs. The Weather Information System Development Oversight Body serves this function for AFWWS programs implementing the "IT Box" model with Information System (IS) Initial Capabilities Documents (ICDs) or IS Capability Development Documents (CDDs).

3.1.5.2. The Lead Command will host the Weather Information System Development Oversight Body to ensure the software development is executed efficiently. The Implementing Commands will participate in and advise this body. Members of the Oversight Body are from organizations identified in Chapter 2. The Lead Command, in coordination with the Implementing Commands, will present to the body proposed requirements and solutions for programs in Information System development for review and approval.

3.1.5.3. All requirements are governed by JCIDS, as implemented via AFI 10-601,

3.2. Management of Allowance Documents and Real Property Requests.

3.2.1. Table 2.1. describes actions and responsible activities for managing allowance documents and Army real property requests.

3.2.1.1. AF Allowance Standards. The Lead Command identifies equipment allowance standards as part of developing materiel solutions to warfighter needs. HQ USAF/A3W reviews applicable AF allowance standards (Allowance Source Codes (ASC) 786/789) aperiodically to ensure proper authorization standards.

3.2.2. Army Tables of Organization and Equipment (TOEs) and Modified Tables of Organization and Equipment (MTOEs). According to AFI 15-157(IP), the Army documents standard Army equipment and personnel for use by AF weather personnel in the appropriate TOE and provides recommended MTOE. Staff Weather Officers (SWOs) will submit change requests through their chain of command, as needed. Nominally, they are reviewed bi-annually during a TOE/MTOE validation prior to being staffed to HQ DA through HQ USAF/A3.

3.2.2.1. Bi-annual TOE/MTOE Validation. HQ USAF/A3W will convene a review board comprised of Special Operations Forces (SOF), HQ DAMI-PI and Combat Air Forces (CAF) MAJCOM weather functionals to review each MTOE and any requests for change. Each MAJCOM weather functional may request subject matter experts attend from affected weather units. MAJCOM weather functionals may request unit audits of on-hand MTOE equipment to support review during the verification meeting and to identify deficiencies that might be systemic and require HQ USAF/HQ DA intervention. SOF-funded equipment/personnel should be reviewed using Special Operations Forces Capabilities Integration and Development System (SOFCIDS) processes. See United States Special Operation Command (USSOCOM) Directive 71-4, *Special Operations Forces Capabilities Integration and Development System (SOFCIDS)*.

3.2.2.2. HQ USAF/A3W will compile suggested changes and recommendations and provide the appropriate documentation to HQ USAF/A3 for endorsement to HQ DA.

3.2.3. Army Real Property. AF units that receive facility support according to AFI 15-157(IP) from their Army host will submit requests for real property to their supporting community activity.

Table 3.1. Management of Allowance Documents and Real Property Requests

ITEM	Subject	OPR	Action	Forward to:	Additional Information and Prescribing Directives
1	AF Allowance Standards	HQ USAF/A3W	Aperiodically review ASC 786 / 789	Allowance Manager, AF Equipment Allowance Division (405 SCMS /GULB) through the applicable system program director, product group manager, or materiel group manager	AFH 23-123, Volume 3, <i>AF Equipment Management</i>
2	Army TOE and MTOE				HQ USAF/A3W is HQ USAF/A3 lead for SWO TOE/MTOE. AFI 15-157 (IP) and AR 71-32, <i>Force Development and Documentation—Consolidated Policies</i>
2.1		SWO	Ensure authorized personnel strength and skills and equipment documented in Army MTOE are available	through command channels to MAJCOM weather functional; copy the supported Army unit's readiness proponent	AFI 10-201, <i>Status of Resources and Training System.</i>
2.2		SWO	Submit recommended changes	MAJCOM/A3 (or designated representative)	Provide justification and supporting documentation through AF channels; include

ITEM	Subject	OPR	Action	Forward to:	Additional Information and Prescribing Directives
					endorsements by squadron, group, etc.
2.3		MAJCOM/A3 (or designated representative)	Review SWO recommendations and submit changes	HQ USAF/A3W (see Item 2)	
2.4		HQ USAF/A3W	Bi-annually review and verify the SWO TOE/MTOE and validate new requests or changes.	HQ USAF/A3 for transmittal to HQ DA DCS for Operations, Director of Force Management (DAMO-FM)	SOF and CAF MAJCOM weather functionals will ensure that all requests for TOE/MTOE changes are forwarded to HQ USAF/A3W.
3	Army Real Property				<p>HQ USAF/A3W provides oversight and advocates for SWO Army Real Property actions through the Army's process.</p> <p>AFI 15-157(IP), AR 420-1, <i>Army Facilities Management</i> and AR 210-20, <i>Real Property Master Planning for Army Installations</i>.</p>
3.1		SWO	Submit requests for real property.	Supporting community activity according to local procedures.	SWO will provide copies of all requests through their MAJCOM to HQ USAF/A3W.
3.2		HQ USAF/A3W	As required/received, HQ USAF/A3W will compile Real	HQ USAF/A3 for endorsement to HQ DA DCS for Intelligence,	Used to support HQ DA budget requests.

ITEM	Subject	OPR	Action	Forward to:	Additional Information and Prescribing Directives
			Property requests.	Plans and Integration (DAMI-RI through DAMI-PI).	

TOD D. WOLTERS, Lt Gen, USAF
DCS, Operations, Plans and Requirements

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFPD 10-9, *Lead Command Designation and Responsibilities for Weapon Systems*, 08 Mar 2007

AFPD 15-1, *Air Force Weather Operations*, 19 Feb 2010

AFI 10-201, *Status of Resources and Training System*, 19 Apr 2013

AFI 10-601, *Operational Capability Requirements Development*, 06 Nov 2013

AFI 15-157(IP), *Weather Support for the U.S. Army*, 06 Feb 2010

AFI 33-360, *Publications and Forms Management*, 25 Sep 2013

AFI 63-101/20-101, *Integrated Life Cycle Management*, 07 Mar 2013

AFMAN 15-129, Volume 2, *Air and Space Weather Operations – Exploitation*, 07 Dec 2011

AFMAN 33-363, *Management of Records*, 01 Mar 2008

AFH 23-123, Volume 3, *Air Force Equipment Management*, 08 Aug 2013

AR 71-32, *Force Development and Documentation—Consolidated Policies*, 01 Jul 2013

AR 210-20, *Real Property Master Planning For Army Installations*, 16 May 2005

AR 420-1, *Army Facilities Management*, 12 Feb 2008

USSOCOM Directive 71-4, *Special Operations Forces Capabilities Integration and Development System (SOF CIDS)*, 10 May 2012

Prescribed Forms

None

Adopted Forms

AF Form 847, *Recommendation for Change of Publication*

Abbreviations and Acronyms

ACAT—Acquisition Category

ACC—Air Combat Command

AF—Air Force

AFMAN—Air Force Manual

AFMC—Air Force Material Command

AFI—Air Force Instruction

AFPD—Air Force Policy Directive

AFRIMS—AF Records Information Management System

AFSPC—Air Force Space Command

AFWA—Air Force Weather Agency

AFWWS—Air Force Weather Weapon System

ANG—Air National Guard

CAF—Combat Air Forces

CDD—Capability Development Document

DCS—Deputy Chief of Staff

DoD—Department of Defense

DOTmLPF-P – Doctrine, Operations, Training, Materiel, Leadership and Education, Personnel, Facilities, and Policy

FoS—Family of Systems

HQ DA—Headquarters, United States Army

HQ USAF—Headquarters, United States Air Force

ICD—Initial Capabilities Document

IP—Interservice Publication

IS—Information System

IT—Information Technology

JCIDS—Joint Capabilities Integration and Development System

MAJCOM—Major Command

MTOE—Modified Tables of Organization and Equipment

OPR—Office of Primary Responsibility

OUSD(AT&L)— Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics

RDS—Records Disposition Schedule

SBEM—Space-Based Environmental Monitoring

SOF—Special Operations Forces

SWO—Staff Weather Officer

TOE—Tables of Organization and Equipment

WFCA SG—Weather Functional Capabilities Area Steering Group