Army Regulation 115–10 AFI 15–157 (IP)

Climatic, Hydrological, and Topographic Services

Weather Support for the U.S. Army

Headquarters
Department of the Army
and the Air Force
Washington, DC
2 September 2021

# SUMMARY of CHANGE

AR 115–10/AFI 15–157 (IP) Weather Support for the U.S. Army

This major revision, dated 2 September 2021—

- o Modifies Army's responsibilities (chap 2).
- o Separates Army Chief Information and Deputy Chief of Staff, G-6 responsibilities (paras 2-1b and 2-1f).
- o Adds Deputy Chief of Staff, G–8 responsibilities (para 2–1*f*).
- o Adds U.S. Army Futures Command responsibilities (para 2–1*h*).
- o Clarifies Army Operations responsibilities (para 2–2).
- o Clarifies Army Communications responsibilities (para 2–3).
- o Clarifies Air Force responsibilities (chap 3).
- o Adds Air Force/A5 responsibilities (para 3–1*b*).
- o Adds Commander, Component Major Command responsibilities (para 3–1c).
- o Adds Commander, Air Combat Command responsibilities (para 3–1*d*).
- o Adds Air Force Materiel Command responsibilities (para 3–1*e*).
- o Modifies Air Force operations responsibilities (para 3–2).
- o Modifies Air Force training responsibilities (para 3–4).
- Updates appendixes A and B.
- o Updates glossary.

Headquarters
Department of the Army
and the Air Force
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2 September 2021

## \*Army Regulation 115–10 AFI 15–157 (IP)

Effective 2 October 2021

## Climatic, Hydrological, and Topographic Services

## Weather Support for the U.S. Army

By Order of the Secretary of the Army and Air Force:

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**History.** This publication is a major revision. The portions affected by this major revision are listed in the summary of change.

**Summary.** This regulation sets forth policies and establishes U.S. Army and U.S. Air Force responsibilities for weather support for the U.S. Army.

Applicability. This regulation applies to the Regular Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve unless otherwise stated. This regulation also applies to the Regular Air Force, the Air National Guard, and U.S. Air Force Reserve. This regulation does not address Special Operations Forces-peculiar weather-related requirements and relationships.

## Proponent and exception authority.

The proponent of this regulation is the Deputy Chief of Staff, G-2, and the Air Force Deputy Chief of Staff for Operations, Plans, and Requirements (Headquarters, Department of the Air Force (A3)). The proponent has the authority to approve exceptions or waivers to this regulation that are consistent with controlling

law and regulations. The proponent may delegate this approval authority, in writing, to a division chief within the proponent agency or its direct reporting unit or field operating agency, in the grade of colonel or the civilian equivalent. Activities may request a waiver to this regulation by providing justification that includes a full analysis of the expected benefits and must include a formal review by the activity's senior legal officer. All waiver requests will be endorsed by the commander or senior leader of the requesting activity and forwarded through their higher headquarters to the policy proponent. Refer to AR 25-30 for specific guidance.

**Army internal control process.** This regulation is not subject to the requirements of AR 11–2. It does not contain internal control provisions.

**Supplementation.** Supplementation of this regulation and establishment of command and local forms are prohibited without prior approval from the Deputy Chief of Staff, G–2 (DAMI–OIS), 1000 Army Pentagon, Washington, DC 20310–1040 and Headquarters, Department of the Air Force Director of Weather

(AF/A3W), 1490 Air Force Pentagon, Washington, DC 20330–1490.

Suggested improvements. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Headquar-Department of the Army (DAMI-OIS), 1000 Army Pentagon, Washington, DC 20310-1040. Air Force users are invited to send comments on AF Form 847 (Recommendation for Change of Publication) to Headquarters, Department of the Air Force Director of Weather (AF/A3WP), 1490 Air Force Pentagon, Washington, DC 20330-1490 or email usarmy.pentagon.hqda-dcs-g-2.mbx.g-2publications-suggestedimp1@mail.mil.

**Distribution.** This regulation is available in electronic media only and is intended for command levels for the Regular Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve. Air Force: Compliance with this publication is mandatory.

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## Glossary

## Chapter 1 Introduction

## 1-1. Purpose

This regulation establishes policy and states Air Force (AF) and Army responsibilities regarding the provision of weather support for the Army. The term "weather support" encompasses the capabilities of climate services, hydrological analysis/prediction, space/terrestrial environmental analysis, and prediction. This regulation is consistent with the intent of the National Defense Strategy, National Military Strategy, other Department of Defense (DoD) strategy documents, and policies. This publication does not address Special Operations Forces-peculiar weather-related requirements or relationships.

## 1-2. References and forms

See appendix A.

## 1-3. Explanation of abbreviations and terms

See glossary.

## 1-4. Responsibilities

- a. Coordination. All Army and AF elements responsible for establishing Army or AF meteorological and space weather requirements will ensure that capabilities and Joint Capability Integration and Development Systems (JCIDS) requirements documents are coordinated across all military departments in accordance with DoD, Joint, and Service regulations to promote interoperability and avoid duplication of weather capabilities and support (see paras 2–1 and 3–1). The AF and Army weather functional leads will coordinate extensively during the development phase of requirement documents to ensure the interoperability of weather capabilities solutions per Chairman Joint Chiefs of Staff instructions. The AF and the Army will routinely cooperate to resolve all weather issues across the spectrum of doctrine, organization, training, materiel, leadership and education, personnel and facilities—policy (DOTMLPF—P) in coordination with the other Services, Joint Staff, and combatant commands (COCOMs).
- b. Specific. Army and AF responsibilities are listed in chapters 2 and 3, respectively. Army-specific responsibilities are documented in AR 5–25 and AF-specific responsibilities in AFI 15–128.
  - c. Collaboration.
- (1) The AF and the Army will routinely collaborate in the development of weather strategy, policy, and plans with the other Services, Joint Staff, and COCOMs. The Army and AF will routinely collaborate with the other Services, Federal agencies, coalition, private industry, and academic partners to develop the best weather capability in support of all-domain operations and the joint force. This includes the use of agile methodologies, development, and contract vehicles (for example, Other Transactional Authorities, Middle Tier Acquisition Authorities, Section 804, and so forth).
- (2) The Army and AF will collaborate with the other Services, Federal agencies, private industry, and academia across a broad spectrum of disciplines and capabilities (including but not limited to geospatial, terrain, space, operations, military capabilities, weapon systems, sensors, tactics, techniques, and procedures, and so forth). This collaboration intends to provide the best weather capability for the joint force based on DoD strategic direction and guidance.

## 1-5. Records management (recordkeeping) requirements

The records management requirement for all Army record numbers, associated forms, and reports required by this regulation are addressed in the Records Retention Schedule–Army (RRS–A). Detailed information for all related record numbers, forms, and reports are located in ARIMS/RRS–A at https://www.arims.army.mil. If any record numbers, forms, and reports are not current, addressed, and/or published correctly in ARIMS/RRS–A, see DA Pam 25–403 for guidance. AF: Ensure all records created as a result of processes prescribed in this publication are maintained in accordance with AFI 33–322 and disposed of in accordance with the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System.

## 1-6. General

a. Strategic direction. The AF and the Army will leverage the 21st century National Security Innovation Base to effectively support DoD operations and national security. The AF and Army will strive to deliver performance with affordability and speed.

- b. Requirements. The Army will formally request weather support for large-scale exercises, training center rotations, and deployments using institutional and corporate tasking processes (in other words, Joint Operational Planning and Execution System (JOPES)). The Army will provide the AF with training, equipment, facilities, communications, and other services in accordance with this regulation and AR 5–25 to enable the AF to integrate weather capabilities into Army operations.
- c. Emerging requirements. For dynamically-generated, directed requirements, such as Immediate Response Force Capabilities, in support of contingency operations, the AF will provide weather support to the maximum extent possible. When these requirements are Army-validated and Army-approved, the AF will determine a support solution and program for the resources as appropriate (see paras 1–6d and 3–1).
- d. Resources. The Army budgets, plans, and programs for resources to meet the Army's responsibilities, as described in chapter 2. The AF budgets, plans, and programs to meet the AF's responsibilities, as described in chapter 3
  - e. Personnel and command relationships.
- (1) AF personnel conducting weather operations and providing weather support to Army organizations will not be assigned duties (for example, guard duty, driver, charge of quarters, mess hall duty, and so forth) inconsistent with their primary mission. Army echelons are responsible for providing staff officer training (Action Officer Integration Course) to AF personnel.
- (2) The AF retains administrative control (command and Uniform Code of Military Justice authority, and personnel actions), operational, and tactical control of AF personnel and equipment unless otherwise directed by the appropriate authority consistent with Joint publications.
- (3) The AF senior weather representative at each Army echelon is traditionally referred to as the staff weather officer (SWO). The SWO is designated a special staff officer and will coordinate activities under the staff supervision of the G–2, S–2, or coordinating staff officer.
- f. Accident and incident boards. When weather or weather support is expected to be a contributing factor to an Army accident or incident, the AF will provide, upon request, a qualified weather officer subject matter expert (SME) to the Army Safety Investigation Board.

## Chapter 2 Army Responsibilities

## 2-1. General

General responsibilities of Headquarters, Department of the Army (HQDA) principal officials and commanders of Army commands (ACOMs), Army service component commands (ASCCs), and direct reporting units (DRUs) are listed in this regulation.

- a. The Assistant Secretary of the Army (Acquisition, Logistics, and Technology) (ASA (ALT)) maintains acquisition oversight and execution responsibilities of approved weather requirements.
  - b. The Army Chief Information Officer (CIO) will—
- (1) Lead Army-AF development of technical and data standards as defined in the current annual Standard View One (StdV-1) for the Common Operating Environment to effectively integrate weather operations into the Army communications architecture.
- (2) Account for AF weather capabilities and requirements in support of the Army when developing installation and deployed communication capacity and information technology (IT) infrastructure (see para 2–3). This includes Army communications network email accounts for the SWOs.
- c. The Chief, National Guard Bureau (CNGB), directly or by delegation to the Director, Army National Guard (ARNG) will—
- (1) Coordinate with Deputy Chief of Staff (DCS), G-3/5/7, and DCS, G-2 to ensure AF weather personnel are provided with facilities that meet mission essential functionality and Army standards and in accordance with NGB Pam 210-20.
- (2) Provide oversight for the fielding of fixed meteorological equipment at ARNG-managed airfields and heliports. Ensure procedures are in place to staff all weather equipment related documentation in coordination with DCS, G–3/5/7, and DCS, G–2.
  - (3) Utilize aligned, mobilized Air National Guard weather flights for deployed overseas support.
- (4) Establish requirements for weather support for continental United States-based ARNG units and provide an updated list of ARNG locations requiring weather support to the DCS, G–2.
  - (5) Coordinate installation weather support requirements in accordance with AFMAN 15–129.

- (6) Notify the supporting regional Operational Weather Squadron (OWS) of all aircraft mishaps and communication outages when there are no AF weather personnel on-site.
  - (7) Ensure that ARNG commanders comply with the provisions of this regulation.
  - d. The DCS, G-2 will—
- (1) Provide AF with a formal Statement of Weather Support Requirements to be reviewed annually and updated every 3 years.
- (2) Coordinate AF weather policy issues with the AF DCS for Operations, Plans, and Requirements (Headquarters, Department of the Air Force (HQ AF)/Deputy Chief of Staff for Operations, Plans, and Requirements (A3)).
  - (3) Coordinate with the AF on Army-AF and Joint Service weather functions, operational concepts, and doctrine.
- (4) Coordinate with DCS, G-3/5/7 on Army weather program and resource issues, ARNG and Army Reserve weather issues, and Army weather support requirements.
- (5) Coordinate with DCS, G-3/5/7 regarding AF weather support gaps identified by U.S. Army Training and Doctrine Command (TRADOC).
- (6) Coordinate all weather capabilities with U.S. Army Futures Command (AFC) to ensure interoperability with AF weather capabilities per CJCSI 3810.01F.
- (7) Provide weather subject matter expertise in support of DCS, G-3/5/7 advocacy of Army-provided facilities and equipment to the AF.
- (8) Assist the U.S. Army Combat Readiness Center with arranging for meteorological expertise on accident/incident boards.
- (9) Coordinate with DCS, G-3/5/7 and the Commanding General (CG), U.S. Army Materiel Command (AMC) to ensure weather personnel are provided facilities, equipment, and funding in support of garrison activities and that meet mission essential functionality per Army standards.
  - (10) Serve as the weather facilities proponent.
- (11) Serve as the Army lead for coordinating climate information in support of Army activities to assess and mitigate the effects of climate change.
  - e. The DCS, G-3/5/7 will—
  - (1) Notify and coordinate any Force Design Updates (FDUs) for weather with DCS, G-2 and HQ AF/A3.
- (2) Submit Army, ARNG, and Army Reserve weather support needs in coordination with the DCS, G-2 to the HQ AF/A3.
- (3) Coordinate with the DCS, G-2 on Army weather program and resource issues, ARNG and Army Reserve weather issues, and Army weather support requirements.
  - (4) Advocate for Army facilities and equipment required by the AF to provide weather support for the Army. *f.* The DCS, G–6 will—
  - (1) Guide and facilitate AF efforts to meet Army communications security (COMSEC) requirements.
- (2) Apply cybersecurity reciprocity to the maximum extent possible and assist AF Materiel Command with approvals to connect AF weather software and systems to Army networks in accordance with DoDI 8510.01 and AR 25–2.
- (3) Maximize use of the existing security authorization documentation from the AF to expedite Army authorities/approvals to connect AF weather software and systems to Army networks. The Army will use the DoD repository, the Enterprise Mission Assurance Support Service (eMASS) or its successor, to access security authorization packages, risk assessment data, artifacts, and documentation for AF Weather Systems to reduce redundant testing, assessment, and documentation, and the associated costs in time and resources; and to support making credible, risk-based decisions regarding the acceptance, use, and connection of AF weather systems to Army networks.
- (4) Assist the AF with processing and approving information assurance and accreditation, such as, but not limited to, certificates of net worthiness, interim authorization to test, interim authority to connect, interim approval to operate, and approval to operate fixed base and deployed weather equipment and systems on Army networks (to include firewall exemptions) in accordance with AR 25–1, AR 25–2, and DoD Information Assurance and Reciprocity Policy.
- (5) Account for AF weather capabilities and requirements in support of the Army when developing installation and deployed communication capacity and IT infrastructure (see para 2–3).
- (6) Provide AF Materiel Command with full disclosure of the authority-to-connect process for AF weather software and systems on Army networks.
- (7) Coordinate cybersecurity requirements with AF Materiel Command early and throughout the development of AF weather software/systems to be connected to Army networks.
  - g. The DCS, G-8 will—

- (1) As the principal advisor to the Chief of Staff, Army (CSA) on all materiel requirements, manage Army implementation of JCIDS for weather capability in coordination with the ASA (ALT); CG, TRADOC; CG, AFC; and Force Modernization Proponents identified in AR 5–22.
- (2) Coordinate force modernization activities, develop modernization plans and monitor the impact of force modernization planning and execution for the total Army, with the assistance of the ASA (ALT).
- (3) Coordinate with the ASA (ALT) on all proposed programming and process recommendations related to weather capabilities.
- (4) Coordinate the operational needs statement (ONS) and other quick reaction capabilities (QRC) DOTMLPF–P implications reviews for weather capability with TRADOC.
- (5) Assess, determine, and synchronize material solutions with key stakeholders for all validated weather capability ONSs.
  - (6) Coordinate ONS and other QRC DOTMLPF-P implications reviews for weather capability with TRADOC.
  - (7) Advise the CSA on recommended weather material capability solutions reviewed for future Army use.
- h. DCS, G-9 will coordinate with DCS, G-3/5/7; DCS, G-2; and CG, AMC to provide planning, and implementation guidance for facilities to meet mission essential functionality and installation operations and support services for AF weather personnel on Army installations on a nonreimbursable basis in accordance with AR 5-9. The DCS, G-9 will also plan and assist Management Decision Execution Package managers in budgeting for support services in the Program Objective Memorandum (POM) cycle for AF weather personnel on Army installations.
  - i. The CG, AFC will—
- (1) Coordinate with Air Combat Command to ensure the development of feasible weather capability requirements for the Army beginning with Solution Pathway Review (SPR) and throughout the AF requirements process.
- (2) Ensure AF weather capabilities are included in the continuous transformation of Army modernization in coordination with DCS, G–2; DCS, G–3; DCS, G–8; HQ AF/A3; and HQ AF/A5. AFC will budget resources (for example, temporary duty (TDY) funding) to ensure the SWO can directly interface with cross functional teams.
- (3) Integrate weather considerations and future weather capability needs in concepts and capabilities provided to future warfighters.
- (4) Integrate weather capabilities within the Future Force Modernization Enterprise in coordination with DCS, G-2; DCS, G-3; DCS, G-8; HQ AF/A3; and HQ AF/A5.
- (5) Provide oversight across the Army for the integration of weather capabilities for the future force in coordination with DCS, G–2; DCS, G–3; DCS, G–8; HQ AF/A3; and HQ AF/A5.
- (6) Integrate weather in the conceptualization, development, and transition of operationally relevant solutions and knowledge through research, engineering, testing, and analysis in coordination with DCS, G–2; DCS, G–3; DCS, G–8; HQ AF/A3; and HQ AF/A5.
- (7) Include weather considerations in the development of future concepts and the Army modernization strategy in coordination with DCS, G-2; HQ AF/A3; and HQ AF/A5.
- (8) Integrate weather in JCIDS and other requirements documents in coordination with DCS, G-2; DCS, G-3; DCS, G-8; HQ AF/A3; and HQ AF/A5.
- (9) Coordinate with DCS, G-2; DCS, G-3; DCS, G-8; HQ AF/A3; and HQ AF/A5 throughout the development of future organizational designs.
- (10) Integrate weather in modeling and simulation for requirement refinement in coordination with DCS, G–2; DCS, G–3; DCS, G–8; HQ AF/A3; and HQ AF/A5. Through the Combat Capabilities Development Command, coordinate weather research and development (R&D) programs with comparable AF program offices to ensure Army meteorological capabilities are compatible with AF R&D programs.
- *j.* The commanders of ACOMs, ASCCs, and DRUs, and responsible Regular and Reserve Component (RC) commanders at all levels will—
- (1) Program and provide support for weather operations, communications, training, administration, budget, and logistics to supporting AF weather personnel as outlined in this regulation and in AR 5–25. This support includes but is not limited to AF weather units habitually aligned with Army units and/or providing airfield weather services.
- (2) Ensure standard Army equipment is issued to the AF, including that listed in the modified table of organization and equipment (MTOE), table of distribution and allowances (TDA), and common table of allowances (CTA).
  - (3) Assist the AF with meeting Army COMSEC requirements.
  - k. The CG, U.S. Army Forces Command (FORSCOM) will—
- (1) Formally notify the Commander, Air Combat Command (COMACC) of all combat training center (CTC) rotations.
  - (2) Formally task Army units to bring their habitually aligned AF weather unit for each CTC rotation/event.

- (3) Formally request COMACC provide AF personnel habitually aligned with specific Army units to attend CTC rotations.
- (4) Communicate contingency weather support requirements through DCS, G-3/5/7 to Joint Staff to support real-world deployments of operational forces.
- (5) Provide MTOE items for Army Contingency Force mission sets (for example, regionally aligned forces, immediate response force, and so forth) to DCS, G-3/5/7 for validation.
- (6) Provide to COMACC annually a prioritization of Army units/echelons (for example, Corps, Division, Brigade Combat Team (BCT), Combat Aviation Brigade (CAB), Security Force Assistance Brigade (SFAB), and so forth) requiring direct weather support from the AF.
- (7) Notify COMACC of Army force structure changes (in other words, decreases or increases in the number of Army units, new units, and so forth) per the Army's POM force cycle, for Air Combat Command to plan, program, and budget for additional resources as required to synchronize the standup of additional weather capability upon the activation of Army units.
- (8) Participate in the Army Air Force Integration Forum (AAFIF) in coordination with TRADOC to resolve Army weather support issues.
  - l. The CG, TRADOC will—
- (1) Document standard Army equipment for use by AF weather personnel in the appropriate force design (see AR 71–32).
- (2) Provide FDUs and Basis of Issue Plans for all operational weather units in coordination with the applicable Center of Excellence (CoE) and DCS, G–2 to the DCS, G–3/5/7 for approval (see AR 71–32).
- (3) Develop and provide operational architectures for transmission of meteorological data and information on Army systems.
- (4) Develop solutions for deficiencies within the Army's area of responsibility specified in this chapter, in coordination with AF SWOs and SMEs at TRADOC units.
- (5) Coordinate with Warfighting Function CoEs; DCS, G–2; HQDA agencies; the AF; and other principal stakeholders, including academia and industry, as applicable, to develop, validate, and forward Army weather sensing requirements to the Army Requirements Oversight Council Process Review Board/Army Requirements Oversight Council, as required by the JCIDS process.
  - (6) Participate in the AAFIF to resolve Army weather support issues in coordination with FORSCOM.
  - m. The CG, AMC will—
- (1) Direct CG, Installation Management Command (IMCOM) to coordinate with DCS, G-3/5/7 and DCS, G-2 to ensure AF weather personnel are provided with facilities that meet mission essential functionality and Army standards.
  - (2) Provide logistics and sustainment of Army-owned weather capabilities.
- (3) Ensure weather personnel are provided facilities that meet mission essential functionality in accordance with Army standards.
- n. The Director of Army Safety (U.S. Army Combat Readiness Center) will, when meteorological expertise cannot be accessed locally (for example, AF weather unit or SWO), coordinate with DCS, G–2 (DAMI–OIS) for meteorological expertise support to accident or incident boards when weather or weather support or service is suspected to be a contributing factor.

## 2-2. Operations

- a. Weather support. The Army will employ AF-provided weather support for Army training, planning, and operations. The Army will integrate habitually aligned AF weather units into training, planning, and operations of each supported unit. When the AF cannot meet its weather support responsibilities, the responsible AF component or major command (MAJCOM) will formally notify their respective ASCC.
- b. Weather sensing in the deployed environment. The Army will provide weather sensing capability as required (for example, remote weather sensors) in forward areas, outside the base/installation, along potential routes of flight, and at locations where AF weather personnel are not assigned to provide weather observations. The Army will confer with AF weather SMEs to determine best locations to emplace Army-owned/procured weather sensing equipment, and the Army will share environmental data outputs with AF weather organizations and personnel. The Army will procure weather sensing capability based on AF SWO recommendations whenever possible and will provide operational weather sensing equipment requirements to the AF.
- c. Deployed and installation support plans development. The Army includes required AF weather operations needed for Army mobilization, contingency, and operations in appropriate planning documents.

- (1) During contingency, operations, mobilization, and deployment planning, the Army will request weather support via formal tasking processes (for example, JOPES/Adaptive Planning and Execution (APEX)) for multi-domain operations. Army formal support requests are also required to mobilize habitually aligned SWOs.
- (2) The Army will provide assigned MTOE for the supporting AF weather unit and include this MTOE in the Time-Phased Force Deployment Database (TPFDD). If a specific Army unit does not include their assigned AF weather capability unit type code (UTC) in their deployment order, AF is not responsible for providing weather support.
- d. Installation support. The Army identifies, documents, prioritizes, validates, and approves Army airfield, heliport, helipad, all ranges, training complexes, and installation weather requirements.
- (1) At locations with validated weather sensing requirements, the Army will provide weather sensing equipment at installations, not meeting the criteria listed in paragraph 3–2e.
- (2) Weather observations obtained from this weather sensing equipment will be made available to AF organizations. The Army will participate in the AF's weather sensing programs of record and procure systems employing existing or planned AF contracts for weather sensing capabilities.
- (3) All sensing equipment and programs at installations will comply with AR 95–2 requirements, and the Army will establish procedures to ensure minimum amount of downtime during sensor malfunctions and maintenance operations.
  - e. Artillery. The Army will use AF weather authoritative model data in support of all field artillery capabilities.
- f. Range support. The Army provides weather sensing capabilities at all Army ranges and training complexes and will provide these observations to the AF whenever possible.
- g. Research, development, test, and evaluation. The Army will provide the AF with microscale models to be evaluated for operational use. The Army will coordinate with the AF to ensure prototype fine-scale and microscale models are compatible with the AF's operational numerical weather model capability.
- h. Weather decision and exploitation tools. The Army will determine critical and operationally significant threshold values for weather effects for all Army warfighting function capabilities. AFC and TRADOC will provide this information for current and emerging capabilities to the AF through DCS, G-2.
- i. Vehicle licensing and dispatch. Army commanders will delegate vehicle dispatch and employment authority to the supporting AF weather commander per AR 600–55. The Army recognizes validated AF-issued operator licenses that meet reciprocity requirements for dispatch and operation of Army vehicles (also see para 3–4c). The Army will provide resources and personnel to conduct vehicle maintenance above the operator level and in accordance with the Army baseline for equivalent AF echelons (for example, AF squadron and Army battalion, AF detachment, and Army company, and so forth).
- *j. Staff supervision.* The SWO is a member of the supported commander's special staff (for example, BCT, CAB, Division, Corps, Aviation battalion, and so forth). The Army will provide staff guidance to assist the SWO in executing their duties. The supported Army commander or their designee will provide written performance input and feedback to the commander of the supporting SWO upon request.
- k. Chemical, biological, radiological, nuclear, high-yield explosive. The Army develops and provides chemical, biological, radiological, nuclear, and high-yield explosives (CBRNE) models and decision aids and makes derived weather information from the models and decision aids available to the AF whenever possible.
- *l. Geoscience Environmental Intelligence.* The Army will cooperate with the AF in its development of geoscience-based capability (for example, hydrological forecasts, trafficability assessments, and decision aids in support of Army operations).
- m. Weather systems hardware and software applications. The Army integrates AF-provided weather support competencies into all-domain intelligence capabilities and programs of record and will work with appropriate AF organizations to ensure weather systems capabilities interface with, interoperate with, and are compatible with Army-provided hardware.

## 2-3. Communications

- a. The Army manages and operates campus area networks for Army and AF personnel on Army posts, camps, and stations and provides required IT support at both common-user (baseline) and mission unique (above-baseline) basis, to include personnel meeting certification requirements under DoD 8570.01–M, to assist in the sustainment of AF weather systems on Army networks. These categories of service provisioning are broken down in the Army's Command, Control, Communications, Computers, and Information Management Services List available for review at the following site: https://www.itmetrics.hua.army.mil/ (select your email certificate when prompted).
- b. The Army programs for, provides, installs, tests and evaluates, operates, and maintains secure and nonsecure communications to move data (including weather data)—

- (1) Within the Army operational network (for example, around the tactical operations area), from the theater downlink site to the theater uplink site, and from the Joint forces theater entry point. Respective Army Network Enterprise Centers (NECs) provide baseline IT support on both secure and nonsecure communications networks to the AF weather organizations that provide support to the Army without reimbursement from the AF in accordance with AR 5–25.
- (2) Within the Army institutional network to include all Army installations, ranges, training complexes, and airfields. Army NECs provide above-baseline requirements to tenants based on service level agreements contracted between the tenant and the respective NEC.
- (3) To ensure weather information and data from weather systems provided by AF organizations are readily available to Army commanders in support of operations and intelligence processes.

## 2-4. Training

- a. Army personnel. The Army trains Army personnel on the following:
- (1) Weather effects on Army operations and warfighting functions, weather information exploitation, and integration of weather information into decision-making processes, mission planning, execution, and sustainment.
- (2) Requesting or obtaining weather support from AF or Army sources. For AF sources, the Army will seek advice and collaborate with the AF on the proper process to request and obtain weather support for inclusion into Army training content.
  - (3) Army-procured weather sensing systems.
- (4) The roles, responsibilities, and operational concepts of AF weather operations through the use of AF-developed or provided lesson plans and materials.
  - b. Army funds. The Army funds or provides training for AF personnel on:
- (1) Army doctrine, organization, planning and operations concepts, requirements, and processes. The Army does not fund travel and per diem for formal AF Air Education and Training Command courses.
  - (2) Operations and user-level preventive maintenance checks of MTOE, TDA, and CTA equipment.
- (3) Weather effects on Army operations and warfighting functions, weather information exploitation, mission planning, and execution processes, and integration into commanders' situational understanding, risk management, and decision making.
- (4) Common Soldier and deployed field skills that are not provided by standard AF formal training programs or that supplement basic skills obtained in AF training courses.
- (5) Specialized tactical skills, as required, to support Army operations and training (for example, air assault; airborne; arctic survival; jumpmaster; survival, evasion, resistance, and escape).
  - (6) Safety and security issues necessary to operate in the Army operational environment.
  - (7) Army staff training and participation in planning and other staff activities.
- c. Army standards. For proficiency, qualification, and certification training, the Army provides instructors, support personnel, range access, range operations, and all materials for AF personnel.
  - d. Army coordination. The Army coordinates with HQ AF/A3 to determine the level and types of training required.

## 2-5. Administration, budget, and logistics responsibilities

The Army programs for and provides (on a nonreimbursable basis from the AF in accordance with AR 5-9):

- a. Capabilities, personnel, training, and equipment identified as an Army responsibility in this regulation.
- b. Assistance to AF weather organizations in Army programming and budget submissions. The Army provides funding in the supported Army units' budgets for execution by the AF SWO to support the installation, garrison, and deployed weather operations and training.
- c. Budget, supply, clerical, and administrative services as well as logistical and intelligence expertise and support commensurate with, and comparable to, the supported Army unit.
- d. Office space and furniture, office equipment, vehicle and equipment storage facilities, and real property to house AF personnel conducting administration, weather operations, maintenance, and training. The Army provides operation and maintenance of real property and other Army-owned facilities and equipment provided for use by AF personnel.
- e. Special Security Office (SSO) support, required sensitive compartmented information (SCI) access for eligible AF personnel, and SCI access management (as defined in DoDM 5105.21, Volume 3). The Army also provides dedicated storage of classified materials and other intelligence support (for example, threat briefings).
- f. A COMSEC account manager, COMSEC equipment and material, and dedicated storage for COMSEC equipment and material.

- g. An armorer and arms room, when both required by Army policy and within the capabilities of the Army armorer, to store weapons and ammunition dedicated to AF weather personnel. Army weapons and ammunition issued to AF personnel will meet Army standards.
  - h. Standard Army ammunition for proficiency training and operations.
- *i.* Preventive, organizational, and unit-level, scheduled, and depot maintenance, fuels, lubricants, and parts for Army-provided vehicles, generators, radios, and trailers. These services will also be provided to Air Force Reserve Command (AFRC) and Air National Guard weather units not collocated with their supported Army unit. The AFRC unit coordinates with the nearest Army maintenance support activity for their preventive, organization, scheduled, and depot maintenance on their assigned Army equipment.
- *j.* All maintenance, operations, and sustainment of Army-provided equipment, including that listed in the MTOE, TDA, and CTA, and other equipment required to operate in the Army-deployed environment.
- k. Nontactical vehicles on a dispatch basis to conduct administrative tasks, installation support, and operational support functions comparable to the supported Army unit or headquarters. The Army will delegate vehicle dispatch and employment authority to the supporting AF SWO comparable to that provided to the supported Army commander's staff and provide resources and personnel to conduct vehicle maintenance in accordance with the Army baseline for equivalent AF echelons (for example, AF squadron and Army battalion, AF detachment and Army company, and so forth).
- *l.* Installation services (comparable to those provided to Army organizations, personnel, and families) to AF organizations, personnel, and families to include, but not limited to, those shown in appendix B.
  - m. Installation and deployed IT equipment, connectivity, and services.
- *n.* Nonstandard services and equipment required by the Army but not available from the AF comparable with that furnished to the Army unit.
  - o. The CBRNE equipment required or issued by the Army.
- p. Individual equipment required or issued by the Army through the Central Issue Facility, Rapid Fielding Issue, and other equipping programs.
- q. Building construction maintenance and utilities including, but not limited to, heating and air conditioning, electricity, gas, water, sewage, garbage collection, housekeeping supplies, and fee-for-service utilities (for example, fixed and mobile telephone, pagers, cable).
- r. Allied support for, but not limited to: structures, foundations, environmental control (for example, asbestos abatement/removal), communication cables (for example, copper, fiber, power, and so forth) to prepare sites for installation, and fielding of AF-provided weather equipment. Technical details will be coordinated with installation agencies responsible for allied support during the site survey. The Project Support Agreement will outline all allied support technical details.
  - s. Training quotas for AF personnel requiring specialized skills training in accordance with paragraph 2–4b.
- t. Functional area SMEs to assist AF development of instructional materials for use in AF courses and continuation training programs.
- u. Travel and per diem of AF personnel, conducting weather operations and providing Army weather support for training and noncontingency operations per the Joint Travel Regulation and applicable AF instructions. The Army funds for non-collocated (supplemental) AF personnel only after arrival at the supported Army unit's location (see para 3-5b).
- v. Travel and per diem for AF-provided weather SMEs supporting Army safety investigation boards, airfield inspection, and certification, and when required to certify Army-procured weather sensing systems.
- w. Shipment of weather equipment assigned to collocated AF units for Army training and noncontingency operations. The Army funds shipment of non-collocated (supplemental) equipment only after arrival at the supported unit's location.
- x. Airfield maintenance technician support (considering primary duty priorities), for on-site maintenance requirements for select AF-provided weather sensing equipment where the AF cannot fulfill their responsibility according to paragraph 3–5e.
  - y. See AR 5–25 and AR 5–9 for additional guidance on Army funding responsibilities.

## Chapter 3 Air Force Responsibilities

#### 3-1. General

a. General responsibilities of HQ AF and AF MAJCOMs are listed in this regulation. HQ AF, through A3, will—

- (1) Receive from the DCS, G-2, the Army's formal Statement of Weather Support Requirements, to be reviewed and revalidated every 3 years.
- (2) Plan, program, and budget resources to enable habitual alignment with supported units, develop plans and concepts, and establish policy to address Army weather support needs that are the responsibility of the AF.
  - (3) Coordinate with DCS, G-2 on weather policy and Army weather support issues.
- (4) Coordinate with DCS, G-3/5/7; DCS, G-2; CG, AMC; and the CNGB through the Air National Guard on Army installation and aviation/airfield support policy, requirements, resources, programs, and priorities.
  - (5) Coordinate with the Headquarters Air Force, CIO, and DCS, G-6 on communications and IT issues.
- (6) Coordinate with U.S. Space Force on capabilities and space architectures to meet Army Space-Based Environmental Monitoring requirements.
  - b. HQ AF, through AF/A5, will—
  - (1) Ensure Army weather requirements receive applicable AF functional review in accordance with AFI 10-601.
  - (2) Coordinate weather requirements with the Army during the AF Gatekeeper and Requirement Strategy Reviews.
- (3) Collaborate with AF/A8, MAJCOMs, other Services (Army), and the defense Science and Technology community to support future AF weather capabilities development through concept development and experimentation.
  - c. Commander, Component MAJCOMs will—
- (1) In coordination with the ASCC commanders, advise their assigned combatant commander on the weather force requirements in direct support of the Army.
- (2) Communicate sourcing nominations of assigned weather forces supporting Army units in coordination with the ASCC commander to the combatant commander.
- (3) Coordinate with the ASCC commander to ensure weather forces habitually aligned to supported Army units are trained, equipped, ready, and deploy for the same period as the supported unit to the maximum extent possible.
- (4) Plan and manage all weather personnel and equipment habitually aligned with Army units to support contingencies, exercises, and deployments.
- (5) Provide appropriate guidance and procedures to manpower and organization staff members to ensure the deployment requirements, and manning document (DRMD) accurately reflects the UTC requirements for weather personnel sourced and tasked to provide direct support to Army units.
- (6) Develop, register, coordinate, cancel, posture, align, code, assess, and verify UTCs for systematic planning and execution of force packages for weather personnel supporting Army units.
- (7) Ensure UTC availability is current and that tasked UTCs for weather personnel supporting specific Army units (in other words, those in combatant commanders' TPFDDs) have corresponding records in the UTC Availability.
- (8) Provide timely verification of all TPFDD taskings for weather personnel supporting the Army and, through established mechanisms, ensure tasked units are ready and prepared to deploy.
- (9) In coordination with the ASCC commander, ensure TPFDD requirements for weather forces habitually aligned for direct support to Army units accurately reflect the combatant commander's needs.
- (10) In coordination with the ASCC commander, build unit deployment tasking line level detail for weather personnel habitually aligned to specific supported Army units and to include in specific operations plan TPFDDs and associated DRMDs.
- (11) Propose, sponsor, and submit new JCIDS documents and requirements strategies for Army weather requirements to HQ AF/A5 for review, validation, and approval by the Air Force Capability Development Council and Air Force Requirements Oversight Council.
  - d. COMACC will—
- (1) Habitually align weather units to specific Army units for the following echelons: ASCC, Corps, Divisions, BCTs, CABs, and aviation battalions, SFAB, Military Intelligence Brigade (MIB)-Aerial Intelligence and aerial exploitation battalions (AEB), and Joint logistics-over-the-shore (JLOTS) units.
- (2) If resources are available, ensure each habitually aligned active duty weather unit supporting a specific Army unit deploys for the same period as this supported Army unit to the maximum extent possible.
- (3) Sponsor operational weather capability requirements documents in support of Army operational requirements and interests.
- (4) Coordinate with the implementing Service/command (U.S. Space Force, AF Materiel Command, and AF Civil Engineering Center), program office, and the Army beginning with the SPR and throughout the requirements process to ensure the development of feasible weather capability requirements in support of the Army.
- (5) Develop a requirements strategy that includes Army weather support gaps and presents to the AF Capability Development Council.
- (6) In coordination with FORSCOM, ensure AF personnel attend CTC rotations with the specific Army unit they are habitually aligned to support to the maximum extent possible.

- (7) Source AF weather capabilities through the Aerospace Expeditionary Forces Center to meet Army requirements.
  - (8) Serve as the mobilization facilitator for weather forces in support of the Army.
- (9) Identify weather force mobilization requirements, including Regular, Reserve, and National Guard for Army support in coordination with CG, FORSCOM and the CNGB, as required.
- (10) Coordinate scheduling, sourcing, posturing, coding, and capability requirements for weather forces in support of the Army with FORSCOM.
- (11) In coordination with FORSCOM, prepare rotational force schedules for units and airmen habitually aligned to support specific Army units in the Army's Sustainable Readiness Model; recommend sourcing solutions for enduring, and emergent Army supported commander requirements.
- (12) Task the appropriate units (for example, Air Ground Operations Wing, Air Support Operations Group) to identify members to fill mobilization requirements.
- (13) Provide conventional AF weather forces and global service sourcing solutions in support of Army forces and capabilities worldwide.
- (14) Transfer ready, fully mission capable weather forces/units habitually aligned with specific Army supported units to combatant commanders.
- (15) Include Army weather support requirements in the strategic vision for the Service core function and force structure options to inform the requirements process; the planning, programming, budgeting, and execution process; and the acquisition process to ensure consistency with strategic direction.
- (16) Sponsor operational weather capability requirements documents in support of Army operational requirements, missions, and interests.
- (17) Coordinate with AFC beginning with the SPR and throughout the requirements process to ensure the development of feasible weather capability requirements in support of the Army.
  - (18) Include Army gaps in all weather requirement strategies presented to the AF Capability Development Council.
- (19) Include AFC representatives in all weather-related high performance teams for operational capability document development.
- (20) Establish effective dialog with key Army stakeholders (for example, AFC, FORSCOM, TRADOC, ASCCs, Corps, Divisions, BCTs, CABs, and so forth) to fully define the scope of operational weather deficiencies across the Army.
  - e. Commander, AF Materiel Command will—
- (1) Ensure Army weather requirements are addressed in its implementation of the atmospheric weather portion of Air Force weather weapon system (AFWWS) program and the development and coordination of the AFWWS architecture, capabilities, acquisition roadmap(s), and life-cycle management/sustainment.
- (2) Ensure Army weather support needs are addressed/included in operational weather capability requirements document development.
- (3) Ensure Army weather support considerations are included in development planning as necessary to support weather requirements development activities and decisions.
- (4) Ensure capability mission effectiveness is assessed and life-cycle cost analysis includes all interrelated systems needed in the expected operational environment to accomplish the end-to-end mission in terms of weapons, sensors, Command & Control, and platforms, to include integration costs.
- (5) Provide Army Cyber Command with complete access to all Risk Management Framework documentation and security authorization packages electronically or in the Enterprise Mission Assurance Support Service for all weather software and systems to be connected to Army networks.
- (6) Coordinate weather software and system security requirements with DCS, G-6 representatives early and throughout system development.

#### 3-2. Operations

- *a. General.* In accordance with the CJCSI 3810.01F, the AF is responsible for meteorological operations in support of the Army and provides—
- (1) Weather capabilities and support for all supported Army units' training, planning, and operations through the habitually aligned AF weather units, and as needed through other units as determined by the AF. If the Army procures operational contract weather capabilities and support, the AF is not liable for the timeliness, accuracy, reliability, or relevancy of weather data and information provided to the Army by the contractor, nor is the AF responsible for providing materiel, data, or other support to the contractor.

- (2) Tailored mission planning and mission execution weather support for Army-manned aviation and Joint category 3–5 unmanned aircraft systems (UAS) via direct support as defined in the DoD Dictionary of Military and Associated Terms. The AF provides general aviation planning and execution weather data and information for small unmanned aircraft system (SUAS) via general support.
  - (3) Formal coordination with DCS, G-2 on AF-developed weather policies and concepts.
  - (4) Weather personnel in DCS, G-2 to assist with:
  - (a) The coordination of Army weather policy, with TRADOC and AFC.
- (b) Army requirements development and determination, capabilities assessments, doctrine, training, and concepts development.
  - (c) The CNGB to manage the National Guard Bureau weather program and weather support to the ARNG.
  - (5) Weather SMEs to participate in Army airfield inspections and certifications.
- (6) Tailored climatological information and long-range outlooks in direct support of Army planning and operations through the designated AF SWO.
- (7) Environmental intelligence expertise, data, and information tailored to assist Army hydrological forecasting, terrain analysis, and mobility assessments.
- b. Army command and direct reporting unit staff weather integration. AF will provide staff weather integration direct support and assign SWOs to the following ACOMs, DRUs, Major Support Command, and CoEs: TRADOC, Combined Arms Center and select CoEs, FORSCOM, AMC, IMCOM, AFC, and U.S. Army Corps of Engineers. The AF SWOs will perform duties to include but not limited to the following:
  - (1) Serve as a weather liaison between the Army organization and the Air Staff.
  - (2) Apply the weather function to enable the Army organization mission, roles, responsibilities, and functions.
  - (3) Provide weather subject matter expertise to the CGs and their staffs.
  - (4) Advise the CGs and their staffs on relevant weather matters and activities.
  - (5) Integrate weather information into the Army organization staffing processes.
- c. Deployed and/or installation support plans development. The AF will develop a plan, in coordination with the supported Army commander, to integrate weather support into Regular and RC mobilization, deployments, redeployments, contingency operations, response plan development, installations, garrisons, and airfields. The AF will also provide a plan to support the garrison commander, stay-behind forces, installations, garrisons, emergency management, and airfields during Army Regular and RC mobilizations, deployments, redeployments, contingency operations.
  - d. Deployed support. The AF provides—
- (1) The personnel and equipment to support Army-deployed, contingency, and wartime operations as described in Joint Chiefs of Staff-directed operations plans and operations orders.
- (2) Qualified individuals to attend specialized tactical or mission-specific Army-provided training based on the Army mission supported as deemed appropriate by the AF command authority.
  - (3) TPFDD entries for AF personnel and AF-provided equipment UTC (see para 2-2c(2)).
- (4) AF personnel habitually aligned at the following Regular and RC echelon headquarters with direct support to the maximum extent possible: ASCC, Corps, Divisions, BCTs, CABs, Aviation Battalions, SFABs, MIB-Aerial Intelligence, AEB, JLOTS units, and Multi-Domain Task Forces. For units that do not receive direct support (for example, aviation companies), the higher echelon SWO will provide or arrange for general support. The AF may task organize and align personnel at other echelons based on the Army mission supported and as deemed appropriate by the AF command authority. The Air National Guard will posture weather flights in support of the following ARNG unit types: Divisions, BCTs, theater aviation brigade Headquarters and Headquarters Companies, expeditionary CABs, deployable aviation battalions, SFABs, expeditionary MIBs, and expeditionary theater sustainment commands.

*Note.* Air National Guard weather flights are not normally co-located (same state) as their supported ARNG unit headquarters.

- (5) Advice to Army leadership during determination of emplacement locations for Army-owned weather sensing equipment.
  - e. Installation weather support. The AF provides—
- (1) Weather functional activities on validated Army installations such as operational tenant units, the garrison commander and staff, airfield, range operations, emergency management and response (in other words, resource protection support such as weather watches, warnings, and advisories), mobilization and training. Support at each location will be documented/updated in a local weather support regulation according to AFMAN 15–129.
- (2) Weather observing equipment and weather equipment maintenance at controlled Army airfields, heliports, and helipads with approved Federal Aviation Administration Class D airspace, unless deemed operationally necessary by the U.S. Army Aeronautical Services Agency and approved by HQ AF/A3. This includes a presence of a permanent,

on-site AF maintainer or an agreement with another AF unit with assigned Radar, Airfield, and Weather Systems specialist personnel.

- (3) Personnel to augment (supplement and backup) automated weather sensing capabilities at locations where the AF is collocated with this equipment and as defined in paragraph 3–2*d*(2). In cases where no AF weather personnel are assigned, augmentation capability will be provided in accordance with AR 95–2.
  - (4) Reach back weather support for CNGB-identified continental United States ARNG facilities.
- (5) The Army with recommendations on the purchase of standard weather sensing equipment to assist the Army in meeting its applicable responsibilities for deployed, installation, airfield, heliport, helipad, and range weather sensing. The AF will ensure AF contracts for weather sensing equipment include an option for the Army to purchase these systems. The AF will assist the Army with required system certifications until an Army certification program is in place. If the Army uses AF contracts to purchase weather sensors or sensing equipment for the Army, the Army will provide allied support, maintenance, parts, and life-cycle management of those systems within Army Resources, in accordance with AR 5–25.
- f. Numerical weather modeling. The AF leads numerical weather modeling efforts to fulfill Army operational requirements. The AF is the Service with the sole responsibility to verify, validate, approve, and implement prototype microscale models developed by the Army (see para 2–2g) for operational use. The AF will include and integrate land-surface (soil moisture, temperature, snow characterization) and other relevant (for example, atmospheric chemical constituents, aerosols) parameters into numerical weather modeling products.
  - g. Field artillery capabilities. The AF will provide weather model data in support of all field artillery capabilities.
- h. Weather decision aids and exploitation tools. The AF will develop deployed and operational-level decision aids and exploitation tools.
- i. Weather systems hardware and software applications. The AF will provide an AF weather support capability and collaborate with the Army to ensure it interfaces with and is interoperable with mission command and intelligence systems (for example, the Army's intelligence system).
- *j. Air Force systems development.* Through the JCIDS process, the AF, with Army assistance, designs systems to operate in the deployed environment and meet Army standard criteria for tactical mobility, target signature, and communications capability and accreditation.

## 3-3. Communications

- a. The AF will meet Army-specific cybersecurity assessment/authorization requirements for AF-provided equipment and software that are expected to operate on Army garrison/installation locations and on Army-deployed networks.
- b. The AF provides access to its weather data, information, and products via reach back and web services to strategic, operational, and regional units operating within AF information networks (for example, weather groups, air operations centers, and OWSs).
- c. AF will grant access/full disclosure of security authorization packages and risk assessment data for weather systems via the eMASS or its successor with Army approving officials (AOs) to enable the Army AOs approval of Authorities to Connect weather systems.

## 3-4. Training responsibilities

- a. The AF trains AF personnel—
- (1) On technical skills required to conduct weather operations and provide Army weather and environmental support.
  - (2) To operate and perform user-level maintenance of AF-provided weather equipment and software.
  - b. The AF trains Army personnel—
- (1) On AF weather operational capabilities, concepts, and limitations. This includes, but is not limited to, the importance of established communications capability, sufficient transportation, and CBRNE equipment to employ weather as an enabler in support of Army operations.
- (2) To take and disseminate basic weather observations in support of Army operations in accordance with Federal Aviation Administration Joint Order 7900.5E to the maximum extent possible.
- (3) Maintenance technicians on required on-site maintenance tasks for select AF-funded weather equipment, as agreed to in para 2–5x. The AF will provide or arrange for the same level of training (using provided Army funds) for Army-funded weather equipment during initial installation, or as requested.
- c. AF commanders validate that AF-issued operator licenses meet, or arrange training to meet, the inter-Service reciprocity requirements stated in AR 600–55.

d. AF provides functional area SMEs to assist Army development of instructional materials for use in Army courses and continuation training programs. This includes, but is not limited to, providing lesson plans and materials required for Army instructors to teach the roles, responsibilities, and operational concepts of AF weather operations to Army personnel.

## 3-5. Administration, budget, and logistics responsibilities

The AF funds and provides (on a nonreimbursable basis from the Army):

- a. Manpower to conduct weather operations and provide weather support that are the responsibility of the AF as specified in this regulation.
- b. Travel and per diem of nonaligned AF personnel conducting weather operations and providing weather support to the supported Army unit's location for training and noncontingency operations.
  - c. AF-unique training, professional development, other requirements, and all associated TDY costs.
- d. Shipment of equipment (supplemental) owned by nonaligned AF organizations to the supported Army unit's location for training and noncontingency operations.
- e. Installation, test and evaluation, technicians to maintain/troubleshoot/repair, and spare and consumable parts of all AF-provided fixed and deployed weather equipment except as stated in paragraph 2–5x. In situations where AF weather and/or maintenance personnel are not assigned at locations where this equipment is located, the AF will arrange for off-site support or provide training to Army personnel who will conduct the maintenance. The AF leads Project Support Agreement development and provides technical assistance to Army allied support efforts.
  - f. Depot-level maintenance for AF-provided vehicles.
  - g. Individual equipment required or issued by the AF.
  - h. Deployed equipment to supplement Army-provided MTOE items as required.
- *i.* Functional area SMEs to assist Army development of instructional materials for use in Army courses and continuation training programs.
- *j.* Pay (for example, hazardous and special duty) and allowances for AF personnel—except travel pay and per diem when those items are identified as an Army responsibility in chapter 2.
  - k. Management of any operational support contracts as described in paragraphs 2–2a and 3–5a.

## Appendix A

## References

#### Section I

## **Required Publications**

#### AFI 33-322

Records Management and Information Governance Program (Cited in para 1–5.)

#### AR 5-9

Installation Agreements (Cited in para 2–1*h*.)

#### AR 5-25

Army Weather Functional Activities (Cited in para 1–4b.)

#### AR 25-2

Army Cybersecurity (Cited in para 2-1f(2).)

#### AR 600-55

The Army Driver and Operator Standardization Program (Selection, Training, Testing, and Licensing) (Cited in para 2–2*i*.)

#### DoD 8570.01-M

Information Assurance Workforce Improvement Program (Cited in para 2–3a.)

#### DoDI 8510.01

Risk Management Framework (RMF) for DoD Information Technology (IT) (Cited in para 2–1f(2).)

## **DoDM 5105.21, Volume 3**

Sensitive Compartmented Information (SCI) Administrative Security Manual: Administration of Personnel Security, Industrial Security, and Special Activities (Cited in para 2–5*e*.)

#### Section II

## **Related Publications**

A related publication is a source of additional information. The user does not have to read it to understand this publication. Unless otherwise indicated, DA publications are available on the Army Publishing Directorate website (https://armypubs.army.mil/). Department of the AF publications are available on the Department of the AF website at https://www.e-publishing.af.mil/. DoD publications are available on the Office of the Secretary of Defense website (https://www.esd.whs.mil/dd/). Joint publications are available at https://www.jcs.mil/doctrine/joint-doctine-pubs.

## AFI 10-402

Mobilization Planning

## AFI 10-403

Deployment Planning and Execution

#### AFI 10-601

Operational Capability Requirements Development

#### AFI 15-128

Weather Force Structure

#### AFI 32-322

Records Management and Information Governance Program

## **AFMAN 15-111**

**Surface Weather Observations** 

## AFMAN 15-129

Air and Space Weather Operations

#### **AFPD 10-4**

Operations Planning: Air Expeditionary Force and Global Force Management

## AFPD 10-6

Capability Requirements Development

### AFPD 10-9

Lead Command Designation and Responsibilities for Weapon Systems

## AFPD 15-1

Weather Operations

#### AR 5-22

The Army Force Modernization Proponent System

#### AR 11-2

Managers' Internal Control Program

## AR 25-1

Army Information Technology

#### AR 25-30

**Army Publishing Program** 

#### AR 71-9

Warfighting Capabilities Determination

## AR 71-32

Force Development and Documentation Consolidation Policies

#### AR 95\_1

Flight Regulations

#### AR 95-2

Air Traffic Control, Airfield/Heliport, and Airspace Operations

## AR 420-1

Army Facilities Management

## **CJCSI 3810.01F**

Meteorological and Oceanographic Operations (Available at https://www.jcs.mil/doctrine/joint-doctine-pubs/.)

## DA Pam 25-2-14

Risk Management Framework for Army Information Technology

## DA Pam 25-40

**Army Publishing Program Procedures** 

## DA Pam 25-403

Guide to Recordkeeping in the Army

## DAFI 10-401

Operations Planning and Execution

#### **DoD Dictionary of Military and Associated Terms**

(Available at https://www.jcs.mil/doctrine/.)

#### DoDD 4715.21

Climate Change Adaptation and Resilience

#### DoDD 8000.01

Management of the Department of Defense Information Enterprise (DoD IE)

## **DoDI 8500.01**

Cybersecurity

## FAA Joint Order 7900.5E

Surface Weather Observing

#### FM 6-0

Commander and Staff Organization and Operations

## JP 1

Doctrine for the Armed Forces of the United States

#### JP 3-0

Joint Operations

## JP 3-30

Joint Air Operations

## JP 3-31

Joint Land Operations

#### JP 3-59

Meteorological and Oceanographic Operations

## JP 5-0

Joint Planning

#### NGB Pam 210-20

Real Property Development Planning for the Army National Guard (Available at https://www.ngbpmc.ng.mil/.)

## Section III

## **Prescribed Forms**

This section contains no entries.

## **Section IV**

## **Referenced Forms**

Unless otherwise indicated, DA forms are available on the Army Publishing Directorate website (https://armypubs.army.mil). Department of the AF forms are available from the Department of the Air Force website (https://www.e-publishing.af.mil/).

## AF Form 847

Recommendation for Change of Publication

## **DA Form 2028**

Recommended Changes to Publications and Blank Forms

## Appendix B

## **Army Amenities Provided to Air Force Personnel**

## B-1. Services

Per paragraph 2–5*l*, Army support provided to AF personnel includes, but is not limited to, the following:

- a. Accounting and finance.
- b. Billeting and temporary lodging.
- c. Chaplain.
- d. Chapel and religious.
- e. Child development.
- f. Contracting.
- g. COMSEC storage and COMSEC account manager.
- h. Dental and medical (provided according to existing DoD policies and AF instructions).
- i. Education and schools.
- j. Equal Opportunity Office.
- k. Enterprise internet.
- l. Enterprise email services.
- m. Exchange and commissary.
- n. Family and unaccompanied housing.
- o. Family support.
- p. Fire and police.
- q. Furnishing for Family and unaccompanied housing, when applicable.
- r. Hazardous materials and environmental protection.
- s. Inspector General.
- t. Legal.
- u. Library.
- v. Mess, field rations, and dining.
- w. Morale, welfare, and recreation.
- x. Mortuary.
- y. Packing and crating.
- z. Pass and identification.
- aa. Postal.
- bb. Public affairs.
- cc. Recreation and physical training facilities.
- dd. Sexual harassment/assault response and prevention training.
- ee. SSO and personnel security services.
- ff. Transportation office services (for example, personal property, permanent change of station, TDY, and deployed equipment shipment).
  - gg. Veterinary.
  - hh. Youth services.
- *ii.* Dependents of a deployed Servicemember can obtain benefits from Corvias, Directorate of Family and Morale, Welfare and Recreation, Army Community Service, Child and Youth Services, and other organizations to include Blue Star Families and the Blue Star Card Program.

## B-2. Exceptions

Civilians and contractors may not be eligible for some of these services.

## **Glossary**

## Section I

## **Abbreviations**

## **A3**

Deputy Chief of Staff for Operations, Plans, and Requirements

#### AAFIF

Army Air Force Integration Forum

#### **ACOM**

Army command

## **AEB**

aerial exploitation battalions

#### AF

Air Force

## **AFC**

U.S. Army Futures Command

#### AFI

Air Force instruction

## **AFMAN**

Air Force manual

## **AFRC**

Air Force Reserve Command

## **AFWWS**

Air Force weather weapon system

#### AMC

U.S. Army Materiel Command

## AO

approving official

#### ΑR

Army regulation

## **ARIMS**

Army Records Information Management System

#### ARNG

Army National Guard

## ASA (ALT)

Assistant Secretary of the Army (Acquisition, Logistics, and Technology)

#### ASCC

Army service component command

## **BCT**

brigade combat team

## **CAB**

combat aviation brigade

#### CBRNE

chemical, biological, radiological, nuclear, and high-yield explosives

## $\mathbf{C}\mathbf{G}$

commanding general

## CIO

Chief Information Officer

#### CNGB

Chief, National Guard Bureau

## COCOM

combatant command

#### CoE

Center of Excellence

#### **COMACC**

Commander, Air Combat Command

## **COMSEC**

communications security

#### CSA

Chief of Staff, Army

#### **CTA**

common table of allowance

## **CTC**

combat training center

## **DA Form**

Department of the Army form

## DCS

Deputy Chief of Staff

## DoD

Department of Defense

## DoDD

Department of Defense directive

#### DoDI

Department of Defense instruction

## **DoDM**

Department of Defense manual

## DOTMLPF-P

doctrine, organization, training, materiel, leadership and education, personnel and facilities-policy

#### npmn

deployment requirements, and manning document

## DRU

direct reporting unit

## **FDU**

Force design update

## **FORSCOM**

U.S. Army Forces Command

#### HQ AF

Headquarters, Department of the Air Force

## **HQDA**

Headquarters, Department of the Army

#### IMCOM

Installation Management Command

## IT

information technology

## **JCIDS**

Joint Capability Integration and Development System

## **JLOTS**

Joint logistics-over-the-shore

#### JOPES

Joint Operational Planning and Execution System

#### JP

Joint Publication

## **MAJCOM**

major command

#### MII

Military Intelligence Brigade

#### MTOF

modified table of organization and equipment

## **NEC**

Network Enterprise Center

## **NGB Pam**

National Guard Bureau pamphlet

## ONS

operational needs statement

## **OPCON**

operational control

## **OWS**

Operational Weather Squadron

#### POM

Program Objective Memorandum

#### QRC

quick reaction capabilities

## R&D

research and development

## RC

Reserve Component

## RRS-A

Records Retention Schedule-Army

#### **SCI**

sensitive compartmented information

#### SFAB

Security Force Assistance Brigade

## **SME**

subject matter expert

#### SPF

Solution Pathway Review

#### SSO

Special Security Office

#### **SUAS**

small unmanned aircraft system

#### SWO

staff weather officer

#### **TDA**

table of distribution and allowances

#### TDI

temporary duty

#### **TPFDD**

time-phased force deployment database

#### **TRADOC**

U.S. Army Training and Doctrine Command

#### TIAS

unmanned aircraft system

#### HTC

unit type code

#### Section II

#### **Terms**

#### Administrative control

Direction or exercise of authority over subordinate or other organizations in respect to administration and support, including organization of Service forces, control of resources and equipment, personnel management, unit logistics, individual and unit training, readiness, mobilization, demobilization, discipline, and other matters not included in the operational missions of the subordinate or other organizations. Also called ADCON. (See JP 1.)

#### Air Force personnel

In the context of this regulation, AF-provided military, civilian, and contractor personnel conducting weather operations, providing weather services, commanding and/or controlling weather operations and/or services, and operating or maintaining weather systems.

Note. Civilians and contractors may not provide or be eligible for some services.

#### Airfield

An area prepared for the accommodation (including any buildings, installations, and equipment), landing, and takeoff of aircraft. See also departure airfield; landing area; landing site. (See DoD Dictionary of Military and Associated Terms.)

## Airfield weather services

For an installation, garrison, or deployed airfield—

- a. Augmenting (supplementing/backing-up) automated systems when required or manually taking, recording, and disseminating surface weather observations.
- b. Issuing, amending, and canceling forecast and observed weather watches, warnings, and advisories.
- c. Producing and amending terminal aerodrome forecasts.

## Augmentation (automated weather observing system)

The process of having certified weather personnel manually add or edit data to an observation generated by a properly sited, automated observing system. The two augmentation processes used are supplementing and backup.

## **Backup** (automated weather observing system)

The method of manually providing meteorological data, and/or dissemination to an automated weather observation when the primary automated method is not operational or unavailable (due to sensor or communication failures) or when unrepresentative and operationally significant.

## **Collection plan**

A systematic scheme to optimize the employment of all available collection capabilities and associated processing, exploitation, and dissemination resources to satisfy specific information requirements. (See DoD Dictionary of Military and Associated Terms.)

## **Deployed**

a. Away from home station to conduct training or operations in a contingency area of operations.

b. Real-world or simulated deployed conditions and/or operations at home station, training centers, or other locations. Command post exercises, field training exercises, mission rehearsal exercises, and other exercises are considered deployed conditions and/or operations. (See DoD Dictionary of Military and Associated Terms.)

## **Depot maintenance**

That 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 as required. Depot maintenance serves to support lower categories of maintenance by providing technical assistance and performing that maintenance beyond their responsibility. Depot maintenance provides stocks of serviceable equipment by using more extensive facilities for repair than are available in lower level maintenance activities.

## **Direct support**

A mission requiring a force to support another specific force and authorizing it to answer directly to the supported force's request for assistance. (See DoD Dictionary of Military and Associated Terms.)

### **Emergency Management and Response**

Capabilities and services designed to reduce the loss of personnel and capabilities due to accidents, health threats, and natural disasters. (See JP 3–0.)

#### **Garrison force**

All units assigned to a post, installation, or area for defense, development, operation, and maintenance of facilities.

## General support

That support which is given to the supported force as a whole and not to any particular subdivision thereof. (See DoD Dictionary of Military and Associated Terms.)

#### Habitual alignment

Weather airmen in detachments/squadrons will be assigned to a specific ASCC, Corps, Division, CAB, Aviation battalion, BCT, Aerial Exploitation Battalion, and so forth, to provide weather support. These Airmen will participate in the major training and readiness events of the Army's sustainable readiness model with the Army unit they are assigned to support. The lengths of deployment for the airmen should be equivalent to the Army unit they are assigned to support

#### Hydrology

The scientific study of the waters of the earth, especially with relation to the effects of precipitation and evaporation upon the occurrence and character of water on or below the land surface. The scope of hydrology may be defined as that portion of the cycle from precipitation to evaporation or return of the water to the seas. Applied hydrology utilizes scientific findings to predict rates and amounts of runoff (river forecasting), estimate required spillway and reservoir capacities, study soil-water-plant relationships in agriculture, estimate available water supply, and for other applications necessary to the management of water resources.

## Information technology

Any equipment or interconnected system or subsystem of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by the DoD component. The term "information technology" includes computers, ancillary equipment, software, firmware, and similar procedures, services (including support services), and related resources. (See DoDD 8000.01.)

## Installation

A base, camp, post, station, yard, center, homeport facility for any ship, or other activity under the jurisdiction of DoD, including any leased facility, which is located within any of the states, the District of Columbia, the Commonwealth of Puerto Rico, American Samoa, the Virgin Islands, the Commonwealth of the Northern Mariana Islands, or Guam. Such term does not include any facility used primarily for civil works, rivers and harbors projects, or flood control projects. In the case of an activity in a foreign country, an installation is any property under the operational control

(OPCON) of the Secretary of a military department or the Secretary of Defense, without regard to the duration of OPCON. For real property accountability, an installation must consist of one or more real property sites.

#### Maintenance

- a. 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.
- b. All supply and repair action taken to keep a force in condition to carry out its mission.
- c. The routine recurring work required to keep a facility (plant, building, structure, ground facility, utility system, or other real property) in such condition that it may be continuously used at its original or designed capacity and efficiency for its intended purpose. (See DoD Dictionary of Military and Associated Terms)

## Meteorological data

Measurements or observations of meteorological variables (such as wind, temperature, air density, and other phenomena that affect military operations). (See DoD Dictionary of Military and Associated Terms) Note: In the context of this regulation, synonymous with weather data.

#### Microscale

Pertaining to meteorological phenomena, such as wind circulations or cloud patterns that are less than 2 kilometers in horizontal extent. (See National Weather Service Glossary.)

## Mission weather support

Production of and provision of tailored mission planning and execution forecasts and mission-tailored weather effects (for example, weather impacts) to support operational decision-making and mission execution. Conducting mission-focused meteorological over watch (also known as MISSION WATCH) for the supported Army unit's area of operation

## **National Security Innovation Base**

National Security Strategy requirement referring to the "American network of knowledge, capabilities, and people—including academia, National Laboratories, and the private sector—that turns ideas into innovations, transforms discoveries into successful commercial products and companies and protects and enhances the American way of life." Intent is to enforce interagency alignment in R&D of innovative autonomous technology to better provide means for stability, deterrence, and, should deterrence fail, the ability to destroy enemy capabilities and their will which takes a deliberate approach to technology as an instrument of policy and national security ends, the consequences of unmanned technology remain questionable. The process requires interagency coordination and decision making from real-world observations.

#### **Operation and maintenance**

Maintenance and repair of real property, operation of utilities, and provision of other services such as refuse collection and disposal, entomology, snow removal, and ice alleviation. Also called O&M. (See DoD Dictionary of Military and Associated Terms)

## **Operational architecture**

A description (often graphical) of the operational elements, assigned tasks, and information flows required to accomplish or support a warfighting function. It defines the type of information, the frequency of exchange, and what tasks are supported by these information exchanges.

## **Operational control**

Command authority that may be exercised by commanders at any echelon at or below the level of COCOM and may be delegated within the command. OPCON is the authority to perform those functions of command over subordinate forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction over all aspects of military operations and joint training necessary to accomplish the mission. OPCON should be delegated to and exercised by the commanders of subordinate organizations; normally, this authority is exercised through subordinate Joint force commanders, Service, and/or functional component commanders. OPCON provides authority to organize and employ commands and forces as the commander considers necessary to accomplish assigned missions. It does not include authoritative direction for logistics or matters of administration, discipline, internal organization, or unit training. (See JP 1.)

#### Organizational maintenance

That maintenance that is the responsibility of and performed by a using organization on its assigned equipment. (See DoD Dictionary of Military and Associated Terms)

#### Preventive maintenance

The care and servicing by personnel for the purpose of maintaining equipment and facilities in satisfactory operating condition by providing for systematic inspection, detection, and correction of incipient failures either before they occur or before they develop into major defects. (See DoD Dictionary of Military and Associated Terms)

#### Reach back

The process of obtaining products, support, and applications, or forces, or equipment, or material from organizations that are not forward deployed. (See DoD Dictionary of Military and Associated Terms)

#### Requirement

An established need justifying the timely allocation of resources to achieve a capability to accomplish approved military objectives, missions, or tasks. Also called operational requirement.

#### Residual forces

Unexpended portions of the remaining United States forces that have an immediate combat potential for continued military operations, and that have been deliberately withheld from utilization. (See DoD Dictionary of Military and Associated Terms)

## **Small Unmanned Aircraft Systems**

SUAS's are characterized by close range, short-duration missions (for example, one to two hours). This class of UAS operates below the coordinating altitude identified in the airspace control plan.

## **Staff supervision**

A staff relationship consisting of formal guidance and assistance provided to AF SWOs by the Assistant Chief of Staff, G–2 (S–2).

#### Staff weather officer

The AF senior weather representative (officer or noncommissioned officer) assigned to provide and/or arrange for weather support at a respective Army echelon.

## Staff weather support

Providing the supported Army commander weather subject matter expertise during Army Airspace Command and Control collection management and/or intelligence, surveillance, and reconnaissance synch, military decision-making process, plans development, and other staff and decision-making processes and operations. Providing oversight of weather services provided to subordinate commanders of the SWO's supported Army commanders. Integration of tailored mission planning and/or execution forecasts and mission-tailored weather effects (for example, weather impacts) to support operational decision making and mission execution.

## **Supplement (automated weather observing systems)**

A method of manually adding meteorological information to an automated observation that is beyond the capabilities of the automated observing system to detect and/or report.

#### **Unmanned aircraft system**

That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft, referred to as UAS. (See DoD Dictionary of Military and Associated Terms.)

#### Weather data

See Meteorological Data.

#### Weather operations

Five core processes—collection, analysis, prediction, tailoring, and integration—to characterize the past, current, and future state of the atmosphere and space environment then enable the exploitation of this environmental information at key decision points.

## Weather support

The result of specialized actions to supply or meet a request for weather data, information, or products. The term weather support also encompasses the capabilities of climate services, hydrological analysis/prediction, space/terrestrial environmental analysis and prediction.