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***Weather***

***WEATHER SPECIALTY WARTIME  
PROFICIENCY TRAINING***

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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This instruction implements AFD 15-1, *Atmospheric and Space Environmental Support*. It establishes wartime proficiency training responsibilities and requirements for weather units. It applies to all PACAF units. Additionally, it applies to Air National Guard (ANG) and Individual Mobilization Augmentees (IMAs) when mobilized to support PACAF. It does not apply to the Air Force Reserve Command (AFRC) or their units.

***SUMMARY OF REVISIONS***

This revision institutes changes required by the implementation of new weather tactical equipment and removes training requirements for obsolete equipment. It also requires new technical training for essential wartime skills. A bar (|) indicates revision from the previous edition.

**1. General:**

1.1. Concept of Training. Wartime proficiency training will be conducted to meet weather support requirements in OPlan and JTF organizational taskings. Personnel tasked in-place in Korea are considered to be mobility tasked and will also be trained. All other in-placed tasked personnel are considered subject to deploy (Air Force Specialty Code exists in an UTC) and will meet required mobility training as specified in AFI 10-403 para 2.13.1.

1.2. Wartime proficiency training encompasses four separate phases. Completion of all phases is required. Applicability of standards for specific equipment items is limited to unit-owned equipment. This includes tactical meteorological and communications equipment that is non-accountable, as well as accountable items on the unit's CA-CRL listings. For Army support units, this also includes equipment carried on their Army organization's property book for use by the USAF weather unit.

1.2.1. Phase I, Consists of Tactical Communication (TACCOM) Equipment Training listed at [Attachment 1](#).

1.2.2. Phase II, Consists of Tactical Meteorological (TACMET) Equipment Training listed at [Attachment 2](#).

1.2.3. Phase III, Consists of Weather Technical Training listed at [Attachment 3](#).

1.2.4. Phase IV, Familiarization Training, Consists of familiarization training requirements at [Attachment 4](#).

1.3. Completion of Phases I and II training fulfills SORTS training subarea TRSA2 requirements. Completion of Phases III and IV training fulfills SORTS training subarea TRSA3 requirements. See AFI 10-205, Chapter 6 for further information.

## 2. Responsibilities:

2.1. All PACAF weather units with wartime weather support functions and mobility commitments will:

2.1.1. Establish a wartime proficiency-training program.

2.1.2. Ensure personnel are technically proficient (forecaster and observer certification training has priority over mobility training).

2.1.3. Ensure all phase training is completed within 90 days (1 year after formal training for ANG) of assignment to a mobility or wartime weather support function. Mobility phase training should begin immediately after or concurrent with certification training.

**3. Requirements and Wartime Standards.** Weather specialty wartime proficiency training requirements and standards are defined in [Attachment 1](#) thru [Attachment 4](#). Requirements will be incorporated into the unit's master training plan, and evaluated in accordance with established standards.

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Director of Air and Space Operations

**Attachment 1****PHASE I--TACTICAL COMMUNICATIONS (TACCOM) TRAINING**

**A1.1.** Tactical communications equipment (TACCOM). Under deployed conditions, each individual must be able to demonstrate the ability to correctly set up and operate all unit-owned TACCOM equipment.

A1.1.1. Meteorological Satellite Imagery Receiver (STT, SOCRATES). As part of a two-person team, must unpack and set up the system, receive, and either display or print a hard copy satellite picture within 2 hours.

A1.1.2. New Tactical Forecast System (NTFS). Must unpack and set up the system and display weather data within 1 hour (assuming access to data).

A1.1.3. Customer-provided unique systems (IMETS, Radios, etc.). Each weather unit will develop a detailed training plan for customer-provided unique systems. The plan will consistently reflect the training standards of the supported customer, and applicable personnel will be trained to those standards.

A1.1.4. Satellite Phone Systems (Iridium, INMARSAT). Each weather unit must develop a detailed training plan for any satellite communication phone systems used. The plan will consistently reflect the training standards of the supported customer, and applicable personnel will be trained to those standards.

A1.1.5. Very Small Aperture Terminal, Tactical (T-VSAT). Must be able to properly set up and to receive data within 1 ½ hours.

**Attachment 2****PHASE II--TACTICAL METEOROLOGICAL (TACMET) TRAINING**

**A2.1.** Tactical Meteorological (TACMET) Equipment and Systems. Under deployment conditions, each individual must be able to demonstrate the ability to correctly set up and operate all unit-owned TACMET equipment and systems.

A2.1.1. MARWIN (UMQ-12) Portable Rawinsonde Set. As part of a two-person team, must unpack and set up the equipment and obtain a data stream within two hours.

A2.1.2. Tactical Meteorological Observing System (TMOS) TMQ-53. Must unpack and set up equipment (2 people) and obtain readings within one hour.

A2.1.3. Manual Observation System (MOS) Kit. Must be familiar with the operation of the various items contained in the unit's MOS kit (i.e., Laser Range Finder, Hand-held Digital Barometer, and Sling Psychrometer). Must demonstrate ability to obtain elements of an observation within 15 minutes and be able to construct visibility chart using the LRF.

### Attachment 3

#### PHASE III--TECHNICAL TRAINING

**A3.1. Technical Skills.** Unless otherwise specified, all applicable personnel will demonstrate task proficiency. Where possible, task proficiency should be demonstrated in other than field conditions.

A3.1.1. Reading Surface Codes (SYNOPTIC and METAR). Given a code breakdown, all personnel must be able to accurately decipher data for wind, temperature, dew point, visibility, pressure, cloud amounts, and ceilings within 1 minute of receipt of report.

A3.1.2. Reading Upper Air Codes. All personnel must be able to accurately decipher constant pressure upper air code used to plot a Skew-T diagram to 100mb to include all mandatory and significant levels.

A3.1.3. Chart Analysis. Forecasters (officers and enlisted) must analyze a chart (surface, constant pressure, streamline, or Skew-T) for specific analysis parameters IAW the Tactical Area Forecast Program (TAFP) for the unit, or as determined operationally significant by the forecaster.

A3.1.4. Observations. Enlisted (and ANG officers) must evaluate meteorological conditions, and encode, record, and disseminate observations in a deployed location or tactical environment within 15 minutes IAW applicable directives with no more than 1 error.

A3.1.5. Decode Meteorological Codes. Once provided the data and code breakdowns, all personnel must be able to decode Forward Area Limited Observing Program (FALOP) and Artillery Meteorological (ARTYMET) codes within 3 minutes of receipt of data.

A3.1.6. Target Acquisition Weather Software (TAWS)/ Night Vision Goggle Operations Weather Software (NOWS). Officers and enlisted forecasters must calculate Beginning Morning Nautical Twilight (BMNT), End Evening Nautical Twilight (EENT), sunrise, sunset, moonrise, and moonset for a given location within 5 minutes with no errors using TAWS. For units whose customers' requirements also include E-O weapon systems support or Night Vision Goggles Operations support, officers and enlisted forecasters, given appropriate information, must develop TAWS forecast for a target, 1 background, and 1 heading or a NOWS forecast within 30 minutes with no errors.

A3.1.7. Visibility Chart. Using the appropriate scale map (1:25,000 and/or 1:50,000), all enlisted personnel must develop a visibility chart for use in evaluating critical operational elements. Chart must contain 1 point per octant and be completed in 30 minutes with no more than 1 error.

A3.1.8. Chemical Downwind Messages (CDM). For units whose customers' requirements include chemical downwind message reporting, forecasters (officer and enlisted) must be able to create and disseminate a CDM as instructed in AFI 15-135, Para 7.15 and [Attachment 3](#). The CDM must be disseminated fast enough to meet supported customers' timeliness requirement, but not to exceed 45 minutes.

A3.1.9. AN/UMQ-13, Mark IVb Meteorological Satellite PC Application. When available, forecasters (officers and enlisted) must be able to install and configure the software (given all necessary information by base communications personnel), retrieve, and display appropriate satellite imagery in one hour.

**Attachment 4****PHASE IV--FAMILIARIZATION TRAINING****A4.1. Familiarization.** Applicable personnel must be familiar with the following areas:

A4.1.1. Single Station Analysis. Officers and enlisted forecasters will review procedures and techniques contained in AWS/FM-300/001, AWS/FM-300/002, and AWS/FM-300/004, and be knowledgeable about the techniques, diagrams, charts, and other information for performing single station analysis and forecasting in the field. Officers and enlisted forecasters will demonstrate ability to identify relationships of basic facts and state general principles about the subject - B (capital B) subject knowledge level CTRS Proficiency Code Key.

A4.1.2. Support Assistance Request (SAR). Officers and enlisted forecasters must be knowledgeable in preparing a request IAW AFI 15-129, Aerospace Weather Operations – Processes and Procedures, Paragraph 2.9, and Attachment 10.

A4.1.3. Mission Support. Officer and enlisted forecasters must be familiar with supported units' requirements, including the tasked OPLAN(s), Air Tasking Order and Military Decision Making processes (as applicable), theater weather support procedures, geography, and climatology.

A4.1.4. AEF. Officer and enlisted forecasters must be knowledgeable of their AEF assignment and AEF tasking vulnerability window.

A4.1.5. Weather Deployment Support Kits. Mobility tasked personnel must be familiar with the use of all items contained in the unit's weather deployment kits.