BY ORDER OF THE COMMANDER
71ST FLYING TRAINING WING (AETC)

VANCE AIR FORCE BASE
INSTRUCTION 15-101

10 MARCH 2026

Weather

WEATHER SUPPORT

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This instruction implements Department of the Air Force Policy Directive (DAFPD) 15-1, Weather Operations, Air Force Instruction (AFI) 10-206, Operational Reporting, DAFI 10-2501, Department of the Air Force Emergency Management Program, AFMAN 15-111, Surface Weather Observations, AFMAN 15-124, Meteorological Codes, and DAFMAN 15-129 Air and Space Weather Operations. It establishes responsibilities, weather support procedures, and general weather services information to include weather observations and forecasts, weather watches, warnings, and advisories, space weather, supported services, dissemination of information, and reciprocal support. This instruction applies to Vance Air Force Base (AFB)-based 71st Flying Training Wing (71 FTW) and subordinate units, in addition to mission partners co-located at Vance AFB. Ensure all records created as a result of processes prescribed in this publication are maintained IAW AFI 33-322, Records Management and Information Governance Program disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the DAF Form 847, Recommendation for Change of Publication; route DAF Forms 847 from the field through the appropriate functional chain of command. This publication may be supplemented at any level, but all direct supplements must be routed to the OPR of this publication for coordination prior to certification and approval.

SUMMARY OF CHANGES

Removed “Eye forward support for OWS” duty priority from Table 1.1., 13.. Removed “Weather Flight may close if manning does not allow for 24/7 operations from 2.2.1.1. Changed integration

service hours to 0700-1500 in **paragraph 2.2.1.2**. Rewrote to reflect adoption of BiFrost due to sundown of JET in **paragraph 3.2.9**. Removed reference to JET in **paragraph 4.4**. Added "Planning Weather Outlook" in **paragraph 5.2**. Added Top 3 desks integrated support in **paragraph 5.3.1.3**. Changed times to local and added "06L, 08L, 12L, 16L, & 20L (for night fly weeks)." In **paragraph 5.6.3**. Planning Weather Outlook section added in **paragraph 5.8**. Added "In the event of a time constraint, the weather flight may provide a Verbal Brief." In **paragraph 5.9.3**. Updated Alternate Operating Location to building 133 in **paragraph 7.1**. In the Glossary of References, removed AFI 10-206 AETCSUP, AFI 15-114 and AFI 15-128 due to their discontinuation.

Chapter 1

ROLES & RESPONSIBILTIES

1.1. Overview. The 71st Operations Support Squadron (OSS) Weather Flight (OSW) coordinates and maintains weather awareness and application for Vance Air Force Base. The instruction establishes the requirements and procedures pertaining to the 71 OSS/OSW's weather support and will be reviewed at least biennially.

1.2. Concept of Operations. The 26 OWS is the authoritative source for weather analysis, while the Weather Flight integrates that analysis into Vance AFB's forecast and planning process. Both units work in conjunction to provide the best weather service supporting mission needs.

1.2.1. The 26 OWS is located at Barksdale AFB, Louisiana and provides regional and operational-level weather products and information to units within the southeastern continental United States.

1.2.2. The Weather Flight is the focal point for all weather support to Vance AFB. The Weather Flight alerts decision makers on mission-limiting environmental factors potentially impacting mission execution.

1.3. Duty Priorities. The Weather Flight duty priorities are noted within **Table 1.1**. The Weather Flight follows these duty priorities to save and preserve life, property, and the mission when the environment poses imminent danger.

Table 1.1. Vance AFB Weather Flight Duty Priority Listing.

Order Of Priority	Duties
1	Complete Emergency War Order Taskings
2	Execute Weather Flight Evacuation
3	Issue/Disseminate Imminent Hazardous Weather Warnings
4	Respond to Aircraft/Ground Emergencies
5	Respond to Pilot-to-Metro-Service (PMSV) contacts
6	Provide Support to the Supervisor of Flying (SOF)
7	Perform Severe Weather Action Plan (SWAP) Operations
8	Augment Automated Meteorological Observing System Observations for Mandatory Elements. Ensure Dissemination of Weather Observations Locally and Longline
9	Prepare/Disseminate Weather Warnings, Watches, and Advisories
10	Mission Execution Forecast Process (MEFP) -- Produce/Disseminate MEFs and other forecasts as needed
11	Disseminate Urgent (UUA) Pilot Reports (PIREP)
12	Disseminate Routine (UA) Pilot Reports (PIREP)
13	Conduct Coordinated Meteorological Watch/Mission Watch
14	Provide Aircrew Mission Weather Briefing Support
15	Provide Other Briefing Support
16	Conduct Weather Functional Training
17	Accomplish Administrative Tasks

Chapter 2

WEATHER FLIGHT OPERATIONS

2.1. General. The Weather Flight's daily operations provide a set schedule, contact information, and alternate methods of ensuring mission success. The Weather Flight supports the full spectrum of operations at Vance AFB. Weather Flight operations can be broken down into 3 functions: Airfield Services (**Chapter 5**), Mission Integration (**Chapters 4** & 6), and Staff Integration (**Chapters 3** & 5). These functions can be found in greater detail in their respective chapters. Weather Flight Leadership provides and coordinates all weather support services to Vance AFB and its tenant units IAW AFMAN 15-129.

2.2. Weather Flight Location, Hours of Operation, & Contact Information. The Weather Flight's primary operating location is 624 Elam Road, Bldg. 155 (Base Operations).

2.2.1. **Operating Hours.** The Weather Flight is normally open 24/7.

2.2.1.1. The Weather Flight may close during holiday breaks when no flying is scheduled and weather permits. Additionally, the Weather Flight may close during Airfield closures but will maintain a standby operations posture during any period of closure.

2.2.1.2. Staff integration services are available on normal duty days from 0700-1500L and can be extended as required.

2.2.2. **Phone Numbers.** The Weather Flight's primary phone numbers are listed in **Table 2.1**.

Table 2.1. Weather Flight Duty Phone Numbers.

Functional Area	**Phone Number** (DSN prefix 448)
Weather Flight Operations Desk	(580) 213-7890/7203/7530
Flight Commander	(580) 213-7883
Wing Weather Officer	(580) 213- 6617
Flight Chief	(580) 213-7885
Airfield Weather Services NCOIC	(580) 213- 7362
Standby Cell Phone	(580) 478-1366

2.2.3. **Organizational Email Address:** **71oss.osw@us.af.mil**

2.2.4. **Mailing Address.** The Vance Weather Flight mailing address is located in **Figure 2.1**.:

Figure 2.1. Mailing Address.

71 OSS/OSW 624 Elam Rd., Suite 110 Vance AFB, OK 73705-5412

2.3. Post Mission Analysis & Feedback. IAW AFMAN 15-129, units that regularly utilize weather support from the Weather Flight are encouraged to provide feedback.

2.4. Release of Information to Non-DoD Agencies or Individuals. Weather information will not be released to non-DoD agencies, individuals, or to the public without approval from 71

FTW/PA (Public Affairs) and 71 FTW/JA (Legal). Any related issues should be coordinated through the Weather Flight leadership.

Chapter 3

WEATHER EQUIPMENT

3.1. General. This chapter provides a brief description of the equipment used to determine the current state of the atmosphere and formulate forecasts. Additionally, this chapter provides information on backup systems, maintenance, and restoral priorities.

3.2. Meteorological (Weather) Equipment. The Weather Flight uses a wide range of equipment to determine the current state of the atmosphere. These critical systems are used continuously to provide customers the most timely, accurate, and relevant weather intelligence possible.

3.2.1. **FMQ-19, Automated Meteorological Station.** The FMQ-19 is an automated suite of integrated weather sensors, processors, and communication components that continually measure weather conditions to provide reliable, real-time weather data in support of airfield operations.

3.2.1.1. The FMQ-19 detects and measures: wind velocities, temperatures, pressure, visibility, present weather, cloud heights and coverage, and lightning.

3.2.1.2. The FMQ-19 is composed of 1 primary weather sensor located near runway 17C and 3 additional sensors suites located near runways 17R, 35C, and 35L (see **attachment 2** for a diagram of the FMQ-19 sensors).

3.2.1.3. The FMQ-19 is maintained by 71 OSS/OSAM (Radar and Airfield Weather Systems, "RAWS").

3.2.1.4. Limitation: The FMQ-19 measures cloud height and coverage using a 30-minute average over the airfield. As a result, the sensor may be slow to report rapidly changing conditions. Forecasters will augment the FMQ-19 observations during rapidly changing condition to mitigate any operational impacts and ensure flight safety.

3.2.2. **TMQ-53, Tactical Meteorological Observing System.** The TMQ-53 (also referred to as "**TMOS**") is a portable automated suite of integrated weather sensors, processors, and communication components that continually measure weather conditions to provide reliable, real-time weather data in support of operations.

3.2.2.1. The TMQ-53 is primarily a deployment asset.

3.2.2.2. The TMQ-53 detects and measures: wind velocities, temperatures, pressure, visibility, present weather, cloud heights and coverage, and lightning.

3.2.2.3. The TMQ-53 is maintained by 71 OSS/OSAM

3.2.2.4. Limitation:

3.2.2.4.1. The TMQ-53 software is prone to crashing and requires regular restarts.

3.2.3. **Weather Surveillance Radar-88D.** Vance AFB operates and maintains a Weather Surveillance Radar-88D (WSR-88D, "weather radar"). The weather radar is located at Kegelman Auxiliary Airfield.

3.2.3.1. The WSR-88D is maintained by 71 OSS/OSAM.

3.2.3.2. Limitations:

3.2.3.2.1. A narrow band of the radar beam to the west-southwest is currently obscured due to trees.

3.2.3.2.2. Wind turbines create small areas of continuous interference covering the wind turbine's footprint. This interference is amplified when several wind turbines are clustered together.

3.2.4. **Kestrel.** The Kestrel is a hand-held weather instrument used to measure wind velocities, temperatures, wind chill, heat index, wet bulb, and pressure. The Kestrel is the primary tool for conducting manual observations.

3.2.4.1. *Limitations:* Wind velocities and Altimeter Settings are considered "estimated" due to limitations of the Kestrel's specifications IAW AFMAN 15-111 Attachment 4, remark 25 (Plain Language Remarks).

3.2.5. **Rain Gauge.** Permanent rain gauge used to manually verify rainfall totals.

3.2.5.1. Limitations*:* Must be manually measured and emptied and may become unverifiable due to debris or contamination.

3.2.6. **Snow Board.** Simple MDF board, painted white, used for measuring snow depth.

3.2.7. Limitations*:* Must be manually measured and swept clean of snow and may become unverifiable due to snow-clearing operations.

3.2.8. **Laser Range Finder.** Used to find distances of objects for visibility reporting and to determine cloud heights.

3.2.8.1. *Limitations*: The laser range finder is not designed for weather observing. Therefore, the device has inherent limitations. The laser range finder cannot reliably detect cloud bases above 2000FT. Additionally, the laser range finder struggles to detect thin cloud layers.

3.2.9. **Bridging Environmental Intelligence for Responsive Operational Support.** BiFrost is a cloud-based, automated dissemination system and weather data hub. It is the primary method of retrieving or disseminating observations, forecasts, flight weather briefs, mission planning products, and weather watches, warnings, and advisories.

3.2.10. **Pilot-to-Metro Service Radio.** The Weather Flight Pilot-to-Metro Service is assigned the frequency of 342.55 MHz. The Weather Flight personnel can speak directly to aircrews to pass and receive weather information.

3.2.11. **71 OSS/OSW Online Products.** The 71 OSS/OSW Sharepoint site is the primary location to find all weather products. Additionally, the Weather Flight will post certain aviation specific products to Box. □SharePoint: **https://usaf.dps.mil/teams/aetc-vc-71og-71oss/weather/SitePages/Home.aspx** □Box: **https://usaf.ent.box.com/folder/139811164697**

Chapter 4

AIRFIELD SUPPORT FUNCTION

4.1. General. The Airfield Support Function includes those actions and areas that affect the Vance AFB aerodrome (5 nautical mile radius around the center of the airfield).

4.2. Airfield Support Function. Airfield Support Function responsibilities and tasks pertain to the following areas: (1) airfield observations, (2) backup dissemination of weather products, (3) terminal aerodrome forecasts, (4) cooperative weather watch, and (5) meteorological watch.

4.3. Airfield Weather Observations. The Weather Flight takes, records, and disseminates observations IAW AFMAN 15-111. The FMQ-19 is the AF standard system and the primary means of taking observations. During airfield hours, the Weather Flight will augment these observations as needed and conduct manual observations if the FMQ-19 is not reporting as outlined in local standard operating procedures.

4.3.1. **Types of Observations.** The Weather Flight provides four basic types of weather observations: routine weather observations (METAR), special weather observations (SPECI), and local weather observations (LOCAL), using automated and manual methods.

4.3.1.1. **METAR.** A METAR is a regularly scheduled observation taken and disseminated every hour at 55-59 minutes after the hour.

4.3.1.2. **SPECI.** A SPECI is an unscheduled observation taken and disseminated when any special criteria are observed or as the forecaster deems necessary. Criteria are maintained in local standard operating procedures and on the 26th Operational Weather Squadron's website: **https://26ows.us.af.mil/tech_ref/idp/index.cfm?icao=KEND**.

4.3.1.3. **LOCAL.** A LOCAL is an unscheduled observation for elements not meeting SPECI criteria.

4.3.1.4. **Manual.** A manual weather observation is taken by the weather forecaster using a Kestrel handheld instrument. Manual weather observations are normally taken during equipment and computer network outages.

4.3.2. **Official Points of Observation.** The official points of observation for Vance AFB are at the FMQ-19's 4 sensor suites. Additionally, the official observing location for weather forecasters is located approximately 50 feet from the west side of Base Ops where the sidewalk meets the Flight Line. This location is marked with a compass rose and labeled "GHOSTRIDERS WEATHER" (see **Attachment 2** for sensor and observation point locations).

4.3.2.1. Limitations:

4.3.2.1.1. Several fixed structures (e.g., buildings, hangars, aircraft shelters, etc.) block portions of the sky and ground visibility. To mitigate this limitation, Weather Flight technicians will walk around the immediate area to get a better sample of the sky and surroundings.

4.3.2.1.2. The ends of the runways are not visible from the official observation point making it difficult to observe low level ground fog.

4.3.3. **FMQ-19 Operations.** In accordance with AFMAN 15-111, the Weather Flight will operate the FMQ-19 in automated mode to provide the official METAR and SPECI observations, and forecasters will augment the sensor when needed.

4.3.3.1. **Augmentation.** Augmentation is the process of having weather forecasters edit or add additional data to an observation generated by the FMQ-19. The two augmentation processes are *supplement* and *back-up*.

4.3.3.1.1. **Supplement.** Supplementing is the process of manually adding observed weather conditions beyond the capabilities of the FMQ-19. Supplemental criteria is listed in standard operating procedures.

4.3.3.1.2. **Back-up:** Back-ups are completed when the FMQ-19 is either missing one or more weather elements or when the sensor is not correctly reporting one or more weather elements.

4.4. Backup Dissemination Procedures. In the event of communication outages, the Weather Flight will disseminate weather observations and resource protection products (watches, warnings, and advisories) locally to agencies in **Table 4.1** (in prioritized order) and track dissemination on a local log.

Table 4.1. Weather Flight Backup Dissemination Log.

Agency	**Phone Number** (DSN prefix 448)
Supervisor of Flying (SOF) Tower Watch Supervisor	Recorded Line: (580) 213-6350 Recorded Line: (580) 213-5188
RAPCON Watch Supervisor	Recorded Line: (580) 213-7135/6765
3 FTS	(580) 213-6251/6252
8/33 FTS	(580) 213-6037/7799
25 FTS	(580) 213-6038/6299
Maintenance Operations Center	(580) 213-7392
71 FTW Command Post	(580) 213-7384

4.5. Terminal Aerodrome Forecast. The Terminal Aerodrome Forecast (TAF) is the official airfield forecast and covers a 5 statute mile radius from Vance AFB. The TAF is produced and disseminated by the Vance Weather Flight based on 71 FTW operational requirements. Forecasts are valid for a 30-hour period and issued at a frequency not to exceed every 8 hours. With respect to any Weather Flight closures, a TAF will be issued no later than 3 hours prior to the airfield opening, and the next TAF will be posted at the next standard time.

4.5.1. The Weather Flight will amend the TAF in accordance with AFMAN 15-129, Table 5.1 and local criteria as identified in the Flight Information Publication (FLIP), as well as for horizontal consistency with any watches, warnings, or advisories.

4.6. Cooperative Weather Watch. IAW this instruction, the Weather Flight maintains a Cooperative Weather Watch with 71 OSS/OSA and the SOF, as outlined below:

4.6.1. Both 71 OSS/OSAT Air Traffic Control (ATC) personnel and SOF should notify the Weather Flight when any of the following unreported conditions are observed at Vance AFB:

4.6.1.1. Tornadic Activity (Funnel clouds or tornados)

4.6.1.2. Thunderstorms or lightning

4.6.1.3. Visibility changes of one or more reportable values, when the prevailing visibility at the tower or the surface is less than 4 statute miles.

4.6.1.4. Any precipitation beginning or ending.

4.6.1.5. Any significant meteorological condition

4.6.2. 71 OSS/OSW will:

4.6.2.1. Reevaluate weather conditions and ensure airfield weather equipment is working properly when a credible source (e.g., ATC, SOF, etc.) reports conditions differing from those in the last reported weather observation.

4.6.2.2. Accomplish the following when FMQ-19 augmentation is required, based on reevaluation of the differing weather conditions reported and local policy:

4.6.2.2.1. Notify the SOF whenever prevailing visibility at the official weather observation point increases or decreases above or below 4 statute miles.

4.6.2.2.2. Reevaluate prevailing visibility after differing reports are received from the ATC tower.

4.6.2.2.3. Use tower ATC tower reported prevailing visibility values as a guide in determining surface visibility when portions of the horizon are obstructed from view.

4.6.2.2.4. Include ATC tower visibility remarks in the METARs and SPECIs in accordance with local procedures.

4.6.2.2.5. Issue SPECI or LOCAL observations in accordance with local procedures.

4.6.2.2.6. Augment the weather sensor for operationally significant weather in accordance with local procedures.

4.7. Meteorological Watch. Meteorological Watch (METWATCH) is the process of monitoring observed and forecast weather conditions and notifying select agencies (e.g., ATC, SOF, etc.) when specific weather conditions occur or are forecasted. Through the Meteorological Watch process, changes in related weather elements drive notifications from the Weather Flight to base agencies.

Chapter 5

MISSION SUPPORT FUNCTION

5.1. General. The Mission Support Function consists of actions directly related to supporting daily missions (e.g., flying operations). The mission weather products and weather briefers are the primary means for supporting daily missions.

5.2. Mission Weather Products. Mission weather products fuse theater scale products with local mission requirements enabling the direct inject of weather impacts into timely, accurate, and relevant environmental information for planning and execution. Mission weather products include the Mission Execution Forecast (MEF), 5-Day weather forecasts, verbal briefings, Planning Weather Outlook, and DD Form 175-1 *Flight Weather Briefings*.

5.3. Mission Support Element. The Mission Support Element performs Mission Watch for all missions regardless of location. The Airfield Support Element and Mission Support Element may be accomplished by the same technician when manning constraints prohibit separate roles. Mission Support Element tasks include:

5.3.1. **Weather Briefing.**

5.3.1.1. The Weather Flight will provide weather briefs in accordance with the duty priorities outlined in **Table 1.1**. Weather briefings can be provided via telephone or in-person at the Weather Flight Operations office.

5.3.1.2. The Weather Flight can send someone to brief the weather to a group of people at an alternate location (e.g., 'mass briefs') when manning allows and with prior coordination.

5.3.1.3. During impactful weather days, the Weather Flight will make every effort to have a forecaster imbedded at the Top 3 desks to be able to provide immediate updates and be available for mission planning with the student and instructor pilots

5.4. Local Flying Area. The local flying area is defined as a 100-mile radius from Vance AFB. The purpose of the local flying area is to define a boundary in which the Weather Flight forecasters are analyzing the full spectrum of weather elements. Regardless of location, the Weather Flight will support all aircraft assigned to the 71 FTW.

5.5. Weather Impacts on Supported Customers. The Weather Flight maintains a list of weather sensitivities, thresholds, and minimums for T-1, T-6, and T-38 aircraft on the local network and on the Weather Flight's SharePoint site. At a minimum, the document will be reviewed and verified annually with each flying training squadron. However, the Weather Flight will update the document on an ad hoc basis upon notification of changes. These sensitivities, thresholds, and minimums will be incorporated when producing all mission weather products and when briefing the weather.

5.6. Mission Execution Forecast. The Mission Execution Forecast (MEF) is the official weather forecast for all Vance flying missions within the local flying area, while the Terminal Aerodrome Forecast is primarily intended for aircraft launch and recovery.

5.6.1. The Weather Flight develops the MEF using the administrative and operational Mission Execution Forecast Process outlined in AFMAN 15-129.

5.6.2. The Weather Flight will amend the MEF in accordance with local operating procedures and in accordance to **Table 1.1**. Once amended, the Weather Flight will notify the SOF and the flying squadrons' step-desks to ensure they are aware of the amendment.

5.6.3. The Weather Flight will produce and disseminate a daily MEF at 06L, 08L, 12L, 16L, & 20L (for night fly weeks). Following any periods of closure, the Weather Flight will produce and disseminate a TAF no later than 3 hours prior to the airfield opening and will produce the next TAF at the next standard time. The MEF will be posted to the Vance Box website and the Weather Flight SharePoint site.

5.7. Vance 5-Day Forecast. The Vance 5-day forecast is a planning tool for all Vance operations and activities. The 5-day is produced daily, and it will be posted to the Vance Box Website, Weather Flight SharePoint site, and emailed to Vance Leadership. During any period of closure, the 5-day will still be produced daily.

5.8. Planning Weather Outlook. The Weather Flight will produce a Planning Weather Outlook product to aid mission planning efforts for the following day's training sorties. It will be published to the Vance Box Website and the Weather Flight SharePoint site NLT 1400L on Sunday-Thursday (excluding holiday weekends).

5.9. Aviation Weather Briefings. The Weather Flight will provide written weather briefs (DD 175-1) or verbal weather briefs to aircrews as requested IAW the duty priorities listed in **Table 1.1**.

5.9.1. Pilots flying within the Local Flying Area may request a written weather brief or a verbal weather Brief. All verbal weather briefs will be conducted from the MEF, and the MEF will be the official brief in lieu of a DD 175-1 for record keeping.

5.9.2. Pilots flying outside of the Local Flying Area will receive a written weather brief on the official DD 175-1 form.

5.9.3. Aircrews should provide the Weather Flight with ample lead time (ideally at least 2 hours) when requesting a written weather brief to ensure the forecaster has enough time to complete the brief and deliver it on time. In the event of a time constraint, the weather flight may provide a Verbal Brief.

5.10. Pilot-to-Metro Service. The Weather Flight will provide weather information to all aircrews who contact Vance Metro. The Pilot-to-Metro Service Radio frequency is 342.55 MHz.

Chapter 6

STAFF INTEGRATION FUNCTION

6.1. General. The Staff Support Function consists of all activities for 71 FTW staff work and planning purposes.

6.2. 71 FTW Standup/Staff Meetings. The Weather Flight provides support for various staff meetings. Weather briefs will be tailored to meet the needs for each meeting. These meetings include, but are not limited to:

6.2.1. 71 FTW Wing Standup

6.2.2. 71 OG Group Scheduling Meetings/Aircraft Maintenance Meetings

6.2.3. Instrument Refresher Course

6.2.4. Quarterly SOF Meetings

6.3. Emergency Operations Center/Crisis Action Team. The Weather Flight will respond to all recalls as required by the 71 FTW/CC and will have a representative for any Emergency Operations Center and Crisis Action Team activations as directed.

6.4. Significant Weather Outlooks. The Weather Flight will brief Vance leadership on significant mission impacting weather events. These updates will usually occur via email and any requested in-person briefings.

6.5. Deployment/Evacuation Mass Briefings. The Weather Flight will provide support for any deployment or emergency evacuations as required.

6.6. Air Traffic Controller Training/Orientation. The Weather Flight will conduct the ATC task certification IAW AFMAN 15-111. Tower Controllers will complete the "Vance AFB ATC Certification Training" PowerPoint and pass the ATC Visibility Exam administered by a fully task-certified forecaster.

6.7. Pre-Deployment Briefing. Upon request, the Weather Flight will provide pre-deployment weather briefs. These briefs will normally include takeoff, enroute, and arrival weather data. Additionally, the Weather Flight can provide climatology data for the deployed location.

6.8. Climatology Support/Special Weather Requests. The Weather Flight can obtain and provide historical data for almost any requested location through the 14th Weather Squadron. Some requests may take a few days to be completed depending on their complexity.

6.9. Flight Information Publications Updates. The Weather Flight is responsible for ensuring all weather information in the Flight Information Publications is current and accurate. The Weather Flight will coordinate with Base Operations for any required changes.

6.10. Chemical, Biological, Radiological, Nuclear, and High-yield Explosive Coordination. The Weather Flight will provide their weather expertise during CBRN operations, and the Weather Flight will provide Chemical Downrange Messages as requested.

6.11. Wing Inspection Team. The Weather Flight will support the Wing Inspection Team as needed.

6.12. Wing Safety (71 FTW/SE). The Weather Flight will support any investigations of ground or aircraft mishaps by providing requested weather data.

Chapter 7

EMERGENCY ACTIONS

7.1. Alternate Operating Location. In the event of a building evacuation, the Weather Flight will relocate operations to the Alternate Operating Location (AOL) in building 133. The Weather Flight standby commercial phone number is (580) 478-1366 and will be the primary number for AOL operations. Once operations are established at the AOL, the Weather Flight will resume weather operations and services IAW the duty priorities listed in **Table 1.1**. The Weather Flight will call and advise the agencies listed in **Table 7.1** on the relocation to the AOL (or other location if needed) and again upon return to the primary operating location (Bldg. 155).

Table 7.1. Agencies/Personnel Notified of Changes in Operating Location.

Agency	**Phone Number** (DSN prefix 448)
Supervisor of Flying Tower Watch Supervisor	Recorded Line: (580) 213-6350 Recorded Line: (580) 213-5188
RAPCON Watch Supervisor	Recorded Line: (580) 213-7135/6765
3 FTS	(580) 213-6251/6252
8/33 FTS	(580) 213-6037/7799
25 FTS	(580) 213-6038/6299
Maintenance Operations Center	(580) 213-7392
71 FTW Command Post	(580) 213-7384

7.1.1. If the airfield sensors are inoperable, the observers will use manual observation methods IAW local procedures to augment observations.

7.1.2. *Limitations:*

7.1.2.1. Several fixed structures (e.g., buildings, hangars, aircraft shelters, etc.) block portions of the sky and ground visibility. To mitigate this limitation, Weather Flight technicians will walk around the immediate area to get a better sample of the sky and surroundings.

7.1.2.2. The ends of the runways are not visible from the official observation point making it difficult to observe low level ground fog.

7.2. Aircraft Emergencies.

7.2.1. **In-Flight Emergency/Ground Emergency.** When notified of an in-flight emergency or ground emergency, the Weather Flight will maintain a heightened level of awareness and advise various agencies as needed.

7.2.2. **Aircraft Mishap.** When notified of an aircraft mishap, the Weather Flight will record a full-element SPECI observation and perform a data save of all pertinent weather data. The Weather Forecasters will maintain a heightened level of awareness and advise various agencies as needed.

Chapter 8

RESOURCE PROTECTION

8.1. General. Resource protection consists of all actions taken to notify Vance AFB personnel of hazardous weather in order to protect personnel, assets, and ensure safe operations.

8.2. Coordination. Vance AFB units are responsible for coordinating any weather watch, warning, or advisory requirements with the Weather Flight. Units requesting support should validate the requirement by providing a list of user impacts and protective actions taken for each watch, warning, or advisory. A list of user impacts and protective actions is maintained locally and on the Weather SharePoint site, and these impacts and actions will be validated annually with the impacted units.

8.3. Watches, Warnings, & Advisories (WWAs). Watches, warnings, and advisories serve to notify Vance AFB personnel of hazardous weather to personnel, assets, and operations. All WWAs are normally issued for a 5 nautical mile radius around Vance AFB, unless otherwise noted.

8.3.1. **Watches.** The purpose of a watch is to alert personnel of the **potential** for hazardous weather.

8.3.2. **Warnings.** The purpose of a warning is to alert personnel of an **imminent** weather hazard that is either expected to threaten or is actively threatening Vance AFB. Warnings are issued for forecasted or observed threats.

8.3.3. **Advisories.** The purpose of an advisory is to alert personnel of mission impacting weather not covered by watches or warnings. Advisories are only issued when the airfield is open.

8.3.4. **WWAs for Vance AFB.** The list of WWAs specific to Vance AFB is maintained on the Installation Datasheet Pages (IDP) on the 26th Operational Weather Support Squadron's website **https://26ows.us.af.mil/tech_ref/idp/index.cfm?icao=KEND**.

8.3.5. Every WWA will have a specified *issued* time and *valid* time.

8.3.5.1. Issued Time – The time for when the forecaster puts out the WWA.

8.3.5.2. Valid Time – The time for when the weather is expected to occur.

8.3.5.3. WWAs can be upgraded by adding phenomena or crossing to a higher threshold, downgraded by removing phenomena or crossing to a lower threshold, and extended by increasing the valid time.

8.3.5.4. All WWAs will be canceled regardless of valid times if conditions are no longer expected, and the weather does not warrant the valid time to be extended. Another WWA may be issued later if required. Forecasters will use their best judgement when deciding whether to cancel or extend WWAs to mitigate impacts and allow 71 FTW to safely conduct operations.

8.3.6. **WWA Notifications.** The notification of WWA issuance, extension, upgrade or downgrade, and cancellation is accomplished via the Joint Environmental Toolkit Automated Dissemination System.

8.3.6.1. **Exception for tornado warnings:** The base tornado siren will be the primary notification system for Vance AFB. Command Post will sound the tornado siren when instructed by the Weather Flight. Similarly, the Command Post will sound the "All Clear" upon notification from the Weather Flight that the threat is no longer present.

Chapter 9

RECIPROCAL SUPPORT

9.1. General. The Weather Flight requires reciprocal support to accomplish its mission. This chapter details the necessary support for successful weather support.

9.2. All Supported Agencies will: Establish and coordinate any weather requirements and procedures with the Weather Flight.

9.3. 71 FTW Command Post will:

9.3.1. Disseminate watches, warnings, and advisories received for Vance AFB over the Emergency Notification System, AtHoc alert system, and/or Giant Voice broadcast system as applicable.

9.3.2. Activate the tornado siren as detailed in **paragraph 8.3.6.1**.

9.4. Supervisor of Flying (SOF) will: Pass along Pilot Reports (PIREPs) to the forecaster.

9.5. Flying Training Squadrons will:

9.5.1. Notify the Weather Flight on any changes to weather sensitivities, thresholds, and minimums (see **paragraph 5.5**.).

9.5.2. Encourage aircrews to provide PIREPs to the Weather Flight either directly via the Pilot-to-Metro Service (frequency 342.55 MHz) or through the SOF whenever feasible.

9.5.3. Coordinate in-person weather briefings with the Weather Flight in advance to allow adequate preparation.

9.6. 71 OSS/OSA:

9.6.1. *Base Operations will:*

9.6.1.1. Publish NOTAMs as applicable for the Weather Flight.

9.6.1.2. Publish necessary changes to the Flight Information Publications for the Weather Flight.

9.6.1.3. Notify weather personnel of all aircraft emergencies, aircraft mishaps, and ground emergencies.

9.6.2. *ATC Tower will:*

9.6.2.1. Participate in the Cooperative Weather Watch program IAW **paragraph 4.6**.

9.6.2.2. Notify the Weather Flight when the Joint Environmental Toolkit is inoperative or of any weather equipment issues.

9.6.2.3. Relay Pilot Reports containing weather information to the forecaster.

9.6.2.4. Notify the forecaster of a change in the active runway.

9.6.2.5. Notify the forecaster when the airfield opens and closes.

9.6.3. *Radar Approach Control (RAPCON) will:* Relay all Pilot Reports containing weather information to the forecaster.

JOSHUA D. LUNDEBY, Colonel, USAF
Commander, 71st Flying Training Wing

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 10-206, *Operational Reporting*, 28 June 2018

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AFMAN 13-204 Volume 1, *Management of Airfield Operations*, 22 July 2020

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DAFPD 10-25, *Emergency Management Program,*05 February 2024

DAFPD 15-1, *Air Force Weather Operations,* 28 May 2024

Installation Datasheet Page, *Memorandum of Understanding between the 71 Operations Support Squadron and 26th Operational Weather Squadron*, 14 August 2024 (reviewed annually)

Attachment 2

AIRFIELD AUTOMATED WEATHER SENSOR LOCATIONS

A2.1. General. Location of FMQ-19 sensor groups and backup observing point.

Figure A2.1. Airfield Automated Weather Sensor Locations.