# BY ORDER OF THE COMMANDER BARKSDALE AIR FORCE BASE

# BARKSDALE AIR FORCE BASE INSTRUCTION 15-101

30 MAY 2024

Weather

WEATHER SUPPORT PROCEDURES



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OPR: 2OSS/OSW Certified by: 2OSS/CC

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Supersedes: BARKSDALEAFBI15-101, 29 June 2021 Pages: 43

This instruction implements Air Force Policy Directive (AFPD) 15-1, Weather Operations, Air Force Instruction (AFI) 15-128, Weather Force Structure, Air Force Manual (AFMAN) 15-129, Air and Space Weather Operations. It describes weather support policies and procedures for Barksdale Air Force Base (BAFB). It applies to all 2d Bomb Wing (2 BW) units and tenant units at BAFB. This instruction applies to the Air National Guard and the Air Force Reserve. This instruction does not apply to the Civil Air Patrol. Maintain official records in accordance with AFI 33-322, Records management and Information Governance Program, and dispose of them in accordance with the Air Force (AF) Records Disposition Schedule found at <a href="https://www.afrims.amc.af.mil">https://www.afrims.amc.af.mil</a>. Contact supporting records managers as required for approval. 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. No waivers may be granted for any part of the publication. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force

## SUMMARY OF CHANGES

This document has been substantially revised and must be completely reviewed. Major changes include Changes to **Chapter 1**: updated Alternate Operating Location (AOL) and Operating hours. Changes to **Chapter 3**: updated Weather Impact Matrix. Changes to **Chapter 4**: Updated WOC

information (formerly known as the CAT). Changes to **Attachment 7**: updated to 2023 matrix review. Added WOC acronym.

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### Chapter 1

### **GENERAL INFORMATION**

### 1.1. General.

- 1.1.1. The 2d Operations Support Squadron Weather Flight (2 OSS/OSW) provides weather support to the 2 BW and all tenant units assigned to BAFB. The current assigned tenant units are: Air Force Global Strike (AFGSC) Headquarters, 8th AF Headquarters, 307th Bomb Wing (307 BW), 49th Test and Evaluation Squadron (49 TES), and 340th Weapons Squadron (340 WPS), 26th Operational Weather Squadron (OWS) and the Joint-Global Strike Operations Center (J-GSOC).
- 1.1.2. This instruction establishes requirements and procedures for weather support, which must be coordinated at the local level to meet mission needs. It consolidates weather support requirements and procedures for peacetime operations. It does not cover weather support procedures for emergency war order operations or certain other special operations/procedures. These are covered in other applicable plans/instructions/regulations.

### 1.2. Weather Operations.

- 1.2.1. General: 2 OSS/OSW focuses on providing tactical-level weather products and information needed for mission planning and execution during wartime, contingency, exercise, and peacetime operations, and is the go-to weather SME to provide tailored weather products for BAFB.
- 1.2.2. 2 OSS/OSW is located in the Integrated Operations Center (IOC), building 6402, room 137
- 1.2.3. Continuity of Operations (COOP): If weather operations are interrupted (e.g., power outage, natural disaster), the following actions will be taken:
- 1.2.4. If weather operations at 2 OSS/OSW are interrupted locally at the IOC, 2 OSS/OSW will move operations to the Alternating Operating Location (AOL). If the interruption limits the ability to utilize the AOL, 2 OSS/OSW will contact 26 OWS and pass on all responsibilities for Watch, Warning, and Advisory (WWA) support, Terminal Aerodrome Forecasts, and Mission Execution Products (MEPs) (e.g. DD 175-1) until a new duty location has been established in accordance with the 2 BW COOP plan.
- 1.2.5. The 2 OSS/OSW will continue weather operations at the 2 BW/CC's discretion if BAFB is no longer available to normal operations.
- 1.2.6. If 2 OSS/OSW cannot transmit an airfield observation via Joint Environmental Toolkit (JET), they will pass all observations via telephone to Air Traffic Control (ATC) and upload the observations via AFW-WEBS, or relay all observations via telephone to another weather unit (e.g., 26 OWS).

# 1.3. Geographic Area of Responsibility (AOR).

1.3.1. Surface weather observations, WWAs and long-range (3 to 5-day) forecasts provided by 2 OSS/OSW are valid for the area located within a 5 Nautical Mile (NM) radius around the center of the BAFB airfield (center of the runway) complex.

1.3.2. 2OSS/OSW provides MEP support and Mission-Scale Meteorological Watch (MISSIONWATCH) for all areas and routes in which BAFB flying units are conducting operations. Since the B-52 routinely conducts global power missions, the geographic AOR for flying weather support is considered worldwide.

# 1.4. Operating Hours/Duty Priorities.

- 1.4.1. 2OSS/OSW duty hours will be scheduled based on Air Traffic Control (ATC) hours. Staff Integration functions (e.g., liaison, climatic support, and training) are available M-F 0730L-1600L, unless closed for AFGSC Family Days, Federal Holidays, or Airfield Closures. Assuming a fully functional weather sensor AN/FMQ-19 Automatic Meteorological Observing System (AMOS), only automated weather observations are disseminated during scheduled airfield closures.
- 1.4.2. Non-Operating Hours: 2 OSS/OSW personnel will be scheduled and available for 1-hour recall during non-operating hours. 2 OSS/OSW will provide standby hours and contact numbers for the standby forecaster to the Airfield Operations Flight (2 OSS/OSA), ATC, and the Barksdale Command Post (CP) before 2 OSS/OSW closure.
- 1.4.3. 2 OSS/OSW leadership determines duty priorities based on mission requirements and hours of operations. **Table 1.1** lists the prioritization of weather station tasks:

Table 1.1. 2OSS/OSW Duty Priorities.

1	Wartime defense of the duty site
2	Perform Emergency War Order (EWO) Taskings
3	Execute 2 OSS/OSW Evacuation/Continuity of Operations Plan
4	Issue Weather Watches, Warnings and Advisories (WWAs) and Conduct Severe Weather Action Procedures (SWAP)
5	Respond to Aircraft Mishaps/Ground Emergencies
6	Respond to Pilot to Metro Service (PMSV) Contacts
7	Disseminate Urgent Pilot Report (PIREPs)
8	Answer Command Post (CP), ATC Tower, Secondary Crash
	Net hotlines
9	Provide Weather Information for Supervisor of Flying (SOF)
10	Disseminate Observations/TAF
11	Produce and Disseminate Missions Execution Products (MEPs)
12	Carry out all other ancillary shift duties (Duty Checklist)
13	Perform MISSIONWATCH Activities
14	Respond to additional support and transient requests
15	Weather Function Training
16	Accomplish Administrative Tasks

### 1.5. Weather Contact Information.

1.5.1. Contact information for 2 OSS/OSW is listed in **Table 1.2**.

| Building 6402 | 105 Lindbergh Road East | Suite 137 | Address | Barksdale AFB, LA 71110-2163 | (318) 456-3136/DSN 781-3136 | Forecaster/Operations | Backup landline (318) 456-1691 | Flight Commander | (318) 456-5735/DSN 781-5735 | Flight Chief | (318) 456-5759/DSN 781-5759 | Email | 20ssweather@us.af.mil

Table 1.2. 2OSS/OSW Contact Information.

1.5.2. Contact information for 26 OWS is listed in **Table 1.3**.

Table 1.3. 26OWS Contact Information.

Address	50 VANDENBERG AVE
	BARKSDALE AFB LA 71110-2163
Forecaster/Operations	(318) 529-2627 / DSN 331-2627
Flight Weather Briefings	(318) 529-2635 / DSN 331-2635
Flight Commander	(318) 529-2620 / DSN 331-2620
Flight Chief	(318) 529-2631 / DSN 331-2631
Director of Operations	(318) 529-2602 / DSN 331-2602
Email	26OWS.MISSIONBRIEF@US.AF.MIL

## 1.6. Dissemination Process of Weather Information.

- 1.6.1. The primary notification system for weather information is the JET web-based display. The secondary notification system is via automated phone calls, manual notification by weather personnel, and follow-up phone calls to ATC, CP, and 2 OSS/OSA (see **Table 1.4**.).
- 1.6.2. Automated Dissemination. JET is designated as the single point for weather personnel to disseminate weather products to both off-base and on-base agencies and/or as a secondary notification to the ATC during Information Display System 5 (IDS-5) outages through the following address <a href="https://awub-wxa-199p.area52.afnoapps.usaf.mil/atc/ATC.action">https://awub-wxa-199p.area52.afnoapps.usaf.mil/atc/ATC.action</a>.
- 1.6.3. Base agencies can view JET via an internet browser at the following address: <a href="https://owsjet26.us.af.mil/portal/private/guest\_barksdale/AreaWeather">https://owsjet26.us.af.mil/portal/private/guest\_barksdale/AreaWeather</a>. This dedicated account will display the automated weather sensors, latest observation, Terminal Aerodrome Forecast (TAF), and WWAs.
- 1.6.4. Report all JET outages to 2 OSS/OSW via the contact information listed in **Table 1.2**.

### 1.7. Alternate Operating Location (AOL).

1.7.1. In the event 2 OSS/OSW is forced to evacuate Building 6402, weather operations will relocate to Room 218 in The Warrior Center. The AOL telephone number is (318) 456-5971/5964 or DSN 781-5971/5964.

1.7.2. The JET system may be impacted by loss of power or lack of connectivity in the event 2 OSS/OSW is forced to evacuate Building 6402. If JET cannot be updated with current weather information, then weather personnel will transmit weather updates via AFW-WEBS and/or telephone to select base agencies. The priorities for notification are listed in **Table 1.4**.

Table 14	20SS	OSW N	Notification	Priorities

Priority	Agency	Contact Number (Area Code 318)
1	SOF/ATC	456-5222
2	CP	456-2152/2151
3	2 OSS/OSA	456-3226
4	26 OWS	529-2627

- 1.7.3. During AOL operations the following functions will be impacted:
  - 1.7.3.1. Pilot-to-Metro Service (PMSV): Upon arrival to the AOL, 2 OSS/OSW personnel will request ATC monitor the weather radio frequency and pass any information via telephone, if required.
  - 1.7.3.2. Mission Integration: Mission execution forecast products and briefing support may be altered. Units who do not have access to the AOL will receive their mission execution forecast products and briefs via 2 OSS/OSW SharePoint site: (<a href="https://usaf.dps.mil/sites/barksdale/2%20BW/2og/2oss/w/SitePages/Home.aspx">https://usaf.dps.mil/sites/barksdale/2%20BW/2og/2oss/w/SitePages/Home.aspx</a>), telephone, or e-mail.
  - 1.7.3.3. Staff Integration: Limited staff support will be available during AOL operations.
  - 1.7.3.4. Weather observations: Weather observation support will be degraded if the AN/FMQ-19 is unavailable during AOL operations. At a minimum, all weather elements in the observation will be taken using backup/tactical equipment. Wind direction, wind speed, and altimeter setting will be estimated due to use of the tactical equipment. Runway Visual Range (RVR) reading will not be available.

### 1.8. Severe Weather Action Procedures (SWAP).

- 1.8.1. 2 OSS/OSW will initiate SWAP via the SWAT (Severe Weather Action Team) when a weather warning is issued for the following severe weather criteria:
  - 1.8.1.1. Tornadic activity (or funnel clouds)
  - 1.8.1.2. Damaging Winds  $\geq$  50kts (not associated with thunderstorms)
  - 1.8.1.3. Severe Thunderstorms (hail  $\geq 3/4$  inch and/or damaging winds  $\geq 50$ kts)
  - 1.8.1.4. Freezing Precipitation (any intensity)
- 1.8.2. A SWAT leader will be appointed IAW 2 OSS/OSW Standard Operating Procedures (SOPs) and will ensure 2 OSS/OSW is postured appropriately to ensure implementation of all severe weather action requirements. 2 OSS/OSW will remain open and SWAP will remain in effect until the expiration or cancellation of applicable warnings.

- 1.8.3. 2 OSS/OSW will supplement automated observations IAW AFMAN 15-111, *Surface Weather Observations*.
- 1.8.4. Post-event procedures will include a verbal review of the events that occurred to 2 OSS/OSW leadership No Later Than (NLT) two duty days after the event. A forecast review may be directed IAW local guidance.

### 1.9. Release of Weather Information.

- 1.9.1. OPSEC and COMSEC will be considered prior to any release of weather information. Specific restrictions do not exist on the dissemination of weather information to other military agencies.
- 1.9.2. Information exchange between 2 OSS/OSW and the local National Weather Service (NWS) office is encouraged in the interest of public safety and resource protection.
- 1.9.3. Support to other non-military agencies, foreign governments or individuals will be coordinated with the Staff Judge Advocate and Public Affairs offices before information is provided. This restriction does not include routine weather information passed on automated weather circuits or information passed through the NWS in the interest of public safety.

### Chapter 2

### AIRFIELD SUPPORT FUNCTIONS

- **2.1. General.** The airfield support function focuses on providing decision makers and supported organizations with highly perishable, timely, accurate and relevant observed environmental information essential to flying and non-flying operations. Personnel executing the airfield support function will:
  - 2.1.1. Take, record, and disseminate surface weather observations for BAFB.
  - 2.1.2. Operate the AN/FMQ-19 AMOS to automatically collect and disseminate weather observations.
  - 2.1.3. Perform one of two types of weather watch: a Continuous Weather Watch or a Basic Weather Watch.
- **2.2.** Continuous Weather Watch: BAFB is classified as an Automated Observing Location. The AN/FMQ-19 is operated in full automatic mode to perform Continuous Weather Watch, providing Meteorological Aviation Report (METAR) and Aviation Selected Special Weather Report (SPECI) observations.

### 2.3. Basic Weather Watch (BWW).

- 2.3.1. The need for a BWW will be evaluated NLT 1-hour prior to the start of scheduled local flying, throughout the entire duration of local flying and until the last land of the day, and during conditions requiring AN/FMQ-19 augmentation (reference Section 2.3.2). During BWW, weather observers will recheck weather conditions at intervals not to exceed 20 minutes since the last observation/recheck, to determine the need for a SPECI observation.
- 2.3.2. BWW will be performed when any of the following conditions are observed to be occurring or are forecast to occur within 1 hour:
  - 2.3.2.1. Ceiling forms below or decreases to less than 1,500 feet.
  - 2.3.2.2. Visibility decreases to less than 3 miles.
  - 2.3.2.3. Precipitation (any form).
  - 2.3.2.4. Thunderstorms.
  - 2.3.2.5. Fog or Mist.
  - 2.3.2.6. All supplemental criteria specified in Table 2.1.
  - 2.3.2.7. During mandatory back-up of AMOS IAW AFMAN 15-111, paragraph 5.2
  - 2.3.2.8. In addition to the above minimum requirements, technicians will remain alert for any other changes in weather conditions requiring a SPECI observation as listed in AFMAN 15-111 Attachment 2, and Attachment 3 of this publication.
- 2.3.3. Weather personnel will also monitor local area observational and forecast products as often as necessary to keep abreast of changes expected to affect the geographic AOR.
- 2.3.4. The BWW will be conducted regardless of operating mode using sound risk management (RM) practices.

**Table 2.1. Mandatory Supplementary Weather Conditions.** 

# Mandatory Supplementary Weather Conditions (occurring)

Tornado, Funnel Cloud, Waterspout

Hail (greater than or equal to 1/4 inch (local warning criteria))

Volcanic Ash

Ice Pellets

# Mandatory Supplementary Weather Conditions - Remarks Section of Report

Funnel Cloud (Tornadic Activity B/ E(hh)mm LOC/DIR (MOV))

Snow Depth (only during controlled airfield hours)

Tower Visibility (A tower visibility remark is required when either the surface prevailing visibility or the control tower visibility is less than 4 statute miles (6000 meters) and the control tower visibility differs from the surface prevailing visibility by a reportable value)

# 2.4. Cooperative Weather Watch (CWW).

- 2.4.1. A CWW program between 2 OSS/OSW and 2 OSS/OSAT is established via 2 OSS Operating Instruction (OI) 15-1, *Cooperative Weather Watch*.
- 2.4.2. Reliable sources e.g., SFS, CES, MXG, OWS personnel will notify 2 OSS/OSW when any of the following are seen or occur within 5 NMs of Barksdale airfield:
  - 2.4.2.1. Tornado or funnel cloud.
  - 2.4.2.2. Hail begins or ends.
  - 2.4.2.3. Thunder or lightning.

### 2.5. Installation Data Page (IDP).

- 2.5.1. Weather support coordination actions between 2 OSS/OSW and 26 OWS are outlined on the 2 OSS/OSW IDP.
- 2.5.2. The IDP also includes a list of current BAFB Weather Warning, Watch, and Advisory (WWA) criteria and unique requirements and phone numbers pertinent to BAFB. The IDP is located on the 26 OWS webpage, under Technical Resources.

### 2.6. TAF.

- 2.6.1. The 2 OSS/OSW is responsible for creating and issuing a TAF for BAFB every eight hours (0400Z, 1200Z, and 2000Z). Each TAF will cover a 30-hour period. These forecasts apply to an area within a five NM radius of the center of the runway complex. The International Civil Aviation Organization (ICAO) airport code for Barksdale AFB is KBAD. See AFMAN 15-124, *Meteorological Codes*, Chapter 1 for code breakdown.
- 2.6.2. Specification and Amendment Criteria: TAF amendments are unscheduled forecast updates which revise the content of the current forecast. 2 OSS/OSW will amend the TAF as required. TAF specification and amendment criteria are specified in **Attachment 2** and reflected on the 2 OSS/OSW IDP.

- 2.6.3. Dissemination and availability: 2 OSS/OSW will disseminate the TAF via JET. If JET is inoperative, the TAF will be distributed longline (exact text) through Air Force Weather Web Services (AFW-WEBS). 2 OSS/OSW will notify ATC with the current forecast for flying purposes if the TAF does not populate properly.
- 2.6.4. Airfield Closure Disseminations Procedures: During a scheduled airfield closure, the 2 OSS/OSW will not disseminate a TAF. The last TAF prior to the closure will be annotated with the expected time the next TAF will be created.
- 2.6.5. If the airfield opens prior to the predetermined TAF times, a TAF starting at the airfield reopen time will be issued. Additionally, a TAF that aligns with the predetermined TAF times will be issued.

# 2.7. Meteorological Equipment.

- 2.7.1. AN/FMQ-19: The AN/FMQ-19 is a highly sophisticated data sensing, processing, and dissemination system. The system continually senses and measures the atmosphere for the following weather elements and parameters: wind, visibility, precipitation, obstructions to vision, cloud height, sky cover, temperature, dew point, altimeter, and lightning. The system will also format and report specific automated remarks. The AN/FMQ-19 processes sensor data once a minute and produces a weather observation.
- 2.7.2. The AN/FMQ-19 has two sensors, one located at each end of the runway. **Attachment** 4 lists the weather sensors and their approximate location on the airfield. Remote readouts can be obtained from JET.
- 2.7.3. The 2 OSS/OSW will use sound ORM practices when the FMQ-19 reports light drizzle/rain (-DZ/-RA) during periods of no observed precipitation and will only augment those observations if significant weather thresholds are crossed as set forth by AFMAN 15-111 and HQ USAF/A3WP.
- 2.7.4. Standing deficiency reports exist on the AN/FMQ-19 freezing precipitation sensor. Until these deficiencies are resolved, weather personnel will mitigate the risk of false freezing precipitation reports by augmenting the observation using manual observation.
- 2.7.5. All AN/FMQ-19 preventative maintenance and repairs will be conducted by Airfield's RADAR Airfield and Weather Services (RAWS) Flight.
- 2.7.6. 2 OSS/OSW will notify RAWS when an outage or issue with the AN/FMQ-19 sensor(s) is identified.

## 2.8. Weather Observations.

- 2.8.1. 2 OSS/OSW technicians are responsible for all BAFB weather observations and must ensure the AMOS generates an official observation from the official observing location between 55-59 minutes past the hour.
- 2.8.2. Official Observing Location: Automated observations are taken from the airfield weather sensors, reference **Attachment 4**. Augmented weather observations are taken on the east side of Hangar 9, beyond the overhang, but not beyond the first double white line on the flight line.
- 2.8.3. Types of Observations. Weather personnel make three types of weather observations: METAR, SPECI, and LOCAL.

- 2.8.3.1. METAR observations are taken between 40-55 minutes past the hour and transmitted between 55-59 minutes past the hour.
- 2.8.3.2. SPECI observations are taken when special criteria conditions exist. SPECI observations contain all elements included in a METAR observation, except for sea-level pressure. See AFMAN 15-111 Attachment 2, and Attachment 3 of this publication for SPECI criteria.
- 2.8.3.3. LOCAL or a Single-element LOCAL will only be taken during backup operations of the AN/FMQ-19 and IAW AFMAN 15-111. See **Attachment 3** for LOCAL criteria.
- 2.8.4. Limitations of weather observation capabilities:
  - 2.8.4.1. Augmented observations are hampered from the observation point due to ramp floodlights at night and the following obstructions from 150° through 330°:
    - 2.8.4.1.1. Trees from north to south (approximately 1 1/2 Statue Mile (SM)).
    - 2.8.4.1.2. Hangars and buildings to the south and west (less than 1/4 SM).
    - 2.8.4.1.3. Parked aircraft to the north and south.
    - 2.8.4.1.4. Presence of obstructions results in a lack of visibility markers beyond 2 SM.
  - 2.8.4.2. The AN/FMQ-19 substitutes time averaging of the sensor data for weather elements based upon spatial averaging techniques (e.g., sky cover and visibility). All other elements evaluated are based on sensor data within 10 minutes or less of the actual time of observation.
  - 2.8.4.3. Radar "Cone of Silence": The WSR-88D radar is located at Shreveport Regional Airport, approximately 10 NM southwest of Barksdale AFB, and is blind to any weather directly over the radar dish and extending upward, in an inverted cone shape. This blind spot may impact thunderstorm and Radar indicated funnel cloud detection within a 10 NM radius of the WSR-88D radar.
  - 2.8.4.4. Lightning Detection: 2 OSS/OSW relies on the AN/FMQ-19 for local lightning data. 2 OSS/OSW supplements using various national lightning detection networks via the internet. These networks only detect about 95 percent of the cloud-to-ground lightning strikes. Lightning detection networks cannot detect in-cloud, cloud-to-cloud, or cloud-to-air lightning strikes. The absence of detected strikes does not assure absence of lightning.

### 2.9. Pilot-to-Metro Service (PMSV) and Pilot Reports (PIREPs).

- 2.9.1. 2 OSS/OSW operates a PMSV radio to provide updated weather information to airborne aircrews and to receive PIREPs. Ultra High Frequency (UHF) channel 227.4 MHz is continuously monitored.
- 2.9.2. Aircrews should relay PIREPs of significant weather conditions encountered during takeoff/climb-out, approach, landing, and in the local pattern. In the interest of flight safety, it is important for all hazardous or unforecasted weather conditions be promptly reported.
- 2.9.3. PIREPs can be passed directly through PMSV, ATC personnel or Supervisor of Flying (SOF). ATC or SOF will relay PIREPs to 2 OSS/OSW within five minutes of receipt.

2.9.4. 2 OSS/OSW will disseminate PIREPs locally whenever the reported weather conditions could impact safety of flight operations. These conditions include, but are not limited to, low-level wind shear, icing of any type or intensity, moderate or greater turbulence, or any other significant weather phenomena.

# 2.10. Weather Watch, Warning, and Advisories (WWAs).

- 2.10.1. WWAs should give base agencies sufficient notice to implement preventative safety measures.
- 2.10.2. 2 OSS/OSW is responsible for issuing all WWAs for BAFB. This includes observed warnings and advisories and forecasted watches, warnings, and advisories.
- 2.10.3. All WWAs, unless stated otherwise, are issued for the immediate vicinity (within 5 NM) of the Barksdale aerodrome complex.
- 2.10.4. WWAs will be issued IAW AFMAN 15-129 and local requirements.
- 2.10.5. WWAs are issued via Integrated Weather Warning Capability (IWWC) using a standard numbering scheme resident in the software. The text of WWAs will contain a WWA number, a specific valid time period (until further notice (UFN) for observed products) and expected conditions. A flowchart of WWA Dissemination is located in **Figure A5.1**.

### 2.10.6. Weather Watch:

- 2.10.6.1. A weather watch is a special notice provided to supported BAFB units alerting them to the potential for hazardous weather conditions. The weather watch is a "heads up" and should trigger consideration for implementing required force protection and risk management decisions. Watches normally precede a weather warning.
- 2.10.6.2. Weather watches are issued for the criteria listed in **Table 2.2**. Deviations to the standard weather watch criteria are due to local requirements.

Table 2.2. Forecast Weather Watch Criteria and Minimum Desired Lead-Times.

Watch Criteria	Values	Lead Time
1. Tornado	Potential Exists At Barksdale AFB	As Potential Warrants
2. Severe Thunderstorm	Winds ≥ 50 KTS and/or Hail ≥ 3/4 inch	As Potential Warrants
3. Moderate Thunderstorm	Winds $\geq$ 35 but $\leq$ 50 KTS and/or $\geq$ 1/4	As Potential Warrants
	but < 3/4 inch	
4. Damaging Winds	Winds not associated w/ TSTM ≥ 50	As Potential Warrants
	KTS	
<ol><li>Strong Winds</li></ol>	Winds not associated w/ TSTM $\geq$ 35 but	As Potential Warrants
	< 50 KTS	
6. Lightning	Potential Within 5 NM	30 min
<ol><li>Freezing Precipitation</li></ol>	At Barksdale AFB Any Intensity	As Potential Warrants
8. Heavy Snowfall	≥ 2 inches within 12 hrs	As Potential Warrants
9. Heavy Rainfall	≥ 2 inches within 3 hrs	As Potential Warrants

## 2.10.7. Weather Warning:

- 2.10.7.1. A weather warning is a special notice provided to Barksdale personnel when weather conditions within the forecast area exist, are imminent, or are highly likely to occur of such intensity to pose a hazard to personnel, resources, and property.
- 2.10.7.2. Weather warnings are issued for the criteria listed in **Table 2.3**. Deviations to the standard weather warning criteria are due to local requirements.

Table 2.3. Forecast Weather Warning Criteria and Minimum Desired Lead-Times.

Warning Criteria	Values	Lead Time
1. Tornado or Funnel Cloud	Within 5 NM	15 min
2. Severe Thunderstorm	Winds $\geq$ 50 KTS and/or Hail $\geq$ 3/4 inch	60 min
3. Moderate Thunderstorm	Winds $\geq$ 35 but $<$ 50 KTS and/or $\geq$ 1/4 but $<$ 3/4	60 min
	inch	
4. Observed Lightning	Within 5 NM	As observed
Warning		
<ol><li>Freezing Precipitation</li></ol>	At Barksdale AFB any intensity	60 min
6. Damaging Winds	Winds not associated w/ TSTM ≥ 50 KTS	60 min
7. Strong Winds	Winds not associated w/ TSTM $\geq$ 35 but $<$ 50	60 min
	KTS	
8. Heavy Rain	≥ 2 inches within 3 hrs	60 min
9. Heavy Snow	≥ 2 inches within 12 hrs	60 min

### 2.10.8. Weather Advisory:

- 2.10.8.1. Weather advisories are a special message which notifies Barksdale users of an established weather condition(s) effecting operations is observed or is expected to occur.
- 2.10.8.2. With the exception of the forecast 25-34 knots wind advisory, weather advisories are issued for the observed criteria listed in **Table 2.4** and once issued will be valid UFN.
- 2.10.8.3. More than one advisory may be in effect at the same time, but only one will be in effect for a particular phenomenon at the same time.
- 2.10.8.4. Exception: Observed winds great than or equal to 20 knots and observed winds greater than or equal to 30 knots will both be issued if wind speeds are observed greater than or equal to 30 knots.

Advisory Criteria	Values	Lead Time
Wind Advisory	Winds $\geq$ 25 but $<$ 35 KTS	30 min
2. Wind Advisory	Winds ≥ 20 KTS	As observed
<ol><li>Wind Advisory</li></ol>	Winds ≥ 30 KTS	As observed
6. Thunderstorms	Within 10 NM	As observed
7. Induction Icing	OAT ≤ 47°F and visible	As observed
	moisture w/vis ≤1 or DP w/in	
	4°F of OAT when visible	
	moisture is not present	
8. Low Visibility	< 1 SM	As observed (Alert RD/RE only)
9. LLWS	w/in 5 NM SFC-020ft AGL	As observed (Alert RD/RE only)
10. Turbulence	MDT-SVR below 10kft w/in	As observed (Alert RD/RE only)
	50 NM	
11. Icing	MDT-SVR below 10kft w/in	As observed (Alert RD/RE only)
	50 NM	
12. Crosswinds	> 20 KTS	As observed (Alert RD/RE only)
13. Crosswinds	> 12 KTS (wet runway)	As observed (Alert RE only)
14. Hail	< 1/4 in	30 min (Alert RD/RE only)
15. Snowfall	≥ Trace but <2in	120 min (Alert RE only)

Table 2.4. Observed Weather Advisory Criteria and Minimum Desired Lead-Times.

### 2.10.9. WWA Dissemination:

- 2.10.9.1. 2 OSS/OSW will initiate WWA dissemination to the primary dissemination agencies listed in **Attachment 5**.
  - 2.10.9.1.1. Primary WWA dissemination method is through the JET computer display. Each agency on the dissemination net then makes additional notifications to their respective agencies.
  - 2.10.9.1.2. Secondary WWA dissemination method is an automated phone call initiated through JET. In the event JET is inoperable, 2 OSS/OSW will call the ATC, CP, and 2 OSS/OSA. These agencies are responsible in-turn for notifying their respective agencies.
- 2.10.9.2. The forecaster will always telephone the CP to disseminate a tornado warning in order to rapidly initiate the Base Public Address Warning System (BPAWS) tornado siren.
- 2.10.9.3. 2 OSS/OSW will verify all WWA notifications are received by ATC, 2 OSS/OSA and CP. This will be accomplished IAW local SOPs.
- 2.10.9.4. BAFB severe weather response actions are highlighted in **Attachment 6** and BAFB Installation Emergency Management Plan (IEMP) 10-2, *Barksdale AFB Installation Emergency Management Plan*, Tab A H, Appendix 1 to Annex B.

### 2.11. Weather Watches, Warnings, and Advisories during Airfield Closure.

- 2.11.1. 2 OSS/OSW is still responsible for WWA dissemination during Airfield closure hours.
- 2.11.2. However, certain WWAs do not have a recipient during airfield closure hours.
- 2.11.3. The WWAs that will not be issued during airfield closure hours are:

- 2.11.4. Observed Thunderstorms within 10 nm.
- 2.11.5. Observed Induction Icing.
- 2.11.6. When all other WWA criteria is forecast to occur or occurring, a stand-by member will come into the 2 OSS/OSW primary duty location and provide WWA dissemination until the threat is over.
- 2.11.7. SWAT will also be activated during Airfield Closure hours when the potential warrants.

# 2.12. Flight Information Publication (FLIP) Reviews.

- 2.12.1. 2 OSS/OSW will coordinate FLIP data changes with the Airfield Manager or designee. FLIP changes are required for the following criteria:
  - 2.12.1.1. Change in Operating Hours.
  - 2.12.1.2. Change in PMSV frequency.
  - 2.12.1.3. Change in contact number for supporting OWS.
  - 2.12.1.4. Change in ceiling or visibility thresholds.
  - 2.12.1.5. Change in pertinent information to observing operations (values being estimated due to primary equipment outage, restricted visibility due to trees, buildings, etc.).
- 2.12.2. A Notice to Airmen (NOTAM) will be sent until requested changes have been incorporated into the appropriate publication.
- 2.12.3. 2 OSS/OSW Airfield NCOIC or designee will review all applicable FLIP entries every time an update is issued.

### Chapter 3

### MISSION INTEGRATION FUNCTIONS

- **3.1. General.** 2 OSS/OSW operations are configured in a manner to maximize the ability to reliably "inject accurate weather information at the right time every time" into the 2 BW and tenant units flying and non-flying organizations mission planning, execution, and assessment processes.
  - 3.1.1. In order to effectively provide actionable weather intelligence to commanders and mission planners, 2 OSS/OSW must be included in supported units planning processes at the appropriate time.
  - 3.1.2. 2 OSS/OSW will focus training on commonly used Military Operating Areas (MOA) and Air Refueling (AR) tracks provided by mission planners.
    - 3.1.2.1. During training missions, some of the more common used MOAs are Lancer, Smokey Hill, Utah Test and Training Range (UTTR), Caddo, and Hog. Some of the more common AR tracks used are AR104, AR116, AR101, AR313, and AR112.
    - 3.1.2.2. Common alternate airfields used by Barksdale AFB flying units are Tinker AFB (KTIK), McConnell AFB (KIAB), Dyess AFB (KDYS), Minot AFB (KMIB), Navy Fort-Worth (KNFW), Little Rock AFB (KLRF), Columbus AFB (KCBM), Altus AFB (KLTS), Eglin AFB (KVPS), Robins AFB (KWRB), Ellsworth AFB (KRCA) and Whiteman AFB (KSZL).
  - 3.1.3. 2 OSS/OSW will dedicate one or more weather technicians to perform mission integration functions throughout the entire mission planning/execution process. 2 OSS/OSW personnel are responsible for providing tailored mission forecast products.
    - 3.1.3.1. 2 OSS/OSW will supply qualified weather personnel to support exercise and deployment requirements, as manning allows.
    - 3.1.3.2. If 2 OSS/OSW cannot provide weather support due to manning constraints, 2 OSS/OSW will arrange for weather support via the OWS or another weather flight.
  - 3.1.4. 2 OSS/OSW can support briefings up to Top Secret.

### 3.2. Weather Impact Matrix.

- 3.2.1. Mission limiting environmental thresholds and sensitivities applicable to BAFB operations and weapons systems are identified in the 2 OSS/OSW Weather Impact Matrix (Attachment 7) and are reviewed annually.
- 3.2.2. Weather impacts are defined using a RED/AMBER/GREEN stoplight chart format (Table 3.1.). Attachment 7 further defines the RED/AMBER/GREEN stoplight to the amount of degradation the B-52 may experience due to the environmental conditions expected.

Table 3.1. Weather Operational Impacts.

RED	Unfavorable	SEVERE OPERATIONAL IMPACT
AMBER	Marginal	MODERATE OPERATIONAL IMPACT
GREEN	Favorable	LITTLE TO NO OPERATIONAL IMPACT

3.2.3. Weather thresholds will be integrated into mission weather products (see **paragraph 3.3**) where appropriate. Thresholds will be reevaluated during the planning phase of each mission/ operation and can/will be adjusted as needed by mission commanders and 2 OSS/OSW personnel in order to ensure mission success.

### 3.3. Mission Weather Products (MWPs).

- 3.3.1. MWP Description:
  - 3.3.1.1. MWPs are designed to fuse theater scale products with BAFB mission requirements in order to exploit weather conditions. MWPs can include: Mission Execution Forecasts (MEFs), long range forecasts, mission planning briefs, environmental inputs to mission analysis, weather staff estimates, climatology analysis, and any other weather products which meet the need of BAFB units.
  - 3.3.1.2. MWPs are developed utilizing the Mission Execution Forecast Process (MEFP). The 2 OSS/OSW MEFP is defined by local SOPs and AFMAN 15-129.
- 3.3.2. MWPs produced by 2 OSS/OSW will be based on specific forecasted time scales.
  - 3.3.2.1. Extended Long-Range Forecast: 384 hours 120 hours (16 days 5 days):
    - 3.3.2.1.1. High-fidelity weather forecasts beyond 120 hours are typically unreliable. However, weather forecasters can generally predict impacts to operations based on climatological data.
    - 3.3.2.1.2. Climatology Services. Upon request, 2 OSS/OSW staff personnel will produce climatological analysis of mission thresholds, weather impacts, or other environmental information in order for mission planners to effectively integrate weather information into their planning process.
  - 3.3.2.2. Long Range Forecast (5 Day): 120 hours 48 hours (5 days 2 days).
    - 3.3.2.2.1. 2 OSS/OSW personnel produce a 5-day long range forecast of key weather elements.
    - 3.3.2.2.2. The long-range forecast will be posted on the 2 OSS/OSW SharePoint (<a href="https://usaf.dps.mil/sites/barksdale/2%20BW/2og/2oss/w/SitePages/Home.aspx">https://usaf.dps.mil/sites/barksdale/2%20BW/2og/2oss/w/SitePages/Home.aspx</a>) NLT 0500L daily.
  - 3.3.2.3. Mission Planning Weather (MPW): 48 4 hours.
    - 3.3.2.3.1. 2 OSS/OSW personnel will produce MPW outlook forecasts of weather conditions and impacts NLT 2000L daily for all missions listed in ePEX.
    - 3.3.2.3.2. MPW outlook forecasts will be posted to the 2 OSS/OSW SharePoint site, <a href="https://usaf.dps.mil/sites/barksdale/2%20BW/2og/2oss/w/SitePages/Home.aspx">https://usaf.dps.mil/sites/barksdale/2%20BW/2og/2oss/w/SitePages/Home.aspx</a>, and updated, as required.
    - 3.3.2.3.3. MPWs will contain the following data:
      - 3.3.2.3.3.1. Departure weather forecast: Temperature, surface wind, pressure altitude, ceiling/visibility, temperature deviation, solar/lunar data, cross winds, and climb wind forecasts.

- 3.3.2.3.3.2. Enroute/Target Area Weather: Continental United States (CONUS) forecast surface prognostic chart, flight level winds, hazards, clouds, and ceiling and visibility forecasts.
- 3.3.2.4. 2 BW & 307 BW Flying MEF: 4 hours prior to take-off land.
  - 3.3.2.4.1. MEFs will be posted on the 2 OSS/OSW SharePoint NLT 30 minutes prior to aircrew show time as listed in ePEX. B-52 aircrews will be provided a copy at the step desk, if requested.

### 3.3.2.4.2. MEF Amendment:

- 3.3.2.4.2.1. Forecasters will conduct MISSIONWATCH on all MEFs and will only amend when weather hazards (based on mission profile) are observed or expected and was not forecast or was forecast and is no longer occurring or expected.
- 3.3.2.4.2.2. Amendments will be uploaded to the 2 OSS Weather SharePoint page.
- 3.3.2.4.2.3. Once crews are airborne, 2 OSS/OSW will provide all updates to the appropriate SOF or control AOC who will relay information to aircrew(s).

### 3.4. Mission Debriefs.

- 3.4.1. All local aircrews receiving an initial weather briefing from 2 OSS/OSW will complete a post-mission debrief describing weather conditions encountered, accuracy of forecast, and impact of the weather and weather forecasts on mission effectiveness IAW AFI 11-2B-52V3\_BARKSDALESUP, *B-52 Operations Procedures*.
- 3.4.2. Mission debriefs may be conducted in person (verbally), telephonically, via SOF, electronically or in writing using the Mission Weather Feedback form.

### 3.5. Flight Weather Briefing (FWB).

- 3.5.1. Provide service IAW posted duty priorities for walk-in requests from transient aircrews.
- 3.5.2. The 2 OSS/OSW will not turn away any transient aircrew who asks for weather in person.
- 3.5.3. All transient aircrew weather support will utilize DD Form 175-1 Flight Weather Brief or a verbal update with relevant weather data.

### 3.6. Tactical Decision Aids (TDAs).

- 3.6.1. 2 OSS/OSW can provide TDAs for the employment of electro optic/infrared weapon systems and laser target designation systems.
- 3.6.2. Detailed mission-specific Target Acquisition Weather Software (TAWS) products will be generated upon aircrew request and critical mission profile data to run the TAWS program is provided.
- 3.6.3. Output includes, but is not limited to, lock-on ranges, optimum viewing direction, thermal crossover times, target/background temperatures, hot-cold list, and solar/lunar data.
- 3.6.4. Non-routine TAWS requests require six hour notification at the appropriate classification level via web, phone, or in person.

### 3.7. Hurricane/Tropical Storm Support.

- 3.7.1. 2 OSS/OSW serves as the primary point of contact (POC) for the 2 BW to coordinate all tailored official forecasts provided to BAFB units/agencies.
- 3.7.2. 2 OSS/OSW uses the National Hurricane Center (NHC) tropical cyclone forecasts (Atlantic, Eastern Pacific) (<a href="https://www.nhc.noaa.gov/">https://www.nhc.noaa.gov/</a>), Joint Typhoon Warning Center (Western Pacific) (<a href="https://www.metoc.navy.mil/jtwc/jtwc.html">https://www.metoc.navy.mil/jtwc/jtwc.html</a>), and Tropical Cyclone Threat Assessment Product issued by the 26 OWS (<a href="https://26ows.us.af.mil/product/tropical/">https://26ows.us.af.mil/product/tropical/</a>) to tailor and produce mission forecast products. Tailoring may include specific local effects such as terrain or relative position to the storm.
  - 3.7.2.1. When an NHC forecast track has a tropical system within close proximity or making landfall along the Atlantic coast or Gulf of Mexico, a direct email will be sent to 2 BW/CC, 2 OG/CC, 2 BW/XP, et al. IAW local SOPs.
  - 3.7.2.2. Updates will be provided daily or when significant deviations occur.
  - 3.7.2.3. When BAFB becomes eligible to receive HUREVAC evacuees, 2 OSS/OSW will provide a briefer to all HUREVAC and CAT/virtual WOC updates as directed by the 2 BW/CC.
- 3.7.3. 48 72-hour outlooks contain a high degree of uncertainty and are for planning purposes only. No deviation from the forecast position, track, movement, maximum wind speed, or intensity trend obtained from the above agencies is authorized.
- 3.7.4. 2 OSS/OSW will initiate SWAP, as necessary, IAW local SOPs and section 1.8 of this publication.

# 3.8. Space Weather Support.

- 3.8.1. General: 2 OSS/OSW will integrate space weather support products into all BAFB mission requirements. The 2d Weather Group at Offutt AFB produces and disseminates all space weather analysis, forecasts, warnings, and advisories. 2 OSS/OSW does not possess inhouse capability to create products, but only interprets and relays data in order to effectively integrate into the mission planning/execution processes.
- 3.8.2. The following space weather products are available upon request:
  - 3.8.2.1. Space Weather events and impacts.
  - 3.8.2.2. Daily Space Indices (Anomalous Propagation, F10, sunspot number, X-ray background).
  - 3.8.2.3. High Altitude Radiation Dosage.
  - 3.8.2.4. Ionospheric Conditions Affecting High Frequency Propagation, Ultra High Frequency Satellite Communications, and the Global Positioning System.

### 3.9. Mission Planning Cell (MPC).

- 3.9.1. 2 OSS/OSW will support 2 BW MPCs when requested. The primary purpose of a weather technician is to advise the MPC Team Chief on any weather factors which may influence mission success.
- 3.9.2. MPC products/inputs will include, but are not limited to:

- 3.9.2.1. Enroute and target area flight level winds.
- 3.9.2.2. TAWS produced TDAs.
- 3.9.2.3. 96-hour mission and target area impact forecast.

### 3.10. MISSIONWATCH.

- 3.10.1. 2 OSS/OSW will conduct a continuous MISSIONWATCH of all routes and flying areas used by 2 BW and tenant units.
- 3.10.2. The 2OSS/OSW will notify the applicable SOF, via phone call or physical visit, of any significant changes in the MEF or other previously briefed weather conditions.

# 3.11. Coordinated Weather Operations.

- 3.11.1. When BAFB units operate with one or more other military units (e.g. air refueling wings, Tanker Airlift Control Center (TACC), etc.), a lead weather unit (LWU) will be identified IAW AFMAN 15-129.
- 3.11.2. OSS/OSW is the LWU when the 2 BW or tenant units are the C2 element with tactical control (TACON) of the support asset, mission, or operation. As the LWU, the 2 OSS/OSW will at a minimum:
- 3.11.3. Coordinate with all units providing weather services to operational units participating in the mission.
- 3.11.4. Coordinate with the regional OWS to define MWPs (e.g. Joint Operating Area Forecast charts, etc.), format (e.g. text, graphics), delivery method/times, and amendment and update criteria (if required) based on mission critical air and space thresholds for all weapons systems in the mission.
- 3.11.5. Provide, MISSIONWATCH, and update the controlling MEF as required based upon mission critical thresholds.

### 3.12. NAOC/USSTRATCOM C3 Aircraft Support.

- 3.12.1. 2 OSS/OSW will provide support for National Airborne Operations Center (NAOC) per the Barksdale Rebound Echo Support Plan, and for United States Strategic Command (USSTRATCOM) airborne alert command, control, and communications (C3) aircraft per Barksdale Reflex Delta Support Plan.
- 3.12.2. Additional advisories issued for NAOC/USSTRATCOM C3 aircraft that are on alert status are listed and annotated in **Table 2.4**.

### Chapter 4

### STAFF INTEGRATION FUNCTIONS

**4.1. General.** The 2 OSS/OSW Staff Integration Function (SIF) provides commanders, staff, and operations personnel with weather information for daily planning activities and critical operational decision making. The Flight Commander or designated members of 2 OSS/OSW are responsible for the content of staff briefings. Requests for off-station briefings will be considered on a case-by-case basis IAW available manning and duty priorities. Off-station briefings may be minimized or cancelled during exercises and contingencies.

# 4.2. Operating Plan (OPLAN) Review/Support.

- 4.2.1. 2 OSS/OSW Flight Commander or his/her representative will provide inputs to applicable OPLANs during an OPLAN review.
- 4.2.2. 2 OSS/OSW Flight Commander will ensure the flight is postured to support all OPLAN required taskings and support requirements.

# 4.3. Briefing Support.

- 4.3.1. Barksdale Staff Meeting:
  - 4.3.1.1. The 2 BW/CC staff meeting is bi-weekly (or as dictated by the 2 BW/CC). The 2 OSS/OSW will attend these briefings based upon 2 BW/CC direction. As a result, the 2 OSS/OSW must have a member ready to brief with little advance notice. The standard briefing format will consist of an extended 5-day Barksdale Weather Forecast unless a different product is requested based on leadership.
  - 4.3.1.2. Additional slides can be added to highlight information of interest to the commander such as a radar picture showing approaching thunderstorms or snowfall, CONUS satellite picture, Atlantic hurricane/Pacific typhoon forecasts affecting deployed assets/personnel, or weather information for areas of the world where 2 BW operations are occurring.
- 4.3.2. 2 BW Wing Operations Center (WOC):
  - 4.3.2.1. The 2 OSS/OSW Flight Commander, or designated representative, will serve as a member of the 2 BW WOC IAW 2 BW Instruction 10-2501, *Barksdale AFB Recall Plan and Wing Command Center Operations Plan*.
  - 4.3.2.2. The 2 OSS/OSW Flight Commander and Flight Chief will ensure participating members receive 2 BW AtHoc notifications for WOC recall IAW local guidance.
  - 4.3.2.3. Upon initial WOC recall and at subsequent WOC briefings thereafter, the 2 OSS/OSW Flight Commander, or his/her designated representative, will brief the weather and mission impacts for current operations.
  - 4.3.2.4. As a minimum, a current satellite, radar picture, and space weather impacts will be briefed highlighting the weather at BAFB and any geographic areas of interest, a depiction of mission impacts due to weather conditions, and an extended forecast for BAFB and any other locations of interest.

- 4.3.2.5. WOC briefings will be executed on NIPR. However, WOC briefings will have the capacity to be created and briefed strictly on SIPRNET, unless capability does not exist.
- 4.3.3. Instrument Refresher Course (IRC).
  - 4.3.3.1. Provide weather expertise for Instrument Refresher Program briefings upon request.
  - 4.3.3.2. See AFMAN 11-210, *Instrument Refresher Program*, for further information.

# 4.4. Wing Inspection Team (WIT) Support.

- 4.4.1. 2 OSS/OSW will provide at least two personnel as WIT members. Normally the Flight Commander, Wing Weather Officer, and/or Flight Chief, will serve on the WIT.
- 4.4.2. WIT support will be offered for the following exercises/inspections:
  - 4.4.2.1. Unit Evaluation Exercise/Inspection (UEE/UEI).
  - 4.4.2.2. Commanders Inspection Program (CCIP).
  - 4.4.2.3. Nuclear Operational Readiness Exercise/Inspection (NORE/NORI).
  - 4.4.2.4. Nuclear Surety Exercise/Inspection (NSE/NSI).
  - 4.4.2.5. Natural Disaster Exercises IAW AFI 10-2501\_AFGSCSUP, Air Force Emergency Management Program Planning and Operations.
- 4.4.3. Weather support, data, mission weather products, and scenarios will use real-world/real-time information during exercises/inspections.

# 4.5. Emergency/Crisis Action Response.

- 4.5.1. SIF weather personnel liaise with 2 BW leadership in cases of emergency/crisis.
- 4.5.2. The level of support provided to 2 BW leadership during a ground emergency or aircraft mishap is dictated in BAFB IEMP 10-2.
- 4.5.3. Chemical, Biological, Radiological, and Nuclear (CBRN):
  - 4.5.3.1. The Flight Commander and/or Flight Chief serve as the 2 BW weather subject matter experts to CBRN operations IAW AFI 10-2501, *Air Force Emergency Management Program Planning and Operations*, AFI 15-128, AFMAN 10-2503, *Chemical, Biological, Radiological, and Nuclear Operations*, AFMAN 15-129, and Joint Publication 3-11.
  - 4.5.3.2. The Flight Commander and/or Flight Chief will coordinate with the 2d Civil Engineer Squadron Readiness and Emergency Flight (2 CES/CEX), Fire Emergency Services (2 CES/CEF), and 2d Operational Medical Readiness Squadron, Bioenvironmental Engineering (2 OMRS/SGXB) to optimize weather data input to the 2 BW's CBRN hazard prediction model [Joint Effects Model (JEM).]
    - 4.5.3.2.1. IAW AFI 15-128, installation weather flight advises and provides the most accurate & representative surface observations and/or alphanumeric forecasts appropriate to a particular CBRN event as the primary weather input to JEM.
    - 4.5.3.2.2. 2 OSS/OSW personnel will work with 2 CES/CEX or other emergency agencies to ensure the supported commander gets a consistent weather picture to aid in decision making.

4.5.3.2.3. Upon request, 2 OSS/OSW will obtain/provide Chemical Downwind Messages (CDMs) from the 26 OWS or AFW-WEBS website IAW local guidance.

# 4.6. Barksdale AFB "Defenders of Liberty" Airshow.

- 4.6.1. During the bi-annual BAFB Air Show, in addition to normal 2 OSS/OSW operations and airfield support functions, 2 OSS/OSW will also provide:
  - 4.6.1.1. A representative to serve on the airshow planning committee.
  - 4.6.1.2. A pre-show weather briefing for all aerial performers on Day 1 of the airshow and a mass weather take-off briefing on the day after the airshow. This briefing will normally be conducted at Building 6448, Hoban Hall.
  - 4.6.1.3. Local MEF and/or DD Form 175-1 weather briefings for all performing aircraft.
- 4.6.2. 2OSS/OSW will support any other operations/exercises taking place during the BAFB Air Show timeframe and allocate personnel appropriately.

# 4.7. Climatology Support.

- 4.7.1. Monthly climatic data for BAFB will be posted to the 2 OSS/OSW SharePoint. Data will include daily and monthly high/low temperatures, mean temperature, heating degree days, cooling degree days, total precipitation, total snowfall, days with thunderstorms, days with fog, peak wind direction, and peak wind speed.
- 4.7.2. Other climatological data will be available upon request including data for other locations. Requests should be made at least two business days in advance in order to allow 2 OSS/OSW to research and compile applicable data.
- **4.8. Supervisor of Flying (SOF) Training/Orientation.** 2 OSS/OSW will provide weather orientation for newly assigned SOF personnel on applicable weather products, and other topics as arranged by 2 OSS/OSW, 2 OG Standardization and Evaluation (2 OG/OGV), and other supported unit's standardization and evaluation sections. Training/orientation will be coordinated with 2 OSS/OSW and conducted Monday-Friday.
- **4.9. OPREP-3 Reporting.** 2 OSS/OSW will assist CP with weather-related OPREP-3 reports and provide the CP with all pertinent weather information as requested. Weather inputs to the OPREP-3 will be sent to AFGSC/A3OW.

# Chapter 5

# MISSION REQUIREMENTS OF SUPPORTED AGENCIES AND RECIPROCAL SUPPORT

**5.1. General.** 2 OSS/OSW supports numerous units with diversified missions assigned to BAFB. Most units have common requirements regarding MWPs, TAFs, and WWA support for resource protection, as listed in **Chapter 3**. Units with more specific requirements are listed below. Impacts and base responses to weather conditions warranting a WWA are listed in **Attachment 6**. Known mission limiting weather factors are listed in **Attachment 7**. The agencies listed in this chapter will also provide services and information to 2 OSS/OSW as described below.

## 5.2. 2d Bomb Wing (2 BW) Staff.

5.2.1. Weather Support Requirements. 2 OSS/OSW will provide detailed planning forecasts, long range outlooks, climatological assessments, and other products for any AOR as requested by local commanders for situational awareness, resource protection, and decisions impacting operations and mission accomplishment.

### 5.3. 2d Bomb Wing, Plans and Programs (2 BW/XP) will:

- 5.3.1. Conduct periodic exercises, IAW AFI 10-229, tailored to upcoming seasonal weather or other environmental concerns in order to evaluate the timeliness of personnel notification and response capability for both on and off-base agencies and geographically separated units. Integrating these events with other base exercises is encouraged.
- 5.3.2. Provide the earliest possible notification of requirements for WOC weather briefings associated with exercises/contingencies.

### 5.4. 2d Bomb Wing, Safety Office (2 BW/SE).

- 5.4.1. 2 OSS/OSW will provide a representative to support accident and/or safety investigations upon request.
- 5.4.2. 2 OSS/OSW will collect, archive, and provide weather data to support accident and mishap investigations upon request.

### 5.5. Barksdale Command Post (CP) will:

- 5.5.1. Serve as the 24-hour point of contact for acknowledging receipt, and then contacting designated BAFB agencies to ensure receipt of all WWAs.
- 5.5.2. Activate the BPAWS immediately upon notification by 2 OSS/OSW personnel that a Tornado Warning has been issued.
- 5.5.3. Relay WWA in **Table 5.1**. to BAFB personnel via the AtHoc notification system.

### Table 5.1. WWA AtHoc Notification Criteria.

WWA AtHoc Notification Criteria
Observed Lightning within 5 NM
Severe Thunderstorms
Damaging Winds (Winds ≥50 knots)
Tornados or Funnel Clouds

- 5.5.4. Use JET to relay objectively measured variables (i.e., current pressure altitude, winds, and temperature only) and active runway to aircrew during an alert force response.
- 5.5.5. Notify 2 OSS/OSW of CP JET outages. When JET is not operational, weather information will be disseminated via telephone.
- 5.5.6. Notify 2 OSS/OSW of any weather-related mission impacts or damage to BAFB. This includes a copy of any weather-related OPREP-3 summary reports.

### 5.6. 2d Communications Squadron (2 CS).

- 5.6.1. 2 OSS/OSW will report all equipment outages to 2 CS Cyber Operations Center (456-2666, 1, 1). The report will include the following information:
  - 5.6.1.1. Equipment type.
  - 5.6.1.2. Time of outage.
  - 5.6.1.3. Description of problem.
  - 5.6.1.4. Mission impact statement.
- 5.6.2. 2 OSS/OSW will advise equipment restoration priority (high, medium, or low) to the Cyber Ops Center org box, **2cs.scos.cfp@us.af.mil**, based on impact to operations and backup capability.
- 5.6.3. 2 OSS/OSW will determine when repaired, restored, or new equipment or communications lines are fully functional.
- 5.6.4. 2 CS will respond to "Significant" equipment outages as determined by weather personnel, within 1 hour of being notified. A mission impact statement will be provided to Job Control when notifying the 2 CS of the equipment outage.
- 5.6.5. 2 CS houses the JET SCA (Sensor Collection Assembly) in the installation data center. 2 CS will coordinate changes to rack space allocation with the 2 OSS/OSW if the JET SCA is impacted.
- 5.6.6. In the case of JET SCA server outage, 2 CS will coordinate and provide entry and escort to approved JET technicians or 2 OSS/OSW personnel servicing the SCA.

# 5.7. 2d Civil Engineer Squadron (2 CES).

5.7.1. 2 OSS/OSW will post on the 2 OSS/OSW SharePoint a summary of the daily climate data for the previous month, at the beginning of each month, and upon request.

- 5.7.2. 2 OSS/OSW will coordinate on applicable weather information during review of BAFB IEMP 10-2.
- 5.7.3. 2 OSS/OSW will participate in CBRN threat response planning, evaluation and exercises whenever possible.
- 5.7.4. Assist Emergency Operations Center (EOC) in establishing procedures in obtaining additional weather information in the event of a CBRN incident.
- 5.7.5. 2 OSS/OSW will provide weather observations, forecasts, and CDMs as required supporting disaster response operations.
- 5.7.6. 2 OSS/OSW will provide input to 2 CES/CEX on weather events that affect BAFB, and on any forecast data (e.g. special weather briefs) received from the NWS.

# 5.8. 2d Security Forces Squadron (2 SFS):

- 5.8.1. 2 OSS/OSW will post on the 2 OSS/OSW SharePoint a summary of the daily climate data for the previous month, at the beginning of each month, and upon request.
- 5.8.2. 2 SFS will contact the 2 OSS/OSW office in case of daily climate questions or in need of different products.

# 5.9. 2d Operational Medical Readiness Squadron, Bioenvironmental Engineering (2 OMRS/SGXB).

- 5.9.1. Bioenvironmental Engineering provides BAFB with the Wet Bulb Global Temperature to identify the flag conditions set for the installation.
- 5.9.2. 2 OSS/OSW will provide the current temperature and dew point upon request.

# 5.10. 49th Test and Evaluation Squadron (49 TES).

- 5.10.1. 2 OSS/OSW will serve as LWU for the Nuclear Weapons Systems Evaluation Program (NucWSEP) and perform all LWU responsibilities defined in AFMAN 15-129 and AFGSC/CC Plan 001.
- 5.10.2. The Test Director will serve as the primary coordinator for NucWSEPs and inform 2 OSS/OSW of required support.

# 5.11. 2d Operations Support Squadron, Airfield Operations Flight (2 OSS/OSA).

- 5.11.1. Airfield Management will:
  - 5.11.1.1. Notify 2 OSS/OSW of all aircraft mishaps and in-flight emergencies in the BAFB.
  - 5.11.1.2. Notify 2 OSS/OSW of NAOC/USSTRATCOM C3 aircraft arrival and departures.
  - 5.11.1.3. Notify 2 OSS/OSW of any changes to normal airfield operating hours. This includes the notification of early airfield opening and closing.

# 5.11.2. RAWS personnel will:

5.11.2.1. Provide routine and emergency maintenance for weather observing and weather dissemination, located on BAFB not covered by contractor agreements.

- 5.11.2.2. Coordinate with 2 OSS/OSW prior to performing scheduled maintenance. Priorities for restoring inoperative weather sensing and communication equipment are listed below:
  - 5.11.2.2.1. AN/FMQ-19.
  - 5.11.2.2.2. TMQ-53.
- 5.11.2.3. OSS/OSW will determine when meteorological equipment may be released for scheduled preventative maintenance inspections.

### 5.12. 11 BW, 20 BS, 93 BS, 96 BS, and 343 BS, 49 TES, and 340 WPS will:

- 5.12.1. Notify 2 OSS/OSW leadership at least 24 hours in advance for pre-departure, take-off and/or CVC brief requirements.
- 5.12.2. Provide timely PIREPs to 2 OSS/OSW whenever significant weather affecting flying operations over the base is observed. PIREPs should be transmitted to ATC Tower or to 2 OSS/OSW via the PMSV.
- 5.12.3. Provide timely requests and coordination for in-person weather briefing support.
- 5.12.4. Provide at least six hours notification for TAWS support at the appropriate classification level via internet, phone, or in person.
- 5.12.5. Provide 2 OSS/OSW with feedback on the accuracy of the MEF after every sortie.
- 5.12.6. Request IRC support at least one week prior to IRC class date.

MICHAEL D. MAGINNESS, Colonel, USAF Commander

### GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

### References

**AFGSC/CC PLAN 001**, Nuclear Weapons Systems Evaluation Program (NucWSEP) 1 December 2015

**AFI 10-2501**, Air Force Emergency Management Program Planning and Operations, 10 March 2020

**AFI 10-2501\_AFGSCSUP**, Air Force Emergency Management Program Planning and Operations, 28 November 2018

**AFI 15-128**, Weather Force Structure, 21 June 2019

AFMAN 11-210, Instrument Refresher Program, 19 August 2020

**AFMAN 10-2503**, Operations in a Chemical, Biological, Radiological, Nuclear, and High-Yield Explosive (CBRNE) Environment, 14 May 2019

AFMAN 15-111, Surface Weather Observations, 12 March 2019

**AFMAN 15-124**, *Meteorological Codes*, 16 January 2019

**AFMAN 15-129**, Air & Space Weather Operations, 9 July 2020

AFI 33-322, Records management and Information Governance Program, 23 March 2020

BAFB Installation Emergency Management Plan (IEMP) 10-2, 3 August 2017

**2 OSS OI 15-1**, Cooperative Weather Watch, 04 December 2020

### Adopted Form

DAF Form 847, Recommendation for Change of Publication

# Abbreviations and Acronyms

- **2 BW**—2d Bomb Wing
- **2 BW/XP**—2d Bomb Wing, Plans and Programs
- **2 CES**—2d Civil Engineering Squadron
- **2 CES/CEF**—Fire Emergency Services
- **2 CES/CEX**—2d Civil Engineer Squadron Readiness and Emergency Flight
- **2 CS**—2d Communications Squadron
- **2 OG**—2d Operations Group
- **2 OSS**—2d Operations Support Squadron
- 2 OSS/OSA—2d Operations Support Squadron, Airfield Operations Flight
- **2 OSS/OSAA**—2d Operations Support Squadron, Airfield Operations Flight, Airfield Management

2 OSS/OSAT—2d Operations Support Squadron, Airfield Operations Flight, Tower

2 OSS/OSW—2d Operations Support Squadron, Weather Flight

2 SFS—2d Security Forces Squadron

**26 OWS**—26th Operational Weather Squadron

**307 BW**—307th Bomb Wing

**340 WPS**—340th Weapons Squadron

**49 TES**—49th Test and Evaluation Squadron

**AF**—Air Force

**AFB**—Air Force Base

AFGSC—Air Force Global Strike Command

AFGSC/A3OW—Air Force Global Strike Command Weather Operations Branch

**AFMAN**—Air Force Manual

**AFI**—Air Force Instruction

**AFPD**—Air Force Policy Directive

**AFW-WEBS**—Air Force Weather Web Services

**AGL**—Above Ground Level

**ALSTG**—Altimeter Setting

**AMOS**—Automatic Meteorological Observing System

**AOL**—Alternate Operating Location

**AOR**—Area of Responsibility

**AR**—Air Refueling

ATC—Air Traffic Control

**BAFB**—Barksdale Air Force Base

**BPAWS**—Base Public Address Warning System

**BS**—Bomb Squadron

**BW**—Bomb Wing

**BWW**—Basic Weather Watch

**CBRN**—Chemical, Biological, Radiological, and Nuclear

**CC**—Commander

**CDM**—Chemical Downwind Messages

**CONUS**—Continental United States

**CP**—Command Post

**CWW**—Cooperative Weather Watch

**FLIP**—Flight Information Publication

IAW—In Accordance With

**IEMP**—Installation Emergency Management Plan

**IOC**—Integrated Operations Center

**IRC**—Instrument Refresher Course

IWWC—Integrated Weather Warning Capability

**JET**—Joint Environmental Toolkit

LWU—Lead Weather Unit

**MEF**—Mission Execution Forecast

**MEFP**—Mission Execution Forecast Process

**METAR**—Meteorological Aviation Report

**MHz**—Megahertz

**MOA**—Military Operating Area

MPC—Mission Planning Cell

**MWP**—Mission Weather Products

**NCOIC**—Non-Commissioned Officer In Charge

NHC—National Hurricane Center

**NLT**—No Later Than

NM—Nautical Mile

**NORE**—Nuclear Operational Readiness Exercise

**NORI**—Nuclear Operational Readiness Inspection

**NOTAM**—Notice to Airmen

**NSE**—Nuclear Surety Exercise

**NSI**—Nuclear Surety Inspection

**NWS**—National Weather Service

**OI**—Operating Instruction

**OPR**—Office of Primary Responsibility

**OPREP**—Operational Report

**OWS**—Operational Weather Squadron

**PIREP**—Pilot Report

PMSV—Pilot-to-Metro Service

**POC**—Point of Contact

**RAWS**—RADAR Airfield and Weather Services

**RM**—Risk Management

RVR—Runway Visual Range

**SM**—Statute Miles

**SME**—Subject Matter Expert

**SOF**—Supervisor of Flying

**SOP**—Standard Operating Procedure

**SPECI**—Aviation Selected Special Weather Report

**SWAP**—Severe Weather Action Procedures

TACC—Tanker Airlift Control Center

**TAF**—Terminal Aerodrome Forecast

**TAWS**—Target Acquisition Weather Software

**TDA**—Tactical Decision Aid

UFN—Until Further Notice

**UHF**—Ultra High Frequency

**WOC**—Wing Operations Center

**WSEP**—Weapon System Evaluation Program

**WSR-88D**—Weather Surveillance Radar 1988 Doppler

**WWA**—Weather Warning, Watch, and Advisory

#### **Terms**

**Air Force Weather Web Service**—USAF internet weather information system which constantly provides worldwide and forecast data to support aircrews and military forecasters. Support hosted by the 557 Weather Wing at Offutt AFB.

**Desired Lead-time**—The amount of advance notice a supported agency desires before the onset of a particular weather phenomenon.

**METAR Observation**—A routine scheduled surface weather observation. It contains a report of wind, visibility, runway visual range, present weather, sky condition, temperature, dew point, and altimeter setting. In addition, significant remarks are appended to the METAR observation.

**Mission Execution Forecast**—A customized weather product providing terrestrial and space weather data and forecasts for a specific mission, or set of missions. It fully integrates aerospace weather with the customer's tactics, weapon systems, environmental sensitivities of equipment, and other operational requirements.

**MISSIONWATCH**—The monitoring of aerospace weather for a specific mission (e.g. ground, air, or space) and informing supported agencies when unforecast mission-limiting phenomena could impact operations.

**Operational Weather Squadron**—An organization comprised of management, technician, and training personnel responsible for providing regional weather support. Their mission is to produce theater-scale tailored weather forecast products and services to customers within their area of responsibility.

**SPECI Observation**—An unscheduled observation taken when specific criteria are met. All SPECIs shall be made as soon as possible after the relevant criteria are observed.

**Target Acquisition Weapons Software**—A tactical decision aid incorporating weather parameters that provides an array of graphical and numerical output to aircrews (e.g. lock-on range, transmissivity, thermal cross-over, etc.)

# TAF SPECIFICATION AND AMENDMENT CRITERIA

**A2.1. Specification/Amendment Criteria:** The 2 OSS/OSW forecasters will issue/amend the TAF IAW the criteria in **Table A2.1**. The TAF specification criteria include standard thresholds listed in AFMAN 15-129 and specific mission needs of units at BAFB.

Table A2.1. TAF Specification/Amendment Criteria.

TAF Criteria						
Ceiling	Visibility	Category	Reference			
Ceiling or Visibility obse	Ceiling or Visibility observed or expected to decrease to less than, or if below, increase to equal or exceed:					
< 200	< 1/2	A	AFMAN 15-129			
< 700	< 2	В	AFMAN 15-129			
< 1000	< 3	С	AFMAN 15-129			
< 2000	< 3	D	AFMAN 15-129			
≥ 2000	≥ 3	E	AFMAN 15-129			

Table A2.2. TAF Specification/Amendment Criteria Continued.

Standard	Specification and Amendmen	Contena
Surface Winds	a.Wind Speed: The difference between the predominant wind speed and the forecast wind speed is $\geq 10$ knots b. Wind Gusts: The difference between observed gusts and the forecast is $\geq 10$ knots c. Wind Direction: A change > 30 degrees when the predominant wind speed or gusts are expected to be 15 knots or greater.	IF: Forecast winds 23018525KT THEN: Amend if predominant winds equal or exceed 28 knots, or if observed gusts equal or exceed 35 knots. Amend if predominant winds are 8 knots or less or gusts do no meet 15 knots. Amend for prevailing wind directions outside of the arc extending from 200 through 260 degrees.
icing, not associated with thunderstorms, from the surface to 10,000ft Above Ground Level (AGL)	The beginning or ending of icing first meets, exceeds, or decreases to less than moderate (or greater) thresholds and was not specified in the forecast	
Turbulence (for weather category II aircraft), not associated with thunderstorms from the surface to 10,000 ft AGL	The beginning or ending of turbulence first meets, exceeds, or decreases below moderate or greater thresholds and was not specified in the forecast	
Weather Warning Criteria	Occur, or are expected to occur during the forecast period, but were not specified in the forecast Specified in the forecast but are no longer expected to occur during the forecast period	Note: Watches are exempt from this requirement. Forecasters may specify watch criteria in the TAF when, in their judgment, the specific nature of the threat dictates
Altimeter Setting	Altimeter setting meets or exceeds 31.00 INS and was not specified in the forecast  Altimeter setting, if above, drops below 31.00 INS and was not specified during the forecast period Altimeter setting drops  below 28.00 INS and was not specified in the forecast  Altimeter setting, if below 28.00 INS, increases above 28.00 INS  and was not specified in the forecast	
Forecast Weather Advisory Criteria issued for amendable TAF criteria	Occur, or are expected to occur during the forecast period, but were not specified in the forecast Specified in the forecast but are no longer expected to occur during the forecast period	
Thunderstorms	Incorrect forecast start or end time	
Specification of Temporary Conditions (TEMPO group)	Forecast conditions specified as temporary become predominant conditions.  Forecast conditions specified as temporary do not occur during the cardinal hour as forecast.  Forecast conditions specified as temporary are no longer expected to occur.	
Changes to Predominant Conditions (BECMG or FM group)	Forecast change conditions occur before the beginning of the specified period of change and are expected to persist. Forecast change conditions do not occur within 30 minutes after the specified time. Forecast change conditions are no longer expected to occur	
Representative Conditions	Forecast conditions are not considered representative of existing or forecast conditions and amending the forecast improves safety, flight planning, operations efficiency, or assistance to in- flight aircraft.	

### SPECIAL LOCAL OBSERVATION CRITERIA

# A3.1. Criteria for Special Observations (SPECI) (IAW AFMAN 15-111) Unique to BAFB Requirements:

- A3.1.1. Visibility: Surface visibility (statue miles), as reported in the body of the observation, will initiate a SPECI if the visibility values decrease to less than the stated values in **Table A2.1**. Additionally, a SPECI will be required if the surface visibility increases to equal or greater than the values listed in each row in **Table A2.1**.
- A3.1.2. Ceiling: The ceiling (rounded off to reportable values) forms or dissipates below, decrease to less than or if below, increases to equal or exceed the values listed in **Table A3.1**.

Table A3.1. Visibility and Ceiling SPECI Criteria.

Visibility	Requirement	Ceiling	Requirement
3 miles	AFMAN 15-111	3000 feet	AFMAN 15-111
2 1/4 miles	FLIP	2000 feet	AFMAN 15-111
2 miles	AFMAN 15-111, FLIP	1500 feet	AFMAN 15-111
1 3/4 miles	FLIP	1000 feet	AFMAN 15-111
1 1/2 miles	AFMAN 15-111	800 feet	AFMAN 15-111, FLIP
13/8 miles	FLIP	700 feet	AFMAN 15-111, FLIP
1 1/8 miles	FLIP	600 feet	FLIP
1 mile	AFMAN 15-111, FLIP	500 feet	AFMAN 15-111, FLIP
3/4 mile	AFMAN 15-111, FLIP	400 feet	FLIP
5/8 mile	FLIP	300 feet	AFMAN 15-111
1/2 mile	AFMAN 15-111, FLIP	200 feet	AFMAN 15-111, FLIP
1/4 mile	AFMAN 15-111	100 feet	AFMAN 15-111

A3.1.3. Sky Condition: A layer of clouds or obscuring phenomena aloft is observed below 700 feet AGL (above ground level), and no layer aloft reported below 700 feet AGL in the previous METAR or SPECI.

### A3.1.4. RVR:

- A3.1.4.1. RVR will be determined when prevailing visibility first observed < 1 SM, and again when prevailing visibility goes above 1 SM.
- A3.1.4.2. When RVR for active runway decreases to less than or, if below, increases to equal or exceed the values in **Table A3.2**.

Table A3.2. RVR Criteria.

RVR	Requirement
6000 feet	AFMAN 15-111, FLIP
5500 feet	FLIP
5000 feet	AFMAN 15-111, FLIP
4000 feet	AFMAN 15-111, FLIP
3500 feet	FLIP
2400 feet	AFMAN 15-111, FLIP
2000 feet	AFMAN 15-111
1600 feet	AFMAN 15-111
1200 feet	AFMAN 15-111
1000 feet	AFMAN 15-111
600 feet	AFMAN 15-111

- A3.1.4.3. When RVR is first determined as unavailable (RVRNO) for active runway, and when it is first determined the RVRNO report is no longer applicable, provided conditions for reporting RVR exist.
- A3.1.5. Tower Visibility. Transmit a SPECI with the tower visibility as a remark when:
  - A3.1.5.1. Notified by the control tower that tower visibility has decreased to less than or, if below, increased to equal or exceed 1, 2, or 3 SM and the tower control visibility differs from the prevailing visibility.
- A3.1.6. Upon resumption of observing functions. Within 15-minutes after the weather technician returns to duty following a break in observing coverage unless a record observation is filed during that 15-minute period (only when the AN/FMQ-19 is being augmented.)
- A3.1.7. OPTIONAL. Any other meteorological situation, which in the opinion of weather personnel is significant to the safety of aircraft operations or resource protection.
- **A3.2. LOCAL Observation Criteria:** Altimeter Setting (ALSTG): ALSTG observations are taken at an interval not to exceed 35 minutes when the AN/FMQ-19 sensor is in backup mode and there has been a change of 0.01 inch Hg (0.3 hPa) or more since the last disseminated ALSTG value. A METAR or SPECI taken within the established time interval will meet this requirement.

# BASE WEATHER EQUIPMENT LOCATIONS

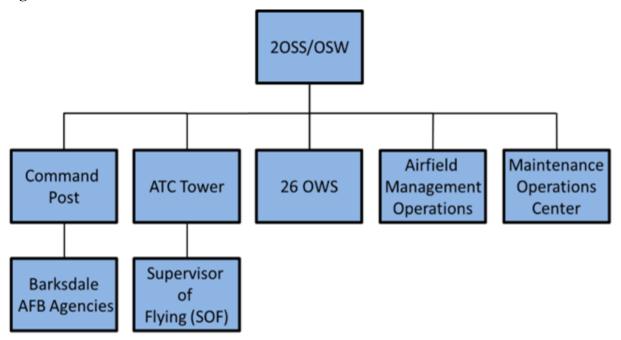
Figure A4.1. Base Weather Equipment and Locations.

	Data	Primary FDCU RWY 15	Secondary/Discontinuity FDCU RWY 33
Visibility	Extinction Coefficient	•	•
Ambient Light	Day/Night	•	
Freezing Rain	Freezing Rain/Ice		
Precipitation ID	Precipitation Type/Intensity	•	
Lightning Detector	Lightning Occurrence, Location, Frequency		
Ceilometer	Cloud Heights and Depth		
Ambient Temp/Relative Humidity	Temperature and Relative Humidity		,
Precipitation Gauge	Liquid Precipitation and Accumulation		
Anemometer	Wind Speed and Direction		•
Barometer	Atmospheric Pressure		
			The second secon

# WEATHER WARNING, WATCH AND ADVISORY NOTIFICATION SYSTEM

**A5.1. Notification.** WWAs will flow from the 2 OSS/OSW, CP, ATC, and 2 OSS/OSAA via JET or telephone. CP will contact other base agencies depending on the situation and specific checklists. Individual commanders of units in need of weather information are responsible for having their units listed in the notification chain maintained by the Barksdale Command Post. **Figure A5.1** displays the notification chain.

Figure A5.1. WWA Notification Chain.



- A5.2. The 2 OSS/OSW initiates the notification process by disseminating, extending or canceling WWAs via JET.
- **A5.3. Barksdale AFB Command Post Role.** The CP assumes responsibility for further dissemination via a variety of different methods dependent on the specific weather watch, warning, and/or advisory. The CP will initiate local checklists based upon the watch, warning or advisory issued.

# SEVERE WEATHER RESPONSE MATRIX

**A6.1. General:** BAFB IEMP 10-2 documents the 2 BW's response actions for hurricanes, wildfires and earthquakes. Response actions for other severe weather criteria are listed below in **Table A6.1**.

Table A6.1. Mission impacts and customer action during severe weather.

Weather Phenomena	Lead Time	Impact	Customer Action
Tornado	15 min	Personal injury Equipment damage	Seek shelter; hangar or divert aircraft
Severe Thunderstorms (3/4" Hail and/or 50kts)	60 min	Personal injury; Equipment damage	Seek shelter; hangar or divert aircraft
Freezing Precipitation	60 min	Delay or cease operations	Cease flying operations; hangar of protect aircraft; base early release
Heavy Rain	60 min	Personnel/flight hazard; Equipment damage; roadway closures	Traffic redirected around flooded roadways; close base pool
Surface winds over 50kts	60 min	Personnel/flight hazard; Equipment damage	Cease unnecessary flying; secure or hangar aircraft; secure light objects outside
Surface winds 35-49kts	60 min	Personnel/flight hazard; Equipment damage	Cease unnecessary flying; secure or hangar aircraft; secure light objects outside
Surface winds 25-34kts	30 min	Personnel hazard	Cease wing walking on B-52 aircraft
Moderate Thunderstorms (≥ 1/4" but < 3/4" Hail and/or Winds ≥ 35kts but < 50kts)	60 min	Personnel/Flight hazard; Equipment damage	Cease unnecessary flying; secure or hangar aircraft; secure light objects outside
Lightning w/in 5 NM of Barksdale AFB	30 min	Delay operations	Protect resources, cease explosive operations
Lightning w/in 5 NM of Barksdale AFB	Observed	Delay or cease operations	Cease flight line operations. Clear pool/golf-course

# **B-52 WEATHER THRESHOLD MATRIX (CUI)**

Figure A7.1. Weather Threshold Impacts.

			BARKSDALE AFB OPERATION	IS
	OPERATION	FAVORABLE (No Degradation) (No Operational Impact)	MARGINAL (Some Degradation) (Moderate Operational Impact)	UNFAVORABLE (Significant Degradation) (Severe Operational Impact)
			ATION LIMITATIONS	
	RNWY 15	1.000	Off / Landing	
	Ceilings	> 002		< 002
ILS	Visibility	> 1/2		< 1/2
ILS	Ceilings	> 005	Marginal T/O impact if Formation and	< 0.05
LOC	Visibility	>1	Ceilings > 002 but < 030 and or	≤ 4
	Ceilings	> 007	Visibility > 1/2 but < 3	< 007
TACAN	Visibility	> 1 3/8		< 1.3/8
	RNWY 33		CUTCH ATLD STATUS MOTANS STAT	
	Ceilings	> 002	CHECK AFLD STATUS/NOTAMS SENT DAILY BY AMOPS ON WX ORG	< 002
ILS	Visibility	> 1/2	INBOX, DETERMINE WHICH RNWY	≤1/2
ILS	Ceilings	> 004	AND INSTRUMENT WILL BE USED.	≤ 004
LOC	Visibility	> 5/8	THEN SELECT APPROPRIATE WX	< 5/8
TACAN	Ceilings	> 005	MINIMA FOR UNFAVORABLE	< 005
IACAN	Visibility	Я	CONDITIONS.	≤1
	RNWY 15/33			
ERCC	ERCC	DRY RUNWAY		WET RUNWAY
		st file alternate if within +1 hour of sch	edule landing forecast if CIG is <020 or vis	: <u>≤</u> 3 SM**
	RVR for Take Off	≥ 2400FT		< 1600FT
	RNWY 15			
LS		≥ 2400FT		< 2400FT
ILS LOC	RVR for Landing	≥ 5000FT	<2400FT and ≤1600FT	< 5000FT
TACAN		N/A		N/A
	RNWY 33			
LS		≥ 2400FT		≤ 2400FT
LBLOC	RVR for Landing	≥3500FT		≤ 3500FT
TACAN		≥5000FT		≤ 5000FT
	Surface Winds			"Sustained >25KT over water
	**Sustain	ed wind criteria during normal flying t	raining ops is waiverable by the OG/CC (or	r equivalent)**
X-W	Vinds for DRY RNWY	< 16 KT	17-34 KT	≥ 35 KT
	Vinds for WET RNWY	< 10 KT	10-14 KT	> 15 KT
Lo	w Level Wind Shear	NONE	FORECAST	OBSERVED
	Thunderstorms	NONE	VCTS	TSTMS
Free	ezing / Frozen Precip	NONE	SNOW	FREEZING PRECIP / FOG
			Enroute	
	Turbulence	LGT TURBC/LGT-MDT TURBC	MDT TURBC	SVR/EXTREME TURBC
	leing	LGT ICING	MDT ICING	SVR ICING
	Thunderstorms	NONE	**TSTMS AVOIDABLE AT FL**	**TSTMS UNAVOIDABLE AT FL**
			LOW FL230 AND 20NM AT/ABOVE FL230*	•
			h ice or snow on the aircraft	
F	inhal and Mathilia.		ial Refueling	C1 186 + 4 104
FI	ight Level Visibility	FL VIS > 3 NM	FL VIS 1-3 NM LGT ICG/TURBC AT FL	FL VIS < 1 NM
	Hazards	NO ICG/TURBC AT FL	LGT ICG/TURBC AT FL	≥ MDT ICG/TURBC AT FL
	Thunderstorms	NONE	**TSTMS AVOIDABLE AT FL**	"TSTMS UNAVOIDABLE AT FL"
	Surface Winds			Sustained > 35KTS
	**Sustain	ed wind criteria during normal flying t	raining ops is waiverable by the OG/CC (or	r equivalent)**
			LOW FL230 AND 20NM AT/ABOVE FL230*	•
		Anti E	xposure Suits	
	face Temperatures (SST)	SST ≥ 60F/15.5C	SST 51F/10.5C-60F/15.5C AND AIR TEMP >= 70F/21.1C	SST <60F/15.5C AND AIR TEMP <70F/21.1C
*	WAVE HEIGHT criteria is	waiverable by the OG/CC (or equivaler	nt) during AR, Fighter Intercept training or MOA	weapons employment activity**
				Sustained > 35KTS (applicable to actua
	Surface Winds Also refer to weapon-specific restrictions below weapons employment or fighter intercept training)			weapons employment or fighter
				intercept training)
	**Sustain	ed wind criteria during normal flying t	raining ops is waiverable by the OG/CC (or	

Figure A7.2. Weather Threshold Impacts Continued.

		ARKSDALE AFB OPERATION	NS	
OPERATION	FAVORABLE (No Degradation) (No Operational Impact)	MARGINAL (Some Degradation) (Moderate Operational Impact)	UNFAVORABLE (Significant Degradation) (Severe Operational Impact)	
Cloud Cover below Flight Level	≤2/8 (SKC, FEW)	3/8 - 4/8 (SCT)	≥ 5/8 (BKN-OVC)	
	Low Level Bomb	ing (500ft over terrain)		
Ceilings	CIG ≥ 020 AGL	CIG ≥005 AGL	CIG < 005 AGL	
Visibility	VIS≥5 NM	VIS 3-5 NM	VIS < 3 NM	
Flight Level Hazards	NO ICG/TURBC AT FL	LGT ICG/TURBC AT FL	≥MDT ICG/TURBC AT FL	
		SYSTEM LIMITATIONS		
		ng Pod (TGP)		
Humidity	ABSOLUTE HUMIDITY <10g/m3	ABSOLUTE HUMIDITY 10-20g/m3	ABSOLUTE HUMIDITY > 20g/m3	
Ceilings (target area)	≤ 1/8 (SKC, FEW)	2/8 - 3/8 (FEW-SCT)	≥ 4/8 (SCT-OVC)  FOG, RAIN, HAIL, OR SNOW	
Precip (Over Target Area)	NONE		FOG, RAIN, HAIL, OR SNOW	
Thermal Crossover	NONE		THERMAL CROSSOVER	
Precip/Hazards (Enroute)	NONE	ANY PRECIP, CLOUDS, FOG, OR ICG		
		led Bombs (LGB)		
Clouds	NONE		CLOUDS OVER TARGET AREA	
Surface Winds (target area)	SFC WIND < 20KT	SFC WIND 20-25KT	SFC WIND > 25KT	
	SFC HEADWIND < 15KT	SFC HEADWIND 15-20KT	SFC HEADWIND > 20KT	
	Buddy	Lase for LGB		
Ceilings (target area)	CIG >080 AGL		CIG <080 AGL	
	Joint Air-to-Sur	face Missiles (JASSM)		
Ceilings	CIG >015 AGL	CIG < 015 AGL		
Visibility	VIS >3 NM	VIS < 3NM		
Surface wind	SFC WIND < 30KT	SFC WIND ≥ 30KT		
Icing Accumulation		loing Accumulation ≥ .25 IN		
	Wind Correction Mu	nition Dispensers (WCMD)		
Surface Winds (target area)		Mission Criteria and Desired Objective.	Check With Mission Planners	
	Illumi	nation Flare		
Clouds at Flight Level		LOW OVC CLOUD DECK/FOG/HZ/DZ		
	KC-10 OPERA	TION LIMITATIONS		
			XWIND >=30KTS	
1	RCR >8	RCR 6-8	RCR 0-5	
	MAX XWIND FOR RCR 20	XWIND RCR +20KT (WAIVER REQ'D)	No Ops	
Engine	Anti-loing must be used when temp ≤	42F with visible moisture or when DPD	is within 3F	
			MDT/SVR TURBC	
	Avoid TSTMS/LTG by 10NM below	w FL230 and 20NM at and above FL230		
	annot Take-off with >.5IN of slush or w	ater on Runway or 4IN of dry snow on ru	unway	
	KC-135 OPERA	TION LIMITATIONS		
			XWIND >=25KTS	
	RCR >8	RCR 6-8	RCR 0-5	
	MAX XWIND FOR RCR 20	XWIND RCR +20KT (WAIVER REQ'D)	No Ops	
		May operate 10 min in MDT Turbo	SVR leing	
			SVR TURBC	
	Avoid TSTMS/LTG by 10NM below	w FL230 and 20NM at and above FL230		
Cannot Take-off with >.5IN of slush or water on Runway or 4IN of dry snow on runway				
ALTERNATE LANDING CONDITIONS				
Ceilings	≥ 030	010-030	<010	
Visibility	>3	2-3	Q	
X-Winds for DRY RNWY	< 16 KT	17-34 KT	≥ 35 KT	
X-Winds for WET RNWY	< 10 KT	10-14 KT	> 15 KT	
Low Level Wind Shear	NONE	FORECAST	OBSERVED	
Weather	No Sig Wx	Snow	Freezing Precip	
Thunderstorms	No Sig Wx VCTS	Snow TSTMS	Freezing Precip Severe TSTMS	