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ROBINS AIR FORCE BASE**

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Weather

WEATHER SUPPORT INSTRUCTION

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This instruction implements Air Force Policy Directive (AFPD) 15-1, Air Force Weather Operations, Air Force Instruction (AFI) 10-206, Operational Reporting, AFI 10-229, Responding to Severe Weather Events, AFI 15-114, Functional Resource and Weather Technical Performance Evaluation, AFI 15-128, Air Force Weather – Roles and Responsibilities, AFI 10-2501, Air Force Emergency Management (EM) Program Planning and Operations, Air Force Manual (AFMAN) 15-111 Surface Weather Observations, AFMAN 15-124, Meteorological Codes, AFMAN 15-129V1, Air and Space Weather Operations – Characterization, and AFMAN 15-129V2, Air and Space Weather Operations – Exploitation. This instruction establishes responsibilities and weather support procedures. It also provides general information for weather services, including weather observations and forecasts, weather warnings, watches, and advisories, space weather data, information dissemination, and base-wide reciprocal support. It applies to units assigned to Headquarters Air Force Reserve Command, Warner Robins Air Logistics Complex, 78th Air Base Wing, 116th Air Control Wing, 461st Air Control Wing, 5th Combat Communications Group, 339th Flight Test Squadron, Marine Light Attack Helicopter Squadron 773, subordinate units, and units assigned, attached, or supported by Robins Air Force Base. 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. Requests for waivers must come through the chain of command from the commander of the office seeking relief from compliance. Waiver requests must be submitted to the OPR; waiver authority has not been delegated. Waiver approval authority for all compliance items within this publication are at the Tier T-3 level. Ensure all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33-322, Records Management Program, and disposed of in accordance with the Air Force Records Information

System (AFRIMS) Records Disposition Schedule (RDS) located at <https://www.my.af.mil/gcss-af61a/afirms/afirms/>. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, Recommendation for Change of Publication; route AF Forms 847 from the field through the appropriate functional's chain of command. See Attachment 1 for a glossary of references and supporting information.

SUMMARY OF CHANGES

This document is substantially revised and must be completely reviewed. Major changes include: Adjust Weather flight (WF) hours of operation 1.5.1, back-up procedures; removed section 1.6; Table 2.1 updated with tower visibility requirement, removed AdHoc reference for installation warning system, updated URLs, renumbered **Chapter 4**, added OSAM requirement for DT notification during airfield closure; updated Table A2.2 ceiling level requirements.

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Chapter 1

CHARACTERIZATION UNIT (CU) & EXPLOITATION UNIT (EU) INTERACTIONS

1.1. General. The 78th Operations Support Squadron Weather Flight (78 OSS/OSW) provides and/or arranges for weather support to the Headquarters Air Force Reserve Command (AFRC), Warner Robins Air Logistics Complex (WR-ALC), 78th Air Base Wing (78 ABW), 116th Air Control Wing (116 ACW), 461st Air Control Wing (461 ACW), 5th Combat Communications Group (5 CCG), 339th Flight Test Squadron (339 FLTS), Marine Light Attack Helicopter Squadron 773 (HMLA-773), subordinate units, and units assigned, attached, or supported by Robins Air Force Base (AFB). The 78 OSS/OSW is commonly referred to as the Weather Flight (WF) throughout this document, and is the focal point for all weather-related issues on Robins AFB. This instruction will be reviewed and revised no greater than biennially or in accordance with (IAW) host/parent unit procedures if the time is less than biennially.

1.1.1. The 26th Operational Weather Squadron (26 OWS) at Barksdale AFB, LA is considered the characterization unit and provides the characterization function for Robins AFB. Characterization encompasses the “collect, analyze and predict” weather core competencies. Characterization depends on Air Force Weather’s ability to collect accurate data, correctly analyze that data, and use the results to produce a coherent picture of the present and future state of the air and space environment.

1.1.2. The WF is considered the exploitation unit. Exploitation is the ability to minimize the impact of environmental threats to friendly forces while simultaneously capitalizing on environmental conditions that maximize the operational advantage over enemy forces. Exploitation units tailor the characterization provided by the characterization unit. Tailoring is the extraction of data that is pertinent to a specific mission profile from the overall characterization of the air and space environment. Tailoring does not mean changing the characterization. To the greatest extent possible, exploitation units will use the characterized data provided to them.

1.2. Concept of Operations.

1.2.1. The 26 OWS at Barksdale AFB, Louisiana, provides regional and operational-level weather products and information to Air Force and Army units in the Southeast region of the Continental United States (CONUS).

1.2.2. **Meteorological Watch (METWATCH).** METWATCH is a deliberate, continuous process for monitoring terrestrial weather or the space environment in an area or region. The purpose of a METWATCH is to identify when and where observed conditions significantly diverge from forecast conditions, determine courses of action to update or amend a forecast product or group of products, and notify designated agencies. The 26 OWS performs a continuous METWATCH for Robins AFB. WF personnel act as the “eyes forward” for the 26 OWS by providing immediate feedback on current or short-term anticipated changes in weather conditions.

1.2.3. The WF is the primary source of tailored weather services in support of 116 ACW, 461 ACW, 339 FLTS, HMLA-773, various headquarters elements, and transient aircrews.

The WF will make every effort to ensure that mission-limiting weather is anticipated and exploited, and that safety and resource protection are maintained.

1.3. Responsibilities.

1.3.1. General responsibilities of the OWS and WF are outlined in AFI 15-128.

1.3.1.1. The 26 OWS issues the Robins AFB Terminal Aerodrome Forecasts (TAFs), forecast weather warnings and watches, and may provide flight weather briefings to transient aircrews passing through Robins AFB. The OWS will issue observed warnings and advisories when the WF is closed.

1.3.1.2. The WF will issue all observed advisories and warnings when the WF is open.

1.3.1.3. The WF will create Mission Weather Products (MWP) that fuse theater scale products with local mission requirements to enable the direct inject of weather impacts into warfighter planning and/or execution. The WF will also provide flight weather briefings for the 116 ACW, 461 ACW, 339 FLTS, HMLA-773, and transient aircrews IAW the WF duty priorities listed in [Table 1.1](#)

1.3.2. **Robins AFB Installation Data Page.** The 26 OWS and Robins WF will coordinate and maintain a Robins AFB Installation Data Page detailing TAF specification and amendment criteria, WWA thresholds, desired lead times, mission impacts, unit information, Joint Environmental Toolkit (JET) back-up contacts and local outage back-up information.

1.3.3. **Eyes Forward & Collaboration.** The Robins WF will act as the eyes forward for the OWS by relaying significant, time-sensitive meteorological information not found in coded meteorological reports to the 26 OWS to assist in forecast operations.

1.4. Duty Priorities. 78 OSS/OSW duty priorities. IAW AFMAN 15-129V2, paragraph 1.3.3.1, the WF has created the following duty priorities. Flight personnel will use good judgment in complying with these duty priorities, especially when there is imminent danger to life and/or property.

Table 1.1. 78 OSS/OSW Duty Priority Listing

Priority	Duties
1	Perform WF Emergency War Order (EWO) Taskings
2	Execute WF Evacuation
3	Respond to Aircraft/Ground Emergencies
4	Respond to Pilot to Metro Service (PMSV) Contacts
5	Provide Weather Information for Supervisor of Flying (SOF)
6	Severe Weather Action Plan (SWAP)
7	Augment AMOS Observations for Mandatory Elements
8	Collaborate with OWS
9	Mission Execution Forecast Process -- Produce and Disseminate Forecasts
10	Disseminate Urgent Pilot Reports (PIREPs)
11	Disseminate PIREPs
12	Perform MISSIONWATCH Activities
13	Provide Briefings
14	Weather Functional Training
15	Accomplish Administrative Tasks

1.5. Hours of Operation & Contact Information.

1.5.1. **WF.** Airfield and mission services will generally be provided 24 hours a day, 7 days a week through the combined support of the Robins WF and 26 OWS. WF services will generally cease during airfield closure (e.g. holidays). The WF will coordinate any closure with the 26 OWS, and the 26 OWS will continue to perform a continuous terminal METWATCH and resource protection support for Robins AFB. Staff services are available during normal duty hours or as coordinated.

1.5.1.1. During airfield closure, the WF Duty Technician (DT) will go on standby, unless there are tornado watches or warnings issued. The DT will notify the OWS, Robins Tower, Airfield Management Operations and Robins Command Post when going on standby and will be reachable via the standby cell phone at 478-960-8471.

1.5.1.2. A web-based aircrew-briefing terminal is located in the Airfield Management Operations (AMOPS) flight planning room. This briefing terminal allows aircrews to self-brief or schedule a flight weather briefing from the 26 OWS.

1.5.2. **26 OWS.** Hours of operation are 24/7, 365 days a year.

1.5.3. Contact Information.

1.5.3.1. **WF:** (478) 926-3573 / DSN 468-3573

1.5.3.2. **WF Alternate Operating Location (AOL):** (478) 926-3814 / DSN 468-3814

1.5.3.3. **PMSV:** 349.850 MHz

1.5.3.4. **26 OWS:** (318) 529-2651/2652/2653 / DSN 331-2651/2652/2653

Chapter 2

AIRFIELD SERVICES

2.1. General. Airfield services include those actions that affect the Robins AFB aerodrome (defined within 5 statute miles of the airfield) or the base as a whole.

2.2. Observations. Observations are taken, recorded, and disseminated IAW AFMAN 15-111, *Surface Weather Observations*, utilizing the FMQ-19 Automated Observing System, the Joint Environmental Toolkit (JET), and Air Force Form 3813, *Surface Weather Observations*. Per AFMAN 15-111, Robins AFB is an automated station and observations will be taken and disseminated automatically by the FMQ-19. The Duty Technician will only augment the automated system to supplement or back-up the FMQ-19. Automated and augmentation processes are outlined in [paragraph 2.2.6](#) and [2.2.7](#). The following types of observations are created and disseminated:

2.2.1. Aviation Routine Weather Report (METAR). The METAR is a routine scheduled observation containing a complete report of wind, visibility, runway visual range, present weather and obscurations, sky condition, temperature, dew point, and altimeter setting collectively referred to as “the body of the report.” In addition, encoded and/or plain language information that elaborates on data in the body of the report may be appended to the METAR. METARs are disseminated both locally and longline between H+55 to H+59 past the hour.

2.2.2. Aviation Selected Special Weather Report (SPECI). The SPECI is an unscheduled observation completed and transmitted when any of the Robins AFB special criteria listed in [Attachment 2](#) have been observed. The SPECI will contain all data elements found in a METAR plus additional remarks that elaborate on data in the body of the report. All SPECI reports will be prepared and transmitted as soon as possible after the relevant criteria are observed. [Attachment 4](#) contains an example SPECI weather observation.

2.2.3. Aviation Selected Local Weather Report (LOCAL). LOCAL observations are unscheduled observations not meeting SPECI criteria. The WF will only take single element LOCALs for altimeter setting changes when the FMQ-19’s pressure sensor is inoperative. LOCAL observations are only transmitted to Robins AFB customers.

2.2.4. Official Observing Points. The location of the FMQ-19 automated observing equipment is deemed the official observing point at Robins AFB. During periods of augmentation, the observation site is located approximately 275 feet northeast of building 110. During relocations to the AOL when augmentation is required, the observation point is the manhole cover on the east side of the building.

2.2.5. Observing Point Limitations.

2.2.5.1. The FMQ-19 sits at a lower elevation than surrounding terrain and fog may pool around the sensors making visibility readings unrepresentative.

2.2.5.2. Augmented observations taken from the observation point northeast of building 110 do not allow the observer to see the entire aerodrome. Ramp floodlights hamper observations at night, and buildings located 1/16 to 3/8 of a mile from the observation point obscure the southern and western horizon. The approach end of runway 15 is

obstructed by a blast fence, buildings, and aircraft parked on the ramp. Lightning may not be seen due to distance, low clouds, or poor visibility. Thunder may not be heard because of flight line noise.

2.2.5.3. Augmented observations taken at the AOL are degraded because the view to the south and west is blocked by hangars, buildings, and aircraft.

2.2.6. **Automated FMQ-19 Observation.** An automated observation is any observation having been evaluated, prepared, and transmitted by an observing system without human intervention. In automated mode, the FMQ-19 observing system will record and disseminate weather observations. The FMQ-19 uses time averaging of sensor data. In an automated observation, sky condition will be an evaluation of sensor data gathered during the 30-minute period ending at the actual time of the observation. All other elements evaluated are based on sensor data that is within 10 minutes or less of the actual time of the observation.

2.2.7. **Forecaster FMQ-19 Augmentation.** Augmentation is the process of having a certified weather forecaster manually add or edit data to an observation generated by the FMQ-19. Weather flight personnel are not required to augment the FMQ-19 when the airfield is closed, except when tornadic activity is occurring or forecast to occur. The two augmentation processes used are supplementation and back up. The WF reserves the right to augment the FMQ-19 based on sound Risk Management (RM) principles as they relate to safety of lives and resources.

2.2.7.1. **Supplementation.** Supplementation is the process of manually adding meteorological information to an observation generated by the FMQ-19 that is beyond the system's capability to measure and report. For example, the FMQ-19 cannot sense a tornado or hail.

2.2.7.2. **Supplementation Procedures.** Weather flight personnel will supplement observations when the airfield is open and the weather conditions in **Table 2.1** are observed. The duty technician will be ready to supplement observations if the conditions in **Table 2.1** are forecast to occur within 1 hour. In addition, weather flight personnel are required to log on to the FMQ-19 and be prepared to supplement whenever a watch or warning has been issued for tornadic activity.

Table 2.1. Mandatory Supplemental Weather Conditions for Robins AFB

<i>Mandatory Supplementary Weather Conditions – Body of Report (Note 1.)</i>
Tornado (+FC) (Note 2) (Note 3)
Funnel Cloud (FC) (Note 2) (Note 3)
Water Spout (+FC) (Note 2) (Note 3)
Hail (GR) (>=1/4 inch hail only per local warning criteria)
Volcanic Ash (VA)
Ice Pellets (IP)
<i>Mandatory Supplementary Weather Conditions - Remarks Section of Report (Note 1.)</i>
Funnel Cloud (Tornadic Activity _B/E(hh)mm_LOC/DIR_(Mov)) (Note 2)
Snow Depth (Note 4) (only during airfield operation hours and if heavy snow warning has been issued and snowfall is occurring.)
Tower Visibility (Note 5)
<p>NOTES:</p> <ol style="list-style-type: none"> 1.References for coding of augmentable weather conditions are located in AFMAN 15-111, Chapter 13. 2.The immediate reporting of funnel clouds takes precedent over any other phenomena. 3.Log on to AMOS and be prepared to supplement for tornadic activity anytime a weather watch or warning has been issued for the phenomena. 4.All Remarks and Additive Data references are provided in AFMAN 15-111, Attach. 3. 5.Include tower vis remark in the next METAR or SPECI when either the surface prevailing or the control tower vis is less than 4 statute miles and the control tower vis differs from the surface prevailing vis by a reportable value.

2.2.7.3. **Backup.** Backup is the process of manually providing meteorological data and/or dissemination of an FMQ-19 generated observation when the primary automated method is not operational or unavailable due to sensor and/or communication failure.

2.2.7.4. **Backup Procedures.** In the event of FMQ-19 malfunction or failure, back-up procedures will be implemented during airfield operating hours and/or if tornadic activity is occurring or forecast to occur. Weather flight personnel will use manual observing procedures when performing back-up operations. When backup of the FMQ-19 is required, the WF will encode and disseminate METAR and SPECI observations IAW AFMAN 15-111, Table 3.1. All element entries must be observed within 15 minutes of the actual time of the observation with the exception of wind gusts and squalls, which are reported only if they are observed within 10 minutes of the time of the observation. When utilizing back-up equipment, all wind and pressure values must be estimated. Weather flight leadership has developed RM-based procedures beyond the standard back-up process outlined in AFMAN 15-111, and WF observers are authorized to make risk control decisions accordingly.

2.3. Terminal Aerodrome Forecast (TAF) Support. The Robins AFB TAF will be produced and disseminated by the 26 OWS IAW AFI 15-128, *Air Force Weather Roles and Responsibilities*, AFMAN 15-124, *Meteorological Codes*, and AFMAN 15-129V1, *Air Force Weather Operations – Characterization*, and the Robins AFB Installation Data Page. Terminal Aerodrome Forecasts are valid for 30 hours, apply to the area within 5 nautical miles of the Robins AFB Airport Reference Point, and are issued at 1300Z, 2100Z, and 0500Z. TAFs will generally not be produced when the airfield is closed. [Attachment 4](#) contains examples of the TAF format.

2.4. Resource Protection (RP) Support & Warnings, Watches and Advisories (WWA). Resource protection is accomplished through a joint effort between the 26 OWS and the WF. Watches and warnings provide advance notice of weather events posing a hazard to life or property. Advisories provide specific notice to an operational agency of environmental phenomena with the potential to impact operations. The 26 OWS is responsible for issuing all forecast weather watches, warnings and advisories. The WF acts as the “eyes forward” for the 26 OWS and is responsible for issuing all observed warnings and advisories. However, the WF can issue any forecast warning if there is an immediate threat to life and/or property. In these cases, the WF will back-brief the 26 OWS when time permits and will also be responsible for disseminating the info to locally supported agencies. The goal is to provide the best possible resource protection to Robins AFB. If the WF is closed, observed advisories and warnings will be issued by the 26 OWS if they have the capability to remotely monitor the observed advisory or warning criteria. If the WF is closed, they will keep a forecaster on recall duty for resource protection actions. Customer responses to WWAs are listed in [Attachment 5](#).

2.4.1. Special Weather Statements & Significant Weather Messages. Special Weather Statements (SWSs) are special notices issued by the 26 OWS to assist military decision makers with RP decisions. Significant weather messages are issued by the WF when WF leadership believes expected weather conditions warrant an additional level of preparation and a “heads up” above and beyond that provided by a watch, warning, or advisory. Examples of conditions requiring a WF significant weather message include a widespread threat of severe weather or the threat of freezing precipitation and/or snow.

2.4.2. Weather Watches. A weather watch is a special notice to installation personnel/supported units of a **potential** for environmental conditions of such intensity as to pose a hazard to life or property. They are used by installation personnel/supported units to make force protection and risk management decisions. Watches are issued for a 5NM radius of the Robins AFB runway complex and are defined in [Table 2.2](#)

Table 2.2. Weather Watches

Criteria	Desired Lead Time
Tornado	As Potential Warrants
Severe Thunderstorm	
Damaging Winds (≥ 50 Knots) -AND/OR-	As Potential Warrants
Damaging Hail ($\geq 3/4$ Inch)	As Potential Warrants
Moderate Thunderstorm	
High Winds (≥ 35 Knots but < 50 Knots) -AND/OR-	As Potential Warrants
Large Hail ($\geq 1/4$ Inch but $< 3/4$ Inch)	As Potential Warrants
Damaging Winds (≥ 50 Knots) – not associated w/ t-storms	As Potential Warrants
Strong Winds (≥ 35 Knots but < 50 Knots) – not associated w/ t-storms	As Potential Warrants
Freezing Precipitation (Any Intensity)	As Potential Warrants
Heavy Snow ($\geq 1/2$ Inch Accumulation in 12 Hours)	As Potential Warrants
Lightning (Within 5 Nautical Miles of the airfield)	30 Minutes

2.4.3. **Weather Warnings.** A weather warning is a special notice to installation personnel/supported units when an established weather condition of such intensity as to pose a hazard to life or property **is occurring or is expected to occur**. Weather warnings provide concise information outlining environmental threats and are used by commanders and personnel to make RP decisions and take protective action. Warnings are issued for a 5NM radius from the center point of the runway and are defined in [Table 2.3](#). Deviations from the standard warning criteria and lead times located in AFMAN 15-129V1 are based on Robins AFB requirements and have been coordinated with all Robins AFB customers.

Table 2.3. Weather Warnings

Criteria	Desired Lead Time
Tornado	15 minutes
Severe Thunderstorm	
Damaging Winds (≥ 50 Knots) -AND/OR-	60 minutes
Damaging Hail ($\geq 3/4$ Inch)	60 minutes
Moderate Thunderstorm	
High Winds (≥ 35 Knots but < 50 Knots) -AND/OR-	60 minutes
Large Hail ($\geq 1/4$ Inch but $< 3/4$ Inch)	60 minutes
Damaging Winds (≥ 50 Knots) – not associated w/ t-storms	60 minutes
Strong Winds (≥ 35 Knots but < 50 Knots) – not associated w/ t-storms	60 minutes
Freezing Precipitation (Any Intensity)	60 minutes
Heavy Snow ($\geq 1/2$ Inch Accumulation in 12 Hours)	60 minutes

2.4.4. **Observed Weather Warnings.** Lightning warnings are the only type of observed warnings issued for Robins AFB. A lightning warning is not issued until lightning is observed, either visually or via the FMQ-19, within a 5NM radius of the Robins AFB runway complex. The lightning warning will remain valid until lightning is no longer observed within 5NM for at least 15 minutes. Exception: A lightning warning will not be cancelled if a thunderstorm is within 5NM (as indicated on radar).

2.4.5. **Observed Weather Advisories.** Observed weather advisories are special notices sent to supported customers alerting them that a predefined weather event, which may impact operations, is occurring on Robins AFB. Observed advisories are issued by the WF and cancelled as soon as the event is no longer occurring, with the exception of lightning, crosswinds, and airframe frost, which must cease to occur for 15 minutes. Observed weather advisories can be found in [Table 2.4](#)

Table 2.4. Observed Weather Advisories

Criteria	Desired Lead Time
Lightning within 10 NM	Observed
Temperature < 20°F	Observed
Crosswinds ≥ 15 Knots (Not associated with Thunderstorms) ¹	Observed
Airframe Frost ²	Observed
Tropical Cyclone within 400NM ³	Observed
Fighter Index of Thermal Stress (FITS) Condition ⁴	Observed
<p>NOTE:</p> <p>1: Issued when crosswind reaches 15 knots and cancelled when crosswind drops below 15 knots for at least 15 consecutive minutes.</p> <p>2: Issued when there is no precipitation, temperature ≤ 40 °F, dew point ≤ 32 °F and surface winds ≤ 8 knots and cancelled when these criteria cease being met for 15 consecutive minutes.</p> <p>3: When issued, flight leadership will produce a Tropical Weather Message.</p> <p>4: FITS is based and relative humidity and temperature. Use the FITS chart (Atch 1) and issue the WA for CAUTION and DANGER. Cancel when criteria is no longer met.</p>	

2.4.6. **Forecast Weather Advisories.** Forecast weather advisories are special notices sent to supported customers that provide advance notice of a predefined weather event that may impact operations. Forecast advisories are issued for a 5NM radius from the center point of the Robins AFB runway complex. Forecast advisories, with their desired lead times, are contained in [Table 2.5](#)

Table 2.5. Forecast Weather Advisories

Criteria	Desired Lead Time
Freezing Temperatures ($\leq 32^{\circ}\text{F}$)	4 hours
Winds ≥ 20 Knots but < 35 Knots	30 minutes

2.4.7. **WWA Numbering Scheme.** Advisories, watches, and warnings are numbered consecutively by identifying the type of weather message (watch, warning, or advisory) followed by a five-digit number. The first two numbers indicate the current month while the second three numbers indicate the sequence number. For example, the message “Weather Warning 02-005” means the month is February (02) and this is the fifth (005) warning issued in the month. The message “Weather Advisory 12-013” means the month is December (12) and this is the thirteenth (013) advisory issued in the month. Examples of different messages are contained in [Attachment 4](#).

2.4.8. **WWA Upgrades/Downgrades.** WWAs will be upgraded (i.e., winds increase from 35 knots to 50 knots) or downgraded as required. Upgrades should meet the desired lead times specified in [Table 2.3](#) and [2.5](#). Only one warning will be in effect at a given time (and may include multiple criteria) except for forecast tornado warnings and/or observed lightning warnings. Tornado and lightning will be separate warnings. Except tornado and lightning warnings, if a warning is issued for one criteria and it becomes necessary to warn for another criteria, a new warning and new number will be issued, to include all criteria expected. A separate valid time may be specified for each criteria if necessary.

2.4.9. **WWA Amendments.** When WWAs requires a change an amendment will be issued.

2.4.10. **WWA Extensions.** WWAs may be extended.

2.4.11. **WWA Cancellation.** WWAs are cancelled when the weather phenomena is no longer occurring or expected to occur. WWAs not amended or cancelled will automatically expire at the end of the valid period. See [paragraph 2.4.4](#) and [2.4.5](#) for specifics on crosswinds, airframe frost and lightning cancellation exception.

2.5. Dissemination Process.

2.5.1. **Observations.** Observations taken by either the FMQ-19 automated observing system or the weather technician are disseminated via JET. When JET is nonoperational, the WF will disseminate observations longline through the Air Force Weather-Web Services (AFW-WEBS). If all Robins AFB longline transmission resources are out of service, the WF will call via telephone (voice relay) to the 26 OWS to arrange for longline transmission. Locally, observations will be relayed by the WF to the following organizations when JET is nonoperational (noted on a local dissemination log), in order of priority listed in [Table 2.6](#)

Table 2.6. Notification Priority

1. Robins Tower hotline
2. Robins Command Post, DSN 497-2612, Comm (478) 327-2612 (As requested)
3. Airfield Management Operations, DSN 468-2114, Comm (478) 926-2114 (As requested)

2.5.1.1. All surface observations will be relayed in this format and order:

2.5.1.1.1. Type of observation/Time (e.g., METAR, SPECI, LOCAL).

2.5.1.1.2. Sky Condition.

2.5.1.1.3. Visibility/Present Weather.

2.5.1.1.4. Temp/Dew Point.

2.5.1.1.5. Winds (Direction in degrees magnetic and Speed).

2.5.1.1.6. Altimeter.

2.5.1.1.7. Remarks.

2.5.2. **TAFs.** The 26 OWS disseminates TAFs via JET. If JET is nonoperational, the WF will disseminate the information locally if requested. When the TAF is unavailable, Robins AFB customers may reference WF-produced products (i.e., the current web-based aviation MEF) through the WF homepage.

2.5.3. **Special Weather Statements & Significant Weather Messages.** Special Weather Statements (SWSs) and significant weather messages provide advance notice of hazardous weather conditions that have the potential to affect Robins AFB. The 26 OWS transmits SWSs to WF leadership via email. Weather flight leadership forwards SWSs to base leaders. Significant weather messages, authored by the WF, are disseminated via e-mail to base leaders.

2.5.4. **WWAs.** The 26 OWS or WF will issue WWAs via JET. After issuance, the WF will give courtesy calls to Robins Tower, Robins Command Post (RCP), and (AMOPS) to ensure receipt. These courtesy calls also serve as back-up notification when JET is out-of-service. Upon receiving the watch, warning, or advisory information, the RCP will disseminate the information through Installation Warning System Emergency Notification System IAW AFI 10-207 and AFMC Guidance for operating Installation Warning System Alerts; and if inoperative, manual notification will be accomplished using Command Post weather Quick Reaction Checklists.

2.5.4.1. **Lightning Warnings.** All lightning warnings are redundant dissemination by the Robins Command Post to the base populace via the Giant Voice (GV), and allow members on base to be prepared for dangerous weather.

2.5.4.2. **Tornado Warnings.** The Robins Command Post has the sole responsibility to activate the Giant Voice/base siren when a tornado warning is issued.

2.6. Cooperative Weather Watch (CWW). The WF and Robins Tower have established a CWW as required by AFI 13-204v3 and AFMAN 15-111. The CWW is the process for Robins Tower personnel to report significant weather events or changes in weather conditions to the Duty Technician (DSN 468-3573). CWW responsibilities are outlined in Chapter 4.

2.6.1. The WF is responsible to develop/maintain a CWW training that includes, but is not limited to:

2.6.1.1. Local weather conditions

2.6.1.2. PIREP reports

2.6.1.3. Procedures for Robins Tower personnel to determine prevailing visibility, report changes in tower prevailing visibility when less than 4 statute miles and differs from surface prevailing visibility, and any occurrence of previously unreported weather conditions that could affect flight safety or be critical to the safety or efficiency of other local operations and resources.

2.6.2. The WF will train all Robins Tower personnel on the CWW program. Training will include a written evaluation with a minimum passing score of 80%. Training must be completed prior to the controller receiving their first position certification in the tower.

2.6.2.1. Document limited weather observation certifications for all Robins Tower personnel on AF IMT 3622, *Air Traffic Control/Weather Certification and Rating Record*.

2.6.3. The NCOIC, Air Traffic Control Training and Standardization (TSN) is responsible to develop CWW and tower visibility observation refresher training, and administer an annual written evaluation for all Robins Tower personnel.

2.6.3.1. Document annual refresher training on AF IMT 1098, *Special Task Certification and Recurring Training*.

2.7. PMSV Support. Weather information is available via PMSV radio at frequency 349.850 MHz. The DT will monitor PMSV traffic for aircraft contacts whenever the station is manned. Aircraft outside the range of the Robins WF PMSV can contact another weather station or reach the WF through a phone patch via the Robins Command Post. When the Robins WF PMSV is inoperative, the WF will notify Airfield Management Operations (AMOPS). They will place the outage on local Airfield Advisories and NOTAMS. The message will read similar to “PMSV RADIO 349.850 INOP; contact Robins Command Post DSN 497-2612 C478-327-2612 for phone patch, during non-duty hours 26 OWS DSN 331-2651 C318-529-2651”. Local Flight Information Publication (FLIPs) also document procedures for in-flight aircrews to receive real-time weather information during PMSV outages.

2.8. Emergency Action(s) Response.

2.8.1. **Aircraft Mishap.** When notified of an aircraft mishap, the WF will initiate a save of applicable data used in the development of any weather products provided and will give this data to investigating agencies upon request.

2.8.1.1. If the WF provided the Mission Weather Product (MWP), the WF will notify the OWS Operations Floor Production Supervisor of the aircraft mishap as soon as possible after notification of the event. The WF will coordinate with the 26 OWS to save all applicable data and products. If products from other OWSs were used, the WF will coordinate with all applicable OWSs to ensure data is saved. Enough data covering weather conditions before and after the mishap will be saved to fully reconstruct environmental conditions. See A2.1.11 for observation requirements.

2.8.1.2. If an OWS, TACC/XOW, or another WF provided the MWP, they will conduct the data save in coordination with any other Air Force Weather units involved.

2.8.2. **Severe Weather Action Procedures (SWAP).** The WF will initiate SWAP in accordance with criteria listed in [Table 2.7](#) SWAP ensures sufficient manpower is available to meet the increased demand for timely weather information from supported unit(s) during

significant weather events. It is imperative that timely and accurate weather watches, warnings, and advisories are disseminated to all agencies to ensure personnel and resource protection. The DT will notify WF leadership of SWAP activation during normal staff duty hours. During non-duty hours, the 26 OWS will notify the WF standby forecaster when conditions listed in **Table 2.7** have been met and the WF technician will activate SWAP.

Table 2.7. Conditions Requiring SWAP Activation

Weather Condition	Desired Notification / Activation Lead Time
1. One of the following Weather Watches is issued by the 26 OWS:	
Tornado	As potential warrants
Severe Thunderstorm (Winds \geq 50 Knots and/or Hail \geq 3/4 Inch)	As potential warrants
Damaging Winds (\geq 50 Knots) – not associated with t-storms	As potential warrants
Freezing Precipitation (any intensity)	As potential warrants
2. One of the following Weather Warnings is issued by the 26 OWS:	
Tornado	15 minutes
Severe Thunderstorm (Winds \geq 50 Knots and/or Hail \geq 3/4 Inch)	60 minutes
Damaging Winds (\geq 50 Knots) – not associated with t-storms	60 minutes
Freezing Precipitation (Any intensity)	60 minutes
3. One of the following weather watches or warnings is issued by the National Weather Service (NWS) or Storm Prediction Center (SPC) for Houston County:	
Tornado Watch/Warning	When Issued
Severe Thunderstorm Watch/Warning	When Issued
Any Winter-Weather Related Advisory, Warning, or Watch	When Issued
4. In the event of unforeseen circumstances, such as a communications line failure, or a critical equipment outage at either the OWS or WF, the WF will implement SWAP at the OWS's request. The OWS, as the agency ultimately responsible for forecast watch/warning support, will have this prerogative in the interest of Robins AFB resource protection and flight safety.	
5. Any other event or situation that the Duty Technician deems necessary for notification.	

2.8.3. **WF Forecaster Recall Requirements.** The WF forecaster will be notified/recalled under the following circumstances, and must report to duty within 30 minutes:

2.8.3.1. Any FMQ-19 or JET outages. The 26 OWS will notify the standby forecaster when observations are not being transmitted, are not representative of current conditions, or when the automated weather sensor display is unavailable.

2.8.3.2. Thunderstorms developing with the potential to be on station within 1 hour. The standby forecaster is responsible for maintaining weather situational awareness as if on-duty in the weather station, and will report back to the station immediately if thunderstorm development occurs.

2.8.3.3. The OWS or NWS/SPC places Robins AFB in any type of moderate or severe thunderstorm watch or warning, or winter precipitation watch or warning. The 26 OWS will notify the standby forecaster prior to issuing any watch or warning for Robins AFB. **A Duty Technician WILL be present for the entire duration of any moderate/severe thunderstorm or winter precipitation watch and/or warning.**

2.8.3.4. Any special mission arrives on station. AMOPS will notify the standby forecaster of any unplanned special mission arrivals.

2.8.4. Chemical, Biological, Radiological, Nuclear, and High-yield Explosive (CBRNE) Response.

2.8.4.1. If surface observations or alphanumeric forecasts are requested, make sure that observations and forecasts provided are representative of the location/time of the CBRNE event.

2.8.4.2. Work closely with Emergency Management or other functions to ensure the supported commander gets a consistent picture.

2.8.4.3. Upon request from Emergency Management or any other agency, obtain/provide Chemical Downwind Messages from the OWS.

Chapter 3

MISSION SERVICES

3.1. General. The WF supports the Robins AFB flying and non-flying missions. This chapter identifies the flying and non-flying missions and the weather support provided.

3.2. Flying Missions. The WF provides weather support to the flying units listed in [Attachment 6](#).

3.3. Mission Weather Products (MWP). MWPs fuse theater scale products with local mission requirements enabling the direct inject of weather impacts into warfighter planning and/or execution. MWPs are tailored to individual customer requirements and include flight weather briefings, mission planning briefs, and any other weather products prepared to meet the needs of a supported unit. MWPs are developed using the Administrative and Operational Mission Execution Forecast Process outlined in AFMAN 15-129V2 and supplemented by the WF's internal Mission Execution Forecast Process. The result is a product designed to provide timely, accurate, and relevant weather intelligence to various customers. The WF MWPs must be horizontally consistent with (but not necessarily mirror) products issued by the 26 OWS and Air Force Weather Agency (AFWA).

3.3.1. Web-based Aviation Mission Execution Forecast (MEF). The daily web-based aviation MEF is designed to provide critical go/no-go weather information for all phases of local flying customers' sorties (see [Attachment 7](#) for sample product). It includes Take-Off/Landing Data (TOLD), solar/lunar data, flight hazards, and flight level winds for supported customers' mission operating areas. The MEF is available through the WF webpage: <https://cs3.eis.af.mil/sites/OO-OP-MC-61/default.aspx> (under Aviation Weather Page). In the event of a Local Area Network (LAN) outage, the MEF will be faxed to the appropriate flying squadrons.

3.3.1.1. Issue Times. The MEF will be issued during normal duty days at 0500L. It will not be issued when the airfield is closed and may not be issued during days when no flying missions are scheduled.

3.3.1.2. Amendments/Updates. The MEF will be monitored continuously and updated as required. The MEF will be amended when the TOLD is out of category, a threshold changes and/or the Route/Orbit/AR forecast is no longer representative of current or forecasted conditions and could adversely impact the scheduled sortie.

3.3.1.3. Formal Briefing. Aircrews should call the WF forecaster at 468-3573 to receive any updates to the MEF and gain a full understanding of expected weather impacts to their mission. Aircrews should call no later than (NLT) 1 1/2 hours before their designated take-off time to receive their briefing.

3.3.1.4. The WF will provide metrics on MEF accuracy and status of products/services as requested.

3.3.2. Flight Weather Briefings (175-1s). Weather personnel will provide verbal or traditional flight weather briefings (DD Form 175-1, *Flight Weather Briefing*) to aircrews as requested and in accordance with the flight's duty priorities as listed in [Table 1.1](#). Briefings will be provided either at the weather station or via fax/phone. Please provide 2 hours

advance notice of DD 175-1 request by calling 468-3573. Out-of-station mass briefings for special missions require 72 hours advance notice, are subject to staffing availability, and must be coordinated with weather flight leadership at 468-0383/0992. Transient aircrews can receive flight weather briefings from either the WF (if manning permits) or the 26 OWS. The 26 OWS can be contacted by phone (DSN 331-2651), fax (DSN 331-2609), or via the web at <https://26ows.us.af.mil>. The OWS requests 2 hours advance notice of DD 175-1 briefings.

3.3.3. Tropical Weather Message. When tropical systems are forecast to come within 400NM of Robins AFB, the WF will issue a tropical weather message. This will generally result in at least 5 days notice of potential storm impacts, and will contain all the latest information regarding the movement and forecast track of the storm, as well as the expected impact on Robins AFB. The tropical weather message will be provided via email to base leadership. The WF will include the RCP in the email, enabling them to immediately start their checklists. The tropical weather message will be updated as needed (usually once per day) or more frequently if directed by the Installation Commander.

3.3.3.1. Tropical Cyclone-Threat Assessment Product (TC-TAP). The 26 OWS will issue a Tropical Cyclone-Threat Assessment Product (TC-TAP) for Robins AFB when the base is expected to receive sustained winds \geq 35-knots during the next 96 hours as a result of a tropical cyclone. The TC-TAP is coordinated between the 26 OWS and WF and will contain at a minimum the start and end time of 35 and 50 knot winds, the peak wind speeds expected, and the storm's closest point of approach to Robins AFB. AFMAN 15-129 V1 & V2 dictate that OWSs and WFs will not deviate from the official National Hurricane Center (NHC) forecast track or intensity, but may tailor impacts to Robins AFB based on experience, training, and local terrain effects. If a TC-TAP is in effect, WF personnel may not deviate from the product when advising base leadership.

3.3.3.2. Hurricane Briefings. The WF will provide the most up-to-date weather briefings regarding any tropical cyclone activity anytime deemed necessary by the Crisis Action Team (CAT) and 78 ABW leadership. Additionally, the WF will provide up-to-date weather briefings to the Robins AFB Mission Partner Senior Leadership, WR-ALC leadership, 116 ACW, 461 ACW, and Marine Light Attack Helicopter Squadron 773 as requested and provided as timely as possible based upon most current NHC update.

3.3.3.3. Hurricane Conditions (HURCON). Upon advisement from the WF, the installation commander will set the HURCON described below for Robins AFB. These conditions alert base agencies of the need to consider resource protection measures related to tropical weather.

3.3.3.3.1. HURCON 4: 72 - hours prior to the arrival of sustained surface winds \geq 50 knots.

3.3.3.3.2. HURCON 3: 48 - hours prior to the arrival of sustained surface winds \geq 50 knots.

3.3.3.3.3. HURCON 2: 24 - hours prior to the arrival of sustained surface winds \geq 50 knots.

3.3.3.3.4. HURCON 1: 12 - hours prior to the arrival of sustained surface winds \geq 50 knots.

3.4. MISSIONWATCH. This is a deliberate process for monitoring terrestrial weather and/or the space environment for specific mission-limiting environmental factors. The WF's main tool to accomplish this task is the Web Situation Display (WSD). The WSD is a FAA program that allows the WF to constantly monitor Robins AFB airborne aircraft from take-off to recovery (with the exception of HMLA-773 aircraft which do not appear on the WSD). For those missions not visible on the WSD, traditional methods of mission following will be employed, including knowledge of flight schedules, tactics, and close contact with Supervisors of Flying (SOFs) and ops cells. Other meteorological and commercial data sources will be used to accomplish this task at the discretion of the Duty Technician. During rapidly changing weather, the WF will amend/update MWPs as required and contact the applicable agencies to pass on critical changes and recommend alternatives to exploit mission weather. Forecasters continually monitor the flight routes of each mission departing and returning to Robins AFB, and will immediately notify the aircrew if weather develops in their route that was not previously briefed/forecast. The 26 OWS will perform flight and route MISSIONWATCH for transient flights they brief which depart from Robins AFB. The WF will perform flight and route MISSIONWATCH for transient flights departing Robins AFB that were briefed by WF personnel.

3.5. Post-Mission Analysis / Feedback. Per AFMAN 15-129V2, units that regularly utilize weather support from the WF will provide post-mission/utilization feedback, when possible. The WF will utilize this data to refine their mission support and gauge unit strengths and challenges. Weather flight leadership will utilize feedback to tailor the Mission Execution Forecast Process, aiding continuous improvement of WF products. Formal/informal feedback methods include:

3.5.1. Web-based feedback form, currently located on the Robins Interactive Customer Evaluation webpage:

https://ice.disa.mil/index.cfm?fa=card&sp=132875&s=519&dep=*DoD&sc=32

3.5.2. Local weather brief feedback forms are located at the WF briefing counter and are also attached to all faxed briefings.

3.5.3. Email and/or phone calls to the flight commander or flight chief.

3.5.4. Routing through the base mail system.

3.5.5. In-person feedback in conjunction with briefings.

3.6. Transient Aircrew Support. Weather technicians will provide or arrange for weather support for transient aircrews IAW the duty priorities listed in [Table 1.1](#). The WF may provide flight weather briefings (175-1s), and/or updates to aircrews. Weather technicians may arrange for weather support from the 26 OWS briefing cell when greater duty priorities take precedence. The 26 OWS briefing cell can be reached at DSN 331-2651/2652, commercial (318) 529-2651/2652, or via web access from the aircrew briefing terminal located in the flight planning room (<https://26ows.us.af.mil>).

3.7. Aero Club Activities. The WF will provide flight weather briefings to Aero Club members performing official Air Force operational duties (i.e. Civil Air Patrol and Initial Flying Training Programs). The WF will provide or arrange briefings when such Aero Club flights are in a transient status through the appropriate OWS or Flight Service Station. The WF will advise Aero Club members performing official flight duties of the OWS web page request process and self-briefing capabilities.

3.8. Non-Flying Missions. The WF provides timely resource and personnel protection (WWAs) to all of Team Robins. Specific support to non-flying missions is identified in **Chapter 4**. Specialized weather information can be provided to support any DoD non-flying mission upon request. However, weather information will not be released to non-DoD agencies or the general public without approval from the 78 ABW Public Affairs and 78 ABW/JA Legal office. Any questions/ clarifications will be coordinated through the WF commander and/or flight chief (468-0992/0383).

3.9. Space Weather Impacts. Robins AFB missions have a wide-variety of parameters affected by various space-weather conditions (High Frequency and Ultra High Frequency communication, radar, Global Positioning System communications, etc.). The WF provides space impacts on their MWP. More detailed products are available at: https://26ows.us.af.mil/by_type/space/index.cfm?fuseaction=space_weather&UID=&BW=H&UF=M&AOR=1&USEHF=1&CFID=9635553&CFTOKEN=69557136. An example of the daily discussion is provided in **Attachment 8**.

3.10. Tactical Decision Aids. At this time, no parent/host units require Tactical Decision Aids (TDAs) or electro-optical aids such as the Target Acquisition Weather Software (TAWS). Weather flight leadership requires parent/host units inform them of changes to their TDA needs so that procedures, training, and software can be generated accordingly.

Chapter 4

STAFF SERVICES

4.1. General. Staff services are typically accomplished by WF leadership and include meteorological functions (briefings), ensuring the WF is trained and equipped for day-to-day operations, and cultivating relationships with base agencies to ensure WF support is optimal.

4.2. Staff Meteorological Functions. Staff meteorological functions aid leadership in identifying and understanding specific weather and environmental impacts. The WF is available to assist commanders in determining weather support requirements and impacts to operations. Examples of staff meteorological functions provided are:

4.2.1. **Staff Briefings.** Staff weather briefings for 78 ABW, Robins AFB Mission Partner Senior Leadership, WR-ALC, 116 ACW, Marine Light Attack Helicopter Squadron 773 and 461 ACW will be provided as requested. Standard information includes a surface analysis, satellite/radar image, and local 5-day weather outlook. Briefing slides may be tailored to meet specific weather requirements.

4.2.2. **Installation Control Center (ICC) Briefings.** The WF will provide weather briefings as required during Crisis Action Team (CAT) / Emergency Operations Center (EOC) standup. When the CAT and/or EOC are activated, the WF will receive notification via ALERT and will prepare a “standard” weather briefing consisting of local surface analysis, satellite/radar image, and 5-day weather outlook. Specific requirements beyond these standard slides will be requested by the function being activated. This includes exercise, natural disaster, hurricane (HUREVAC/HURCON support) and deployment briefings.

4.2.3. **Instrument Refresher Course (IRC) Briefings.** The WF provides IRC briefings as required by course scheduling in accordance with AFMAN 11-210 (*Instrument Refresher Program*) and AFMAN 15-129V2. The weather portion of the briefing consists of an overview of the WF’s Airfield and Mission Services, WF capabilities, WF and 26 OWS responsibilities, resource protection, seasonal/regional weather and space weather impacts (when applicable). The WF requires host units to request these briefings on an as-needed basis.

4.2.4. **Predeployment Planning Briefings.** The WF will provide predeployment weather briefings as requested. Briefing content will be tailored to meet customer requirements. For example, an aviation unit will receive weather impacts at the deployed location on their flying mission, in addition to the standard surface weather information usually presented to ground units. A ground-based unit will receive a briefing on surface temperatures, wind speed, potential for blowing sand and dust, and precipitation.

4.2.5. **Climatology Services.** General climatology for Robins AFB is provided on the WF’s webpage <https://cs3.eis.af.mil/sites/OO-OP-MC-61/default.aspx> Upon request from an authorized agency, the WF will provide specific climatology data for Robins AFB and other locations. Requests may be made to WF leadership (DSN 468-0992).

4.3. Staff Integration Functions. Weather flight leadership will make every effort to ensure that the unit is adequately resourced to meet both operational and staff requirements. In addition

to leadership and management of unit activities, members will also function as a direct interface with supported unit commanders and staff, and will provide direct support to command, control and planning functions. Specific integration with base agencies is outlined below.

4.3.1. **Headquarters Air Force Reserve Command (HQ AFRC).** The WF will provide AFRC Crisis Action Team briefing support in the event AFRC/A3V cannot provide such support. The WF requires 48-hour advance notice for exercise support of this type.

4.3.2. **Warner Robins Air Logistics Complex (WR-ALC).** The WF will:

4.3.2.1. Provide technical advice on weather support problems or requirements.

4.3.2.2. Provide monthly climatology for Robins AFB via the weather web page at: <https://cs3.eis.af.mil/sites/OO-OP-MC-61/default.aspx>.

4.3.3. **78th Air Base Wing (78 ABW).** The WF will:

4.3.3.1. Where applicable, prepare the necessary weather annex/appendices for Robins AFB Contingency Plans.

4.3.3.2. Respond to aircraft mishaps as outlined in Robins AFB Installation Emergency Management Plan 10-2 (IEMP 10-2).

4.3.3.3. Assist in periodic exercises tailored to upcoming seasonal weather or other environmental concerns and educate base agencies on the purpose and applicability of weather watches, warnings, and advisories.

4.3.4. **778 CES/CEXM.** The WF will provide local weather data, chemical downwind messages, effective downwind messages, and/or upper air winds as requested. AFI 10-2501, *Air Force Emergency Management (EM) Program Planning and Operations*, outlines WF actions for major accidents, natural disasters, and incidents involving terrorist use of weapons of mass destruction (WMD).

4.3.4.1. In accordance with AFI 10-2501, the WF will assist in developing Annex B Natural Disaster for the IEMP 10-2.

4.3.4.2. In accordance with the 78 CEG Contingency Response Plan, the WF will contact CE Customer Service at DSN 468-5657 whenever surface temperatures are forecast to drop below 25 degrees Fahrenheit for more than 4 hours and/or below 15 degrees Fahrenheit for more than 4 hours.

4.3.4.3. In accordance with the IEMP 10-2, Flood Checklist #15, the OSS/OSW is charged with the relay of NWS-issued flood watches/warnings for the Robins AFB area (Bibb & Houston Counties) to Command Post.

4.3.4.4. Provide weather briefing support during delegation visits under the Open Skies Treaty and Chemical Weapons Convention Compliance Plans.

4.3.5. **78 LRS/LGRD.** The WF will provide weather information as requested by the Installation Deployment Officer (IDO) to support base exercises and real world deployments. A minimum of 3 hours notice is required to gather climatology for potential destinations.

4.3.6. **78 ABW/CP.** The WF will:

4.3.6.1. Notify the RCP whenever the base weather station is evacuated and/or the AOL is evacuated.

4.3.6.2. Coordinate with the RCP for weather related Operational Report 3 (OPREP-3) and provide the RCP any pertinent weather information.

4.3.7. **78 ABW/JA.** The WF will:

4.3.7.1. Refer all requests or subpoenas for weather information, including requests for WF response actions to severe weather related to weather causing damage or injury that may be associated with civil claims or court action to 78 ABW/JA.

4.3.7.2. For any request for synoptic weather records kept in accordance with record disposition schedule, the WF will compile the records recorded in regular course of WF operations and release IAW FOIA procedures after coordination with 78 ABW/JA.

4.3.7.3. For any request of a weather observation record including a supplemented remark of Aircraft Mishap, contact information for the Duty Technician who supplemented the instrument recording will be provided to the Safety Board.

4.3.7.4. For any request or subpoena for weather observation record involving an augmented record for severe weather, including, e.g. comment of 'funnel cloud,' 'hail' (size over an inch in diameter), 'freezing rain', contact number for Duty Technician augmenting instrument record will be provided to JA separate from record.

4.3.8. **78 OSS/OSAT.** The WF will:

4.3.8.1. Participate in the CWW program (see paragraph 2.6.).

4.3.8.2. Provide notification, via OWS or WF, of all forecasted weather watches, warnings, and advisories via Integrated Weather Warning Capability (IWWC), telephone, e-mail, or in-person during airfield hours of operations.

4.3.8.3. Notify Robins Tower whenever the base weather station is closed, the duty technician goes on standby duty, and/or the base weather station is evacuated and moved to the AOL facility.

4.3.8.4. WF leadership will participate as a member of the Airfield Operations Board (AOB) as directed in AFI 13-204 v3 *Airfield Operations Procedures and Programs*.

4.3.8.5. Monitor the FMQ-19 readings and perform RM based augmentation procedures and clearly defined duty priorities that include augmentation. In all cases, the highest priority will be flight safety.

4.3.8.6. Reevaluate the weather conditions whenever a reliable source (i.e. Robins Tower, pilots, local law enforcement, etc) reports weather conditions different from the last disseminated observation (i.e. different ceiling height, visibility, present weather, etc).

4.3.8.7. Relay PIREPs to Robins Tower considered significant to flight operations.

4.3.8.8. During back-up of the visibility sensor, use Robins Tower values of prevailing visibility as a guide in determining surface prevailing visibility when view is obstructed. The presence of a surface-based obscuration, uniformly distributed to heights above the

level of the tower is sufficient reason to consider the weather unit's prevailing visibility to be the same as the control tower level.

4.3.8.9. Notify airfield leadership when continuous RVR reporting is needed during airfield closure hours to ensure system is left on to properly report RVR conditions.

4.3.8.10. Notify Robins Tower when JET, FMQ-19 becomes inoperative and when winds are estimated.

4.3.9. **78 OSS/OSAM.** The OWS or WF will provide notification of weather watches, warnings, and advisories via IWWC/telephone/or e-mail, and will notify AMOPs whenever the base weather station is closed, the duty technician goes on standby duty, and/or the base weather station is evacuated and moved to the AOL facility.

4.3.10. **116th Air Control Wing (116 ACW) and 461st Air Control Wing (461 ACW).** The WF will:

4.3.10.1. Provide in-person briefings on request and with 48 hour advance notice for the following Team JSTARS functions:

4.3.10.2. Crisis Action Team activations.

4.3.10.3. Higher Headquarters (HHQ) missions.

4.3.10.4. Exercises and inspections requiring WF support products.

4.3.11. **5th Combat Communications Group (5 CCG).** The WF will:

4.3.11.1. Provide weather briefings for 5 CCG exercises. Upon request, the WF will provide an initial pre-deployment briefing, including a 5-day forecast for the location of interest. Additional weather support during the exercise will be as requested or coordinated.

4.3.11.2. Provide real-world deployment briefings as needed, 48 hours notification when possible.

4.3.12. **All Supported Flying Units (116 ACW, 461 ACW, 339 FLTS, HMLA-773).** The WF will provide services as outlined throughout this publication.

4.4. Reciprocal Support.

4.4.1. **78 ABW/PA** will:

4.4.1.1. Coordinate tours of the base weather station by community groups and others with the Flight Commander (468-0992) or Flight Chief (468-0383).

4.4.1.2. When requested/needed, arrange for severe weather warnings to be displayed on base marquee systems.

4.4.1.3. When requested, provide approval of public release of weather information.

4.4.2. **78 OSS/OSAT** will:

4.4.2.1. Participate in the CWW Program (See paragraph 2.6.). Each Robins Tower member will be required to pass a written exam and receive an orientation of the weather facilities.

4.4.2.2. Notify WF when tower's prevailing visibility decreases to less than 4 statute miles or increases to 4 statute miles or more, and the tower prevailing visibility is different from the surface prevailing visibility.

4.4.2.3. Solicit aircrews for PIREPs, when able, and relay information to WF.

4.4.2.4. Notify WF if hail, tornado or funnel cloud is observed.

4.4.2.5. Report any other previously unreported meteorological condition that could affect flight safety or be critical to the safety of efficiency of other local operations and resources to the WF.

4.4.2.6. Provide control tower orientation training for weather personnel.

4.4.2.7. Provide daily PMSV radio checks on UHF frequency 349.85.

4.4.2.8. Assist WF in disseminating weather information, as priorities permit, when evacuation of the Weather Station is directed.

4.4.3. **78 OSS/OSAM** will:

4.4.3.1. Notify the WF immediately of all aircraft emergencies, incidents, or accidents.

4.4.3.2. Notify Weather Flight Chief or Flight Commander of all changes to published approach weather minimums at Robins AFB (published in FLIPs). The WF will provide amendments/updates to this document and update all internal SOPs based upon changes in the FLIPs.

4.4.3.3. Advise the WF of all changes in the active runway condition (e.g., wet or dry).

4.4.3.4. Call stand-by DT when flying operations require.

4.4.4. **78 OSS/OSM** will:

4.4.4.1. Provide, coordinate, and/or arrange for the installation, maintenance, and repair of all weather communication equipment except for that maintained by contract (e.g., JET).

4.4.4.2. Notify responsible service agencies of outages.

4.4.4.3. Coordinate with off-base agencies to repair off-base communication lines.

4.4.4.4. Ensure established maintenance response times are met.

4.4.4.5. Ensure a single 24-hour point of contact for reporting outages.

4.4.4.6. Maintain equipment and technical orders for the following meteorological equipment:

4.4.4.6.1. PMSV Radio (Motorola CM-200).

4.4.4.6.2. Weather Surveillance Radar-1988, Doppler (WSR-88D).

4.4.4.6.3. Automated Observing System (FMQ-19).

4.4.4.7. Coordinate with the Duty Technician before any routine maintenance is performed on weather observing equipment (e.g., FMQ-19, WSR-88D).

- 4.4.4.7.1. If maintenance on the FMQ-19 requires liquid to be added to the rain gauge, record and report the amount of liquid added to the Duty Technician.
- 4.4.4.7.2. Perform routine maintenance and cleaning of all FMQ-19 sensors at least once per week.
- 4.4.5. **Robins AFB Command Post (78 CP)** will:
 - 4.4.5.1. Disseminate weather warnings, watches, and advisories according to local procedures.
 - 4.4.5.2. Notify the WF when any other agency or credible source (i.e. Fire Department, Houston County Emergency Management, or Georgia State Patrol) reports a funnel cloud, tornado or any other significant weather event. Immediately activate the Giant Voice/base siren when a tornado warning has been issued by the 26 OWS or the WF.
 - 4.4.5.3. Include the WF on their dissemination/notification list for any weather related OPREP-3s or incidents.
- 4.4.6. **78 ABW Communications Directorate (78 SC)** will:
 - 4.4.6.1. Provide, coordinate, and/or arrange for the installation, maintenance, and repair of all weather communication circuits except for equipment maintained by contract.
 - 4.4.6.2. Notify the responsible service agents for outages.
 - 4.4.6.3. Coordinate with off-base agencies to repair off-base communications lines.
 - 4.4.6.4. Perform necessary follow-up actions as required until full service is restored.
 - 4.4.6.5. Ensure telephone circuits are assigned repair priorities.
 - 4.4.6.6. Load required Time Compliance Network Orders (TCNOs) to JET server and report compliance on the HQ AFWA Site Compliance and Notification System (SCANS) website.
- 4.4.7. **78 SFS Base Defense Operations Center (BDOC)** will promptly inform the WF of any hazardous weather (tornado, hail, winds, etc.) observed or reported by Security Forces personnel.
- 4.4.8. **78 MDG** will provide and disseminate Wet-Bulb Globe Temperature and associated flag conditions on days with expected high temperatures.
- 4.4.9. **78 ABW/JA** will review all requests for weather information that are associated with civil claims or court cases and provide approval for public release of weather information.
- 4.4.10. **78 CEG** will provide backup electrical power support to critical equipment at the WF via a back-up generator located outside building 110. Generator power starts automatically when commercial power service is interrupted with auto start and switching capabilities.
- 4.4.11. **116 ACW (116 OSS/OSA, DPC), 461 ACW, 339 FLTS and HMLA-773,** will:
 - 4.4.11.1. Notify the DT of current and planned weather alternates and any special considerations affecting duration of tour (e.g., weather categories, exercise/deployment considerations, etc.)

4.4.11.2. For JSTARS HHQ missions, 116/461 OSS will relay information on details of route of flight, area of operations, and divert fields to the WF NLT 48 hours prior to mission take-off.

4.4.11.3. Notify the WF of required additional support as soon as it becomes known to include monitoring of alternate observations/forecasts and tracking of previously unspecified weather criteria.

4.4.11.4. Provide timely notification of changes to scheduled operations that affect weather support requirements as soon as changes are identified.

4.4.11.5. Provide the WF a weekly/daily flying schedule via fax, email, or webpage. At a minimum, the schedule must include take-off and landing times, orbit/route name and valid times, and flight level.

4.4.11.6. Notify 78 OSS WF of LAN outages/web page discrepancies as soon as identified.

4.4.11.7. Provide PIREPS either directly to the WF via phone (468-3573), through the PMSV, or via Robins Tower. PIREPs will include the location and flight level of the aircraft, time of the observation, type of aircraft, and a description and the extent of meteorological elements. Conditions at takeoff, en-route, and upon arrival at the destination are requested.

4.4.11.8. Provide post-mission feedback to the WF for all missions, especially those considered non-effective due to weather. See paragraph 3.5 for more details.

4.4.11.9. Include weather feedback link, via ICE, with other debrief forms.

4.4.11.10. Squadron Ops Officers act as liaisons to provide in-person feedback from their unit.

4.4.11.11. Provide guidance (at least 2 weeks in advance) to the WF regarding any weather training/educational requirements (or changes in requirements), if applicable.

4.4.11.12. Coordinate with WF leadership to schedule in-person briefings for deploying aircrews, providing at least 48 hours notice.

4.4.12. **Airfield Operations Flight Information Publication (FLIP) Manager.** The FLIP manager will submit FLIP updates provided by the WF to Air Force Flight Standards Agency/Operating Location-D (AFFSA/OL-D).

4.4.13. **All Weather Support Recipients** will:

4.4.13.1. Notify the WF of any problems with their JET accounts.

4.4.13.2. Notify the WF when new weather support requirements are identified.

4.4.13.3. Coordinate changes/additions to weather support requirements as soon as possible.

4.4.13.4. Provide a minimum of 48-hour notice for known weather support requests entailing out-of-station support.

Chapter 5

WEATHER EQUIPMENT

5.1. General. This chapter provides a brief description of the meteorological and communications equipment used by the WF. Additionally, it provides information on back-up systems, maintenance, and restoral priorities.

5.2. Meteorological Equipment. The WF uses advanced meteorological equipment to determine the current state of the atmosphere. These critical systems provide customers the most timely, accurate and relevant weather intelligence possible.

5.2.1. **FMQ-19.** The FMQ-19 samples, measures, and reports: temperature, wind speed and direction, visibility, cloud base height and amount of coverage, pressure, liquid equivalent precipitation accumulation, ice accretion during freezing precipitation and lightning strikes. These measurements are processed to create properly formatted, fully automated observations that comply with applicable various reporting standards and protocols defined by the Federal Meteorological Handbook (FMH-1), the World Meteorological Organization (WMO), the Federal Aviation Administration (FAA), National Weather Service (NWS), and military reporting standards.

5.2.2. **GIBSON-RIDGE SOFTWARE.** The WF utilizes Gibson Ridge Software as its primary source of radar data. Weather technicians use software to analyze complex radar signatures and obtain detailed information on storm intensity, movement, internal circulation, and general wind flow. Weather technicians will routinely incorporate the latest radar information into Mission Weather Products and Resource Protection actions. Back-up source for radar provided through WeatherTap website.

5.2.3. **Lightning Detection.** The National Lightning Detection Network provides the WF with national lightning data. This national lightning data is received via a satellite antenna installed on the roof of building 110. Back-up sources of national lightning data are available through the Air Force Weather-Web Services (AFW-WEBS) and WeatherTap websites.

5.2.4. **Kestrel 4000/4500.** The Kestrel is a hand-held device that provides temperature, dew point, wind speed/direction, and pressure readings. The Kestrel is the primary source of backup meteorological data during FMQ-19 outages.

5.3. Communications Equipment. The following systems form the backbone of the WF communications network.

5.3.1. **Joint Environmental Toolkit (JET).** As discussed in [paragraph 2.5](#), JET is the primary system for disseminating forecasts, observations, warnings, watches, and advisories. When JET is out-of-service, telephones are used to contact key aircraft controlling agencies.

5.3.2. **PMSV Radio.** The Pilot-To-Metro-Service Radio (349.850 MHz) allows the WF to communicate with aircrews, both on the ground and flying, as well as Robins Tower personnel. If the PMSV is out-of- service, aircrews can contact the OWS via phone patch (where possible) to get weather data.

5.3.3. **Phones/Hotlines.** Phones and direct lines serve primarily for rapidly passing along critical, time-sensitive information, and also serve as a backup for passing along information when other dissemination systems fail.

5.3.4. **LAN.** The WF relies heavily on the local area network to guarantee the timeliness and accuracy of weather intelligence to its customers.

5.4. Maintenance. **Table 5.1** identifies which organizations provide preventive maintenance and repairs for weather and communications equipment.

Table 5.1. Equipment Maintenance

Organization	Equipment
78 OSS/OSM (ATCAL Maintenance)	FMQ-19/PMSV
AFWA Fielded Systems	JET
78 ABW/SC (Telephone Systems)	Phones/Hotlines
78 ABW/SC (Network Maintenance)	LAN/Internet Connectivity

5.4.1. **Restoral Priorities.** Priorities for restoring critical systems exist in the event that a natural disaster or any other anomaly simultaneously impacts systems base wide. Significant indicates a situation where the equipment is completely inoperative, while minimal means the equipment is in limited operation. The priorities for weather equipment are listed in **Table 5.2** (priorities may be adjusted based on forecasted weather):

Table 5.2. Equipment Restoral Priorities

Equipment	Organization	Response Times Significant/Minimal
FMQ-19	78 OSS/OSM	Immediate/Next duty day
PMSV Radio	78 OSS/OSM	Immediate/Next duty day
LAN/Internet Connectivity/Phones/Hotlines	78 ABW/SC	12 hours

5.5. Building Power. Building 110 is equipped with a back-up generator. The generator will start automatically when power is cut-off to building 110.

JEFFREY R. KING, Colonel, USAF
Commander

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

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

AFI 10-206, *Operational Reporting*, 06 September 2011

AFI 10-229, *Responding to Severe Weather Events*, 15 October 2003

AFPD 11-2, *Aircrew Operations* 19 January 2012

AFH 11-203, Vol 1, *Weather for Aircrews* 12 January 2012

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AFI 13-204, Vol 3, *Airfield Operations Procedures and Programs*, 01 September 2010

AFMAN 11-210, *Instrument Refresher Program*, 3 February 2005

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

AFMAN 15-111, *Surface Weather Observations*, 27 February 2013

AFI 15-114, *Functional Resourc/ Weather Technical Performance Evaluation* 7 December 2001

AFMAN 15-124, *Meteorological Codes*, 28 February 2013

AFI 15-128, *Air Force Weather Roles and Responsibilities*, 07 February 2011

AFMAN 15-129, Vol 1, *Air and Space Weather Operations – Characterization*, 06 December 2011

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

Robins AFB Installation Emergency Management Plan 10-2, January 2014

Air Force Weather Agency Technical Note 98-002

Abbreviations and Acronyms

AFI —Air Force Instruction

AFMAN —Air Force Manual

AFB —Air Force Base

AFFSA —Air Force Flight Standards Agency

AFMC —Air Force Materiel Command

AFPD —Air Force Policy Directive

AFTR —Air Force Training Records

AFWA —Air Force Weather Agency

AFW-WEBS —Air Force Weather-Web Services

AGL —Above Ground Level

AOL —Alternate Operating Location
AMOPS —Airfield Management Operations
AMOS —Automated Observing System
AOR —Area of Responsibility
BWW —Basic Weather Watch
CAT —Crisis Action Team
CB —Cumulonimbus
CBRNE —Chemical, Biological, Radiological, Nuclear, and High-yield Explosive
CC —Commander
CES —Civil Engineering Squadron
CONUS —Continental United States
CWW —Cooperative Weather Watch
DA —Density Altitude
DPC —Deployment Planning Cell
DSNT —Distant
EOC —Emergency Operations Center
ESTMD —Estimated
EWO —Emergency War Order
FLIP —Flight Information Publication
FITS —Fighter Index of Thermal Stress
FTU —Formal Training Unit
GPS —Global Positioning System
GSU —Geographically Separated Unit
HF —High Frequency
IAW —In Accordance With
ICAO —International Civil Aviation Organization
ICC —Installation Control Center
IRC —Instrument Refresher Course
IWWC —Integrated Weather Warnings Capability
FRQ —Frequent
JET —Joint Environmental Toolkit
KT —Knots

LAN —Local Area Network

LTG —Lightning

LWR —Lower

MEF —Mission Execution Forecast

MEFP —Mission Execution Forecast Process

METAR —Meteorological Terminal Aviation Routine Report

METCON —Meteorological Conference

METSAT —Meteorological Satellite

METWATCH —Meteorological Watch

MOV —Moving

MOVD —Moved

MWP —Mission Weather Product

NWS —National Weather Service

OHD —Overhead

OPR —Office of Primary Responsibility

OSA —Airfield Operations Flight

OSKX —Weapons and Tactics Branch, Contingency Operations

OSS —Operations Support Squadron

OWS —Operational Weather Squadron

PA —Public Affairs

PA —Pressure Altitude

PIREP —Pilot Report

PK WND —Peak Wind

PMSV —Pilot-to-Metro Service

POC —Point of Contact

RCP —Robins Command Post

RDS —Records Disposition Schedule

RVR —Runway Visual Range

RWY —Runway

SE —Safety Office

SFS —Security Forces Squadron

SM —Statute Mile

SOF —Supervisor of Flying

SOP —Standard Operating Procedure

SPECI —Special

SWAP —Severe Weather Action Procedures

TACC —Tanker Airlift Control Center

TAF —Terminal Aerodrome Forecast

TCU —Towering Cumulus

TWR —Tower

UFN —Until Further Notice

UHF —Ultra High Frequency

UNKN —Unknown

VFR —Visual Flight Rules

VHF —Very High Frequency

VIS —Visibility

WF —Weather Flight

WSHFT —Wind Shift

Attachment 2

SPECIAL WEATHER OBSERVATION CRITERIA

A2.1. A Special weather observation will be taken and disseminated for the listed criteria*: *FLIP criteria updates may cause temporary changes to the reportable values listed below.

A2.1.1. **Visibility.** When the prevailing visibility decreases to less than or, if below, increases to equal or exceed any of the values listed below:

Table A2.1. Visibility Levels

3SM - AFMAN 15-111	1 5/8SM - FLIP	1SM - AFMAN 15-111/FLIP
2 3/4SM - FLIP	1 1/2SM - FLIP	3/4SM - FLIP
2SM - AFMAN 15-111/FLIP	1 1/4SM - FLIP	5/8SM - FLIP
		1/2SM - FLIP

A2.1.2. **Ceiling.** When the ceiling forms or dissipates below, decreases to less than, or if below, increases to equal or exceed any of the values listed below:

Table A2.2. Ceiling Levels

2000 ft – AFMAN 15-111	700 ft - AFMAN 15-111/ FLIP
1500 ft - AFMAN 15-111	600 ft - FLIP
1000 ft – AFMAN 15-111	500 ft - AFMAN 15-111/ FLIP
900 ft - FLIP	400 ft - FLIP
800 ft - AFMAN 15-111	200 ft - FLIP

A2.1.3. **Sky Condition.** A layer of clouds or obscuring phenomena aloft is observed below 900 ft and no layer aloft was reported below 900 ft in the previous METAR or SPECI.

A2.1.4. **Wind.**

A2.1.4.1. **Wind Shift.** Wind direction changes by 45 degrees or more in less than 15 minutes and the wind speed is 10 knots or more throughout the wind shift.

A2.1.4.2. **Squall.** A strong wind characterized by a sudden onset in which the wind speed increases at least 16 knots and is sustained at 22 knots or more for at least 1 minute.

A2.1.5. **Volcanic Ash.** Eruption or volcanic ash cloud first noted.

A2.1.6. **Thunderstorm.**

A2.1.6.1. **Begins or ends.** (A SPECI is not required to report the beginning of a new thunderstorm if one is currently reported.)

A2.1.7. **Precipitation.**

A2.1.7.1. Hail begins or ends.

A2.1.7.2. Freezing precipitation begins, ends, or changes intensity.

A2.1.7.3. Ice pellets begin, end, or change intensity.

A2.1.7.4. Any other type of precipitation begins or ends. NOTE: Except for freezing rain, freezing drizzle, hail, and ice pellets, a SPECI is not required for changes in type (e.g., drizzle changing to snow grains) or the beginning or ending of one type while another is in progress (e.g., snow changing to rain and snow).

A2.1.8. Tornado, Funnel Cloud, or Waterspout.

A2.1.8.1. Is observed and/or disappears from sight or ends.

A2.1.9. **Runway Visual Range (RVR).** The WF will provide RVR output according to the specifications listed in [Table A2.3](#)

Table A2.3. RVR Reporting.

RVR for active runway decreases to less than or, if below, increases to equal or exceed	
6000 ft - AFMAN 15-111	2400 ft – AFMAN 15-111/FLIP
5500 ft - FLIP	2000 ft – AFMAN 15-111
5000 ft – AFMAN 15-111/FLIP	1600 ft – Local E-8 criteria
4000 ft – FLIP	1000 ft – Local E-8 criteria
3500 ft – FLIP	

A2.1.9.1. Prevailing visibility is first observed \leq 1SM/1600 meters, and again when prevailing visibility goes above 1SM/1600 meters.

A2.1.9.2. RVR is first determined as unavailable (RVRNO) for the active runway, and when it is first determined that the "NO" report is no longer applicable, provided conditions for reporting RVR still exist. For example, if the active runway is 33, and the 33 vis sensor is inoperative, the 15 sensor may not be used to back-up RVR. The RVRNO remark must be appended to column 13.

A2.1.10. **Upon Resumption of Observing Services.** Take, disseminate, and record a SPECI within 15 minutes after returning to duty following a break in observing coverage or augmentation if a METAR was not filed as scheduled during the preceding 15-minute period.

A2.1.11. **Aircraft Mishap.** When operating in back-up mode, a SPECI will be taken immediately following notification or sighting of an aircraft mishap at or near the observing location unless there has been an intervening observation. This SPECI will be identified by including (ACFT MSHP) in remarks on the AF Form 3803/3813 only. This remark will not be transmitted locally or longline.

A2.1.12. Any other meteorological situation that, in the weather technician's opinion, is critical.

Attachment 3

TERMINAL AERODROME FORECAST (TAF) SPECIFICATION AND AMENDMENT CRITERIA

A3.1. Specification Criteria. The TAF will specify the time of occurrence, the duration, and the intensity (if applicable) of expected weather conditions. The following weather criteria will be specified in the TAF if expected to occur during the forecast period:

A3.1.1. Ceiling and/or visibility is forecast to decrease to less than, or if below, is forecast to equal or exceed any of the following levels:

Table A3.1. Ceiling/Visibility Forecast Levels

Ceiling	Visibility	Category
≥ 2,000 FT	≥ 3 SM (4,800 M)	E
< 2,000 FT but ≥ 1,000 FT	< 3 SM (4,800 M) but ≥ 2 SM (3,200 M)	D
< 1,000 FT but ≥ 700 FT	< 3 SM (4,800 M) but ≥ 2 SM (3,200 M)	C
< 700 FT but ≥ 200 FT	< 2 SM (3,200 M) but ≥ 1/2 SM (800 M)	B
< 200 FT	< 1/2 SM (800 M)	A

A3.1.2. Wind:

A3.1.2.1. A change in wind speed of 10 knots or more.

A3.1.2.2. A change in the onset, duration, and intensity of wind gusts.

A3.1.2.3. A change in prevailing wind direction of more than 30 degrees when the predominant wind speed or gusts are expected to be more than 15 knots.

A3.1.3. Icing, not associated with thunderstorms, from the surface to 10,000 feet Above Ground Level (AGL).

A3.1.4. Turbulence (for Cat II aircraft), not associated with thunderstorms, from the surface to 10,000 feet AGL.

A3.1.5. Any weather warning criteria (that can be specified in the TAF) that is expected to occur during the forecast period (onset, duration, and intensity).

A3.1.6. Altimeter Setting. The onset of altimeter settings meeting or exceeding 31.00 INS or altimeter settings 28.00 INS or less. If less than the threshold specify when altimeter settings equal or exceed the thresholds, if greater than, specify when altimeter settings will decrease to equal or less than the thresholds.

A3.1.7. Any forecast weather advisory criteria (that can be specified in the TAF) that is expected to occur during the forecast period (onset, duration, and intensity).

A3.1.8. Thunderstorms (onset and duration).

A3.1.9. Temporary conditions (onset and duration).

A3.1.10. Changes to predominant conditions (onset, duration, and intensity, if applicable).

A3.2. Amendment Criteria. Forecasters will ensure the TAF is representative of expected or actual conditions. Forecasters will amend the TAF for the following:

A3.2.1. Temporary Conditions:

A3.2.1.1. Amend if temporary conditions become predominant.

A3.2.1.2. Amend if temporary conditions do not occur during the cardinal hour as forecast.

A3.2.1.3. Amend if temporary conditions are no longer expected to occur.

A3.2.2. Changes to Predominant Conditions (BECMG or FM group). Amend if forecast change conditions occur before the beginning of the specified period of change and are expected to persist, do not occur within 30 minutes after the specified time, or are no longer expected to occur.

A3.2.3. Representative Conditions. Amend if forecast conditions are not considered representative of existing or forecast conditions and amending the forecast improves safety, flight planning, operational efficiency, or assists in-flight aircraft.

A3.2.4. When the ceiling and/or visibility is observed, or later forecast, to increase to or exceed, or decrease to less than any of the levels listed in Table A3.1 and was not specified in the TAF.

A3.2.5. Winds:

A3.2.5.1. If the difference between the predominant wind speed and the forecast wind speed is 10 knots or more.

A3.2.5.2. If wind gust speed is in error by 10 knots or more.

A3.2.5.3. If prevailing wind speed is in error by more than 30 degrees AND winds are more than 15 knots.

A3.2.6. Icing, if beginning or ending of icing meets, exceeds, or decreases to less than moderate (or greater) intensity and was improperly specified in the forecast.

A3.2.7. Turbulence, if the beginning or ending of turbulence meets, exceeds, or decreases to less than moderate (or greater) intensity and was improperly specified in the forecast.

A3.2.8. Weather Warning Criteria.

A3.2.8.1. If weather warning criteria occurs, or is expected to occur, during the forecast period, but was not specified in the forecast.

A3.2.8.2. If weather warning criteria is specified in the forecast but is no longer expected to occur during the forecast period.

A3.2.9. Altimeter Setting.

A3.2.9.1. If the altimeter setting meets or exceeds, or if above, drops below 31.00 INS and was not specified in the forecast.

A3.2.9.2. If the altimeter setting drops below, or if below, increases to or above 28.00 INS and was not specified in the forecast.

A3.2.10. Forecast Weather Advisory Criteria (for amendable TAF criteria).

A3.2.10.1. If forecast weather advisory criteria occurs, or is expected to occur, during the forecast period, but was not specified in the forecast.

A3.2.10.2. If forecast weather advisory criteria is specified in the forecast but is no longer expected to occur during the forecast period.

A3.2.11. Thunderstorms. If the start or end time of the thunderstorm is incorrectly specified.

Attachment 4

SAMPLE WEATHER PRODUCT DISSEMINATION FORMAT/INTERPRETATION
OBSERVATION/TAF/WWAS

Table A4.1. Sample Weather Observation

1	2	3	4	5	6	7	8	9
SPECI KWRB 221506Z AUTO 17013G22KT 2SM RVRNO TSRA BKN015CB								
09/08 A29.99 RMK AO2 TS OHD MOV NE								
10	11	12						
Body of Report and Remarks								
Group	Reference		Brief Description					
Type of Report	A4.1.1.		Indicates type of report.					
Station Identifier	A4.1.2.		A four-character group used to identify the observing location.					
Date and Time of Report	A4.1.3.		Date and time of the report.					
Report Modifier	A4.1.4.		A report modifier (COR) identifying report as a correction, or AUTO indicating the weather observation is a fully automated report with no human intervention.					
Wind	A4.1.5.		Indicates wind direction and speed. Gusts are appended if available.					
Visibility	A4.1.6.		Provides prevailing visibility from the designated point of observation in statute miles (CONUS) or meters (OCONUS).					
Runway Visual Range	A4.1.7.		10-minute RVR or varying RVR in hundreds of feet or meters.					
Present Weather	A4.1.8.		Any weather occurring at the observing location, obscurations to vision, or other phenomena.					
Sky Condition	A4.1.9.		State of the sky in terms of sky cover, layers and heights, ceilings and obscurations.					
Temperature and Dew Point	A4.1.10.		Measure of hotness/coldness of ambient air. Dew point measures saturation point temperature.					
Altimeter	A4.1.11.		Indicates altitude above MSL of an aircraft on the ground.					
Remarks	A4.1.12.		Remarks generally elaborate on parameters reported in the body of the report, and will be included in all METAR and SPECI observations.					

A4.1. Type of Report. METAR or SPECI.

A4.1.1. **Station identifier, also called the ICAO.** This code identifies the location of the observation (in this case Robins AFB).

A4.1.2. **Date and Time of Report.** This is in Zulu (GMT) of the last element of the observation.

A4.1.3. **Report Modifier.** The report modifier can be either of the following two elements:

A4.1.3.1. COR is entered into the report modifier group when a corrected METAR or SPECI is transmitted.

A4.1.3.2. AUTO identifies the report as a fully automated report with no human intervention.

A4.1.3.2.1. AUTO is automatically included in reports when the weather technician signs off the AMOS indicating the observations are no longer being augmented.

A4.1.3.2.2. AUTO and COR will not be seen in the same observation. If the term COR is used, the observation cannot be reported as AUTO, since a weather technician is manually correcting the observation.

A4.1.4. **Wind.** The true direction the wind is blowing from encoded in tens of degrees using three figures. Directions less than 100 degrees are preceded with a "0." The wind speed is entered as a two or three digit group immediately following the wind direction.

A4.1.4.1. **Gust.** The wind gust is encoded in two or three digits immediately following the wind speed. The wind gust is encoded in whole knots using the units and tens digits and, if required, the hundreds digit.

A4.1.4.2. **Variable Wind Direction (speeds 6 knots or less).** Variable wind direction with wind speed 6 knots or less may be encoded as VRB in place of the direction.

A4.1.4.3. **Variable Wind Direction (speeds greater than 6 knots).** Wind direction varying 60 degrees or more with wind speed greater than 6 knots will be encoded. The variable wind direction group will immediately follow the wind group. The directional variability will be encoded in a clockwise direction. For example, if the wind is variable from 180 degrees to 240 degrees at 10 knots, it would be encoded 21010KT 180V240.

A4.1.4.4. **Calm Wind.** Calm wind is encoded as 00000KT.

A4.1.5. **Visibility.** The furthest predominant distance (at least 50% of the aerodrome) seen from the airfield reported in statute miles (CONUS) or meters (OCONUS).

A4.1.6. **Runway Visual Range.** An instrumentally derived value that represents the horizontal distance a pilot can see down the runway. RVRNO indicates that RVR information is not available during periods when prevailing visibility is 1 mile (1600 meters) or less or RVR is 6,000 feet (1830 meters) or less.

A4.1.7. **Present weather.** Any weather phenomenon occurring on the airfield. This is mandatory anytime the visibility is less than 7 miles. [Table A4.2](#) lists the present weather codes:

Table A4.2. Weather Phenomena Codes

Qualifier	Weather Phenomena			
	Descriptor	Precipitation	Obscuration	Other
- Light	MI (Shallow)	DZ (Drizzle)	BR (Mist)	PO (Developed Dust/Sand Whirls)
Moderate	PR (Partial)	RA (Rain)	FG (Fog)	SQ (Squall)
+ Heavy	BC (Patches)	SN (Snow)	FU (Smoke)	FC (Funnel Cloud, Tornado, or Water Spout)
VC (Vicinity)	DR (Low Drifting)	SG (Snow Grains)	VA (Volcanic Ash)	SS (Sandstorm)
	BL (Blowing)	IC (Ice Crystals)	DU (Dust)	DS (Dust Storm)
	SH (Showers)	PL (Ice Pellets)	SA (Sand)	
	TS (Thunderstorms)	GR (Hail)	HZ (Haze)	
	FZ (Freezing)	GS (Small Hail or Snow Pellets)	PY (Spray)	
		UP (Unknown Precip)		

A4.1.8. **Sky Condition and Cloud Height.** Describes the amount of clouds present at the airfield and the base of each cloud deck. They fall into the following categories:

A4.1.8.1. SKC/CLR – Sky Clear.

A4.1.8.2. FEW – 1/8 to 2/8 coverage.

A4.1.8.3. SCT – Scattered; 3/8 to 4/8 coverage.

A4.1.8.4. BKN – Broken; 5/8 to 7/8 coverage.

A4.1.8.5. OVC – Overcast; 8/8 coverage.

A4.1.8.6. VV – Vertical visibility; normally used during heavy fog, indicates the distance that weather personnel can see vertically upward into the obscuring phenomena.

A4.1.8.7. FEW000 – Surface-based obscuration.

A4.1.8.8. **Cloud Height.** Three-digit number provides the height of the base of the cloud in hundreds of feet (e.g., 015 equals 1,500 feet). The CB and TCU descriptors may be appended to the cloud height to indicate the cloud is a cumulonimbus or towering cumulus.

A4.1.9. **Temperature and Dew Point (in degrees Celsius).**

A4.1.10. **Altimeter Setting.** The pressure value to which an aircraft altimeter scale is set so that the altimeter indicates the altitude above mean sea level of an aircraft on the ground at the location for which the value was determined. The altimeter is measured in inches (INS) of mercury.

A4.1.10. **Remarks.** [Table A4.3](#) contains some of the most commonly seen remarks in observations:

Table A4.3. Remarks Listing

AO2—Automated sensor indicator
CB—Cumulonimbus
DSNT—Distant
ESTMD—Estimated
FROPA—Frontal Passage
LTG—Lightening
LWR—Lower
MOV—Moving
MOVD—Moved
OHD—Overhead
PK WND—Peak Wind
PRESFR—Pressure Falling Rapidly
PRESRR—Pressure Rapidly Rising
RWY—Runway
TCU—Towering Cumulus
TWR—Tower
UNKN—Unknown
VIS—Visibility
WSHFT—Wind Shift
PA—Pressure Altitude
DA—Density Altitude

A4.2. TAF.**Table A4.4. Sample TAF**

<p>KWRB 0113/0219 31005KT 9999 SCT015 SCT250 QNH3015INS BECMG 0117/0118 12010KT 4800 SHRA SCT010 BKN025 OVC080 QNH3005INS TEMPO 0119/0122 VRB10G20KT 1600 TSRA SCT008 BKN015CB OVC030 T24/0120Z T10/0210Z</p>
--

A4.2.1. The forecast follows the same general format as the observation with the following exceptions noted :

A4.2.1.1. **Valid Date/Time.** Forecasts are valid for a 30-hour period. In this example, the forecast is valid from the 1st at 1300Z until the 2nd at 1900Z.

A4.2.1.2. **BECMG** – This is a code to indicate the predominant conditions will change to (or become) the conditions listed in the line of the forecast. The conditions will change during the time period that follows the BECMG code (1700 to 1800Z in the example above).

A4.2.1.3. **TEMPO** – This code means the conditions listed on the line may occur temporarily anytime between the time frame following the TEMPO code (1900Z to 2200Z in this example).

A4.2.1.4. **Max Temp/Min Temp.** T24 indicates a maximum temperature in Celsius to occur on the 1st at 20Z. T10 indicates a minimum temperature of 10 Celsius to occur on the 2nd at 10Z **NOTE:** M indicates a minus sign in front of the number: M05 = -5 C.

A4.3. Weather Warnings, Watches, and Advisories (WWAs)

Table A4.5. Sample WWAs**1. OBSERVED WEATHER WARNING.**

ROBINS AFB WEATHER WARNING 05-001
VALID 17/1921Z (17/1421L) TO UFN
OBSERVED LIGHTNING IS OCCURRING WITHIN 5NM OF ROBINS AIR FORCE BASE

2. FORECAST WEATHER WARNING.

ROBINS AFB WEATHER WARNING 11-051
VALID 10/1500Z (10/1000L) TO 10/2200Z (10/1700L)
SEVERE THUNDERSTORMS WITH HAIL $\geq \frac{3}{4}$ IN. (FORECAST VALUE 1 IN.) AND
DAMAGING WINDS ≥ 50 KTS (FORECAST VALUE 65 KTS) IS FORECAST TO OCCUR
AT ROBINS AIR FORCE BASE.

3. WEATHER WATCH.

ROBINS AFB WEATHER WATCH 05-015
VALID 15/1858Z (15/1358L) TO 15/2100Z (15/1600L)
POTENTIAL FOR TORNADIC ACTIVITY EXISTS AT ROBINS AIR FORCE BASE.

4. OBSERVED WEATHER ADVISORY.

ROBINS AFB WEATHER ADVISORY 09-037
VALID 08/1408Z (08/0908L) TO UFN
OBSERVED TEMPERATURE < 20 F EXISTS AT ROBINS AIR FORCE BASE.

5. FORECAST WEATHER ADVISORY.

ROBINS AFB WEATHER ADVISORY 02-012
VALID 10/0500Z (10/0000L) TO 10/1400Z(10/0900L)
TEMPERATURE ≤ 32 F IS FORECAST TO OCCUR AT ROBINS AIR FORCE BASE.

Attachment 5

CUSTOMER RESPONSE MATRIX

Table A5.1. Customer Response Matrix

Weather Phenomena	Lead Time	Impact	Customer Action
Tornadoes	15 Minutes	Personal injury; equipment damage	Seek shelter; hangar or divert aircraft
Severe Winds (≥ 50 Knots)	60 Minutes	Personal injury; flight hazard; equip. damage	Seek shelter; hangar, tie down or divert aircraft; secure flight line
Hail $\geq 3/4$ Inch	60 Minutes	Personal injury; equipment damage	Seek shelter; hangar or divert aircraft; secure flight line; protect/cover equipment
Moderate Winds (≥ 35 Knots but < 50 Knots)	60 Minutes	Flight hazard; equipment damage	Point aircraft into wind; space out or tie down aircraft; secure flight line
Hail $\geq 1/4$ Inch but $< 3/4$ Inch	60 Minutes	Personal injury; equipment damage	Seek shelter; hangar or divert aircraft; secure flight line; protect/cover equipment
Freezing Precipitation (Any intensity)	60 Minutes	Delay or cease operations	Cease flying and maintenance operations
Heavy Snow ($\geq 1/2$ Inch Accumulation in 12 hours)	60 Minutes	Delay or cease operations	Prepare aircraft for de-icing; cease flight line operations; cease facility and grounds maintenance
Freezing Temperatures ($\leq 32^\circ$ F)	4 Hours	Personnel hazard	Limit outdoor exposure
Lightning potential within 5 Nautical Miles (Weather Watch)	30 minutes	Personnel hazard; delay operations	Evacuate personnel from flight line; divert or hold aircraft
Winds ≥ 20 Knots but < 35 Knots	30 minutes	Personnel hazard	Secure flight line; limit exposure to upper parts of aircraft; maintainers will wear harnesses
Crosswinds ≥ 15 Knots (Not associated with T-storms)	Observed	Flight hazard	No touch-and-go landings; E-8Cs potentially diverted
Lighting observed within 5 Nautical Miles	Observed	Personnel hazard; delay operations	Evacuate personnel from flight line; divert or hold aircraft
Lightning observed within 10 Nautical Miles	Observed	Personnel hazard; delay operations	Prepare flight line for lightning and high winds
Tropical Cyclone observed within 400 Nautical Miles of Robins AFB	Observed	Varies by situation	Monitor tropical cyclone forecast; consider convening Installation Control Center

Attachment 6

**FLYING UNITS SUPPORTED & MISSION LIMITING ENVIRONMENTAL
CONDITIONS**

Table A6.1. Flying Units Supported

Organization	Mission
116th Air Control Wing (116 ACW) (E-8C) 461st Air Control Wing (461 ACW) (E-8C)	The 116 ACW and 461 ACW are responsible to COMACC for operations, logistics, training and combat support of the E-8C Joint Surveillance Target Attack Radar System (JSTARS) command and control aircraft supporting combatant commanders. Provides combat-ready theater battle management forces at the direction of the Joint Chiefs of Staff. Operates and supports these forces worldwide, ensuring combat capability for all operations
339th Flight Test Squadron (339 FLTS) (F-15, C-5, C-130, C-17)	The 339 FLTS determines F-15, C-5, C-130, and C-17 aircraft airworthiness following programmed depot maintenance. The unit recovers non-airworthy aircraft from worldwide locations and performs oversight of all WR-ALC systems testing. The unit plans and executes development and qualification test and evaluation missions and provides technical expertise to operational commands and aircraft industries worldwide.
Marine Light Attack Helicopter Squadron 773 (HMLA-773) (AH-1W, UH-1Y)	HMLA-773 provides Offensive Air Support (OAS), utility helicopter support, armed escorts, and airborne supporting arms coordination during naval expeditionary operations and joint/combined operations.

A6.1. Mission Limiting Thresholds.

A6.1.1. **Airframe-Specific Weather Limitations.** [Table A6.2](#) – [A6.10](#) provide the general airframe weather limitations for supported aircraft based on AFI 11-202V3, *General Flight Rules* and the limitations from aircraft specific AFI 11-2.

Table A6.2. USAF General Flight Rules Weather Limitations

(Ref: AFI 11-202V3)		
Weather Condition	Impact	Customer Action
Cig/Vis < 2,000 / 3	Alternate required	Add fuel to allow divert
Cig/Vis < 1,000/ 2, if MAJCOM approved	Alternate required	Add fuel to allow divert
Cig/Vis < 500 / 2	Terminal not suitable for alternate	Select another alternate

Table A6.3. E-8C Weather Impacts—Limiting Weather Thresholds

Take-off Limiting Criteria	
Weather Phenomena	Flying Impact
Lightning within 5 NM	No airfield operations (take-offs)
Lightning within 10 NM	Takeoff with 116 OG/CC approval
RVR 1600 ft	Take-off minimum
RVR 1000 ft	Take-off minimum with centerline lights and two transmissometers
Crosswinds \geq 25 knots	Maximum limit for dry runway take-offs
Crosswinds \geq 20 knots	Maximum limit for wet runway take-offs
Tailwind > 10 knots	Maximum limit for dry runway take-offs
Tailwind \geq 5 knots	Maximum limit for wet runway take-offs
VIS \geq 1/2 SM / CIG \geq 200 ft	Take off limits if no RVR available
Freezing Precipitation	No take-offs
En-Route/On-Orbit Limiting Criteria	
Thunderstorms	Avoid by 20NM above FL230 Avoid by 10NM below FL230
Icing (MDT and greater)	No flight into reported severe icing. Minimize flight through forecast moderate or greater icing. Under no circumstances will flight be sustained in moderate or greater icing.
Turbulence (MDT and greater)	No flight into forecast or reported severe turbulence. Avoid reported moderate. Plan best altitude to avoid forecast moderate turbulence.
Vsby \geq 1 NM	Needed to find refueling aircraft
Landing Limiting Criteria	
Lightning within 5 NM	No airfield operations
Lightning within 10 NM	Land with 116 OG/CC approval
RVR 2400 ft or 1 SM VIS	Precision Approach minimum
RVR 4000 ft	Non-precision approach minimum
Crosswinds \geq 25 knots	Maximum limit for dry runway landings
Crosswinds > 18.5 knots	Maximum limit for wet runway landings
Crosswinds > 15 knots	Maximum limit for icy runway landings
Tailwind > 10 knots	Maximum limit for dry runway landings
Tailwind \geq 5 knots	Maximum limit for wet runway landings
VIS \geq 1/2 SM / CIG \geq 200 ft	If no RVR available
Freezing Precipitation	No landings

Table A6.4. AH-1W Weather Impacts—Limiting Weather Thresholds

Take-off / Landing Limiting Criteria	
Weather Phenomena	Flying Impact
Lightning within 5 NM	No airfield operations
VIS \geq 3SM / CIG \geq 1000 ft	FCF Minimum
Freezing Precipitation	No take-offs or landings
Surface Winds \geq 60 kts	No Takeoff/ Landing if a TSTM is producing Strong Surface Wind Gusts at the Airfield
Mission / En Route Limiting Criteria	
Weather Phenomena	Flying Impact
Thunderstorms	Avoid by 10NM below FL250
Icing (Light)	Light Icing may Degrade Aircraft Performance
Icing (MDT and greater)	Flight into Moderate or Severe Icing Conditions is Prohibited
Turbulence (Severe Aloft)	Flight into Severe or Extreme Turbulence is Prohibited

Table A6.5. UH-1N/UH-1Y Weather Impacts—Limiting Weather Thresholds

Take-off / Landing Limiting Criteria	
Weather Phenomena	Flying Impact
Lightning within 5 NM	No airfield operations
Hail	No Takeoff/ Landing if a TSTM is producing Hail at the Airfield
Thunderstorm / Heavy Rain	No Takeoff/ Landing if a TSTM is producing Heavy Rain at the Airfield
Surface Winds \geq 60 knots	No Takeoff/ Landing if a TSTM is producing Strong Surface Wind Gusts at the Airfield
Windshear	No Takeoff/ Landing if a TSTM is producing Windshear Conditions at the Airfield
VIS \geq 3SM / CIG \geq 1000 ft	FCF Minimum
Mission / En Route Limiting Criteria	
Weather Phenomena	Flying Impact
Thunderstorms	Aircraft Should Avoid All Thunderstorms
Icing (All)	Aircraft should Avoid all Areas of Any Icing Conditions
Turbulence (Severe and greater)	Aircraft Should Avoid Areas of Severe or Extreme Intensity Turbulence. Aircraft May Operate in Areas of Light or Moderate Turbulence

Table A6.6. F-15 Weather Impacts—Limiting Weather Thresholds

Take-off/Landing Limiting Criteria	
Weather Phenomena	Flying Impact
Lightning within 5 NM	No airfield operations
Crosswinds & Sustained ≥ 35 knots	No take-offs or landings
VIS ≥ 3 SM / CIG ≥ 3000 ft	Initial Functional Check Flight (FCF) Minimum
VIS ≥ 3 SM / CIG ≥ 1500 ft	Subsequent FCF Minimum
Freezing Precipitation	No take-offs or landings
Mission/En Route Limiting Criteria	
Thunderstorms	Avoid by 20NM above FL250 Avoid by 10NM below FL250
Icing (MDT and greater)	May operate for short periods in MDT icing; Never Severe Icing
Turbulence (MDT and greater)	Avoid observed MDT/SVR Turbulence

Table A6.7. C-5 Weather Impacts—Limiting Weather Thresholds

Take-off/Landing Limiting Criteria	
Weather Phenomena	Flying Impact
Lightning within 5 NM	No airfield operations
Crosswinds ≥ 27 knots	No take-offs or landings
VIS ≥ 3 SM / CIG ≥ 1500 ft	Initial FCF Minimum
VIS ≥ 3 SM / CIG ≥ 1000 ft	Subsequent FCF Minimum
Freezing Precipitation	No take-offs or landings
Mission/ En Route Limiting Criteria	
Weather Phenomena	Flying Impact
Thunderstorms	Avoid by 20NM above FL250 Avoid by 10NM below FL250
Icing (MDT and greater)	May operate for short periods in MDT icing; Never Severe Icing
Turbulence (MDT and greater)	May operate for short periods in MDT/Avoid SVR
Volcanic Ash	Pilots Shall not Fly into Regions of Known or Reported Volcanic Activity

Table A6.8. C-17 Weather Impacts Limiting Weather Thresholds

Take-off / Landing Limiting Criteria	
Weather Phenomena	Flying Impact
Lightning within 5 NM	No airfield operations
Crosswinds \geq 27 knots	No take-offs or landings
VIS \geq 3SM / CIG \geq 1500 ft	Initial FCF Minimum
VIS \geq 3SM / CIG \geq 1000 ft	Subsequent FCF Minimum
Freezing Precipitation	No take-offs or landings
Mission/ En Route Limiting Criteria	
Weather Phenomena	Flying Impact
Thunderstorms	Avoid by 20NM above FL230 Avoid by 10NM below FL230
Icing (MDT and greater)	May operate for short periods in MDT icing; Never Severe Icing
Turbulence (MDT and greater)	May operate for short periods in MDT/Avoid SVR and MDT mountain wave

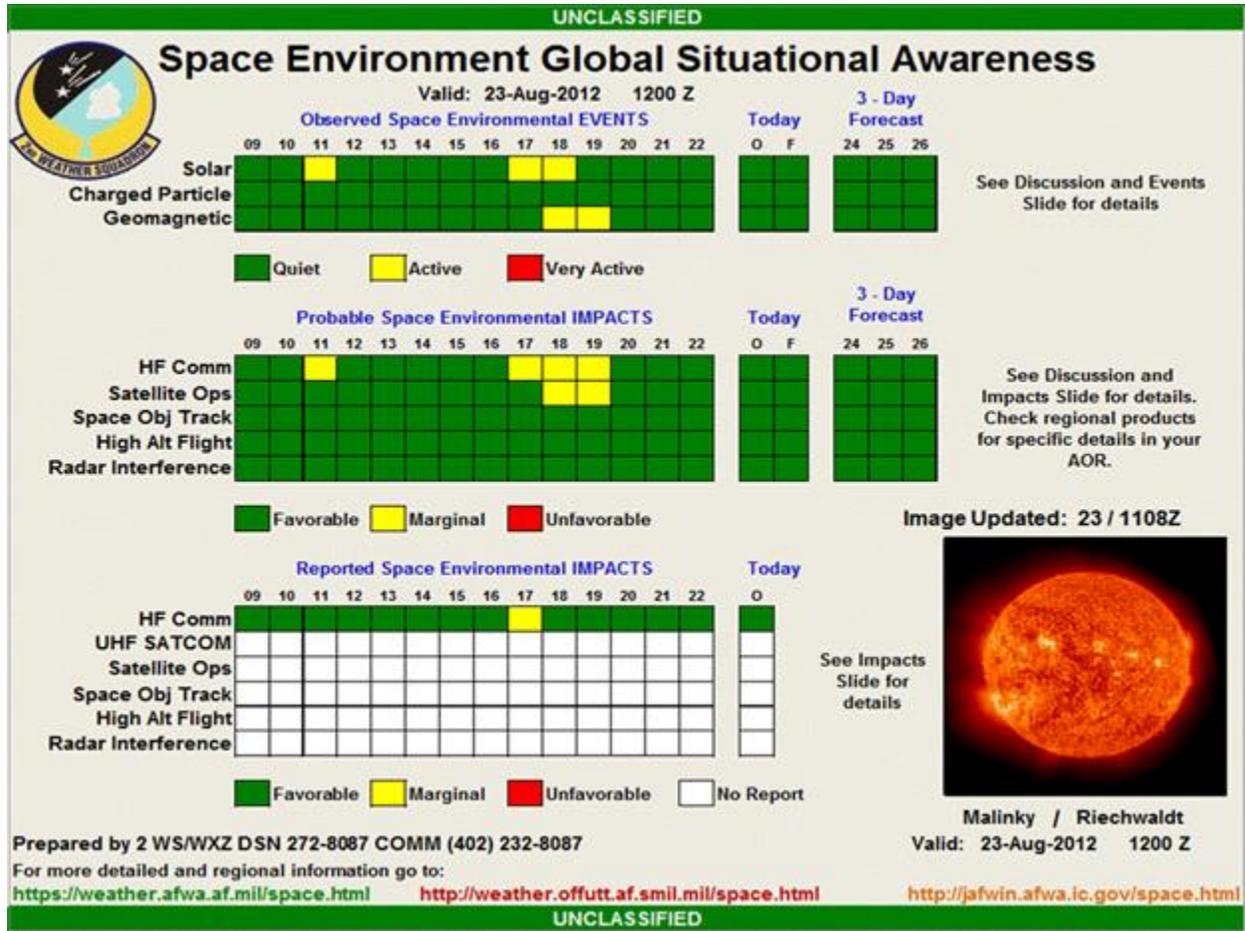
Table A6.9. C-130 Weather Impacts—Limiting Weather Thresholds

Take-off / Landing Limiting Criteria	
Weather Phenomena	Flying Impact
Lightning within 5 NM	No airfield operations
Crosswinds \geq 35 knots	No take-offs or landings
VIS \geq 3SM / CIG \geq 1500 ft	Initial FCF Minimum
VIS \geq 3SM / CIG \geq 1000 ft	Subsequent FCF Minimum
Freezing Precipitation	No take-offs or landings
Mission / En Route Limiting Criteria	
Weather Phenomena	Flying Impact
Thunderstorms	Avoid by 20NM above FL250 Avoid by 10NM below FL250
Icing (MDT and greater)	May operate for short periods in MDT icing; Never Severe Icing
Turbulence (MDT and greater)	May operate for short periods in MDT/Avoid SVR and MDT mountain wave

Attachment 8

SPACE WEATHER IMPACTS

Figure A8.1. Space Weather Impacts



Attachment 9

RESOURCE PROTECTION AREA MAPS

A9.1. General. Most resource protection forecasts for Robins AFB are valid for 5 nautical miles from the center point of the runway complex. The area within the red ring on [Figure A9.1](#) below depicts this 5 nautical miles area. An observed thunderstorm advisory is valid for an area within 10 nautical miles of the airfield complex. This area is shown shaded in blue. [Figure A9.2](#) depicts the 400 nautical mile range ring around Robins AFB which is used for observed tropical cyclone advisories.

Figure A9.1. 5 and 10 Nautical Mile (NM) Rings

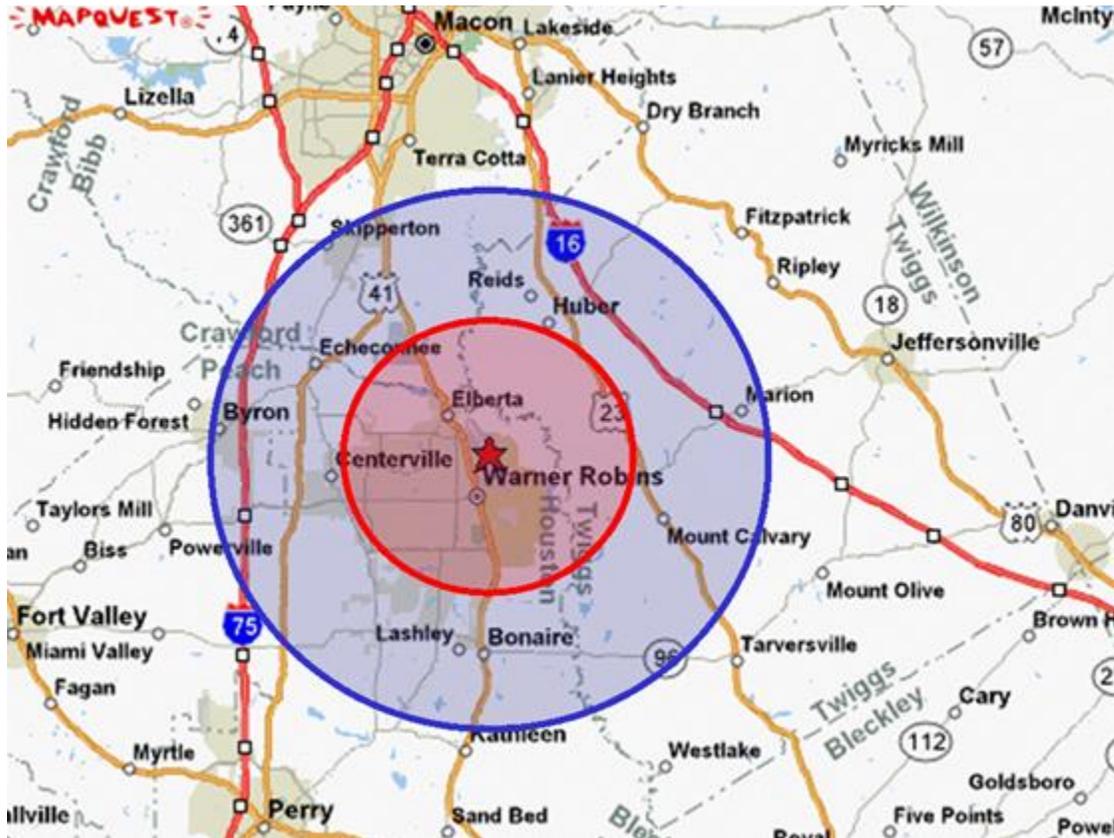


Figure A9.2. 400 Nautical Mile Ring

