



MCCONNELL AIR FORCE BASE WEATHER SUPPORT

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

NOTICE: This publication is available digitally on the AFDPO WWW site at: http://www.e-publishing.af.mil.

OPR: 22 OSS/OSW (SSgt Jennifer L. Chance)
Supersedes MAFBI15-105, 20 January 2003

Certified by: 22 OSS (Lt Col Chris B. Patterson)
Pages: 54
Distribution: F

This instruction implements AFD 15-1, Atmosphere and Space Environmental Support. It establishes the responsibilities and procedures for providing and using weather services at McConnell AFB. It implements AFMAN 15-111, AFMAN 15-124, AFMAN 15-129, AFMAN 15-135, and AMCI 15-101. It applies to all agencies described herein.

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

This instruction is a revision of MAFBI 15-105, dated 20 Jan 2003. It adds information about the new 22 OSS/OSW Weather WEB Site on the McConnell AFB Intranet Homepage in paragraph 1.4.11., reflects the increased desired lead time for severe thunderstorm (winds >= 50 knots, hail >= 3/4 inch) warnings from 1 hour to 2 hours as directed by HQ USAF/XOW in paragraph 4.2., and is amended to include 26 Operational Weather Squadron (OWS) at Barksdale AFB as a weather support agency for McConnell AFB. In this revision, the Command Post is tasked in paragraph 6.2.3 to issue base cable television audio overrides to inform base housing occupants of severe thunderstorm warnings (in addition to tornado warnings from previous instruction).

Chapter 1—GENERAL INFORMATION

Table with 2 columns: Section Number and Page Number. Includes sections 1.1 General (4), 1.2 Duty Priorities (5), 1.3 Equipment Limitations (5), 1.4 Responsibilities (5), and 1.5 Release of Weather Information (8).

Chapter 2—FORECASTING SERVICES 9

- 2.1. Duty Hours. 9
- 2.2. Terminal Aerodrome Forecast (TAF) 9
- 2.3. Mission Services. 11
- 2.4. Pilot-to-Metro-Service (PMSV). 12
- 2.5. The 26 OWS will provide PMSV support... 12

Chapter 3—OBSERVING SERVICES 13

- 3.1. Duty Hours. 13
- 3.2. Basic Weather Watch (BWW). 13
- 3.3. Observing Site Limitations. 13
- 3.4. Cooperative Weather Watch. 13
- 3.5. Observation Dissemination. 13
- 3.6. Format and Content of METAR/SPECI Observations. 14
- 3.7. Criteria for Taking SPECI Observations. 15
- 3.8. LOCAL Observation Reporting Requirements. 16
- 3.9. Bird Strike Prevention Assistance. 17
- 3.10. Updating of NOTAMS, DoD FLIPs and IFR supplements. 17

Chapter 4—WEATHER WARNINGS, WATCHES AND ADVISORIES 18

- 4.1. General. 18
- 4.2. Weather Watch Criteria. 18
- Table 4.1. Forecast Weather Watch Criteria and Associated Minimum
Desired Lead-Times and Actions. 19
- 4.3. Weather Warning Criteria. 20
- Table 4.2. Forecast Weather Warning Criteria and Associated Minimum
Desired Lead-Times and Actions. 20
- 4.4. Weather Advisory Criteria. 21
- Table 4.3. Forecast Weather Advisory Criteria and Associated Minimum
Desired Lead-Times and Actions. 21
- 4.5. Dissemination of Watches/Warnings/Advisories. 22

Chapter 5—TORNADO AND SEVERE WEATHER PROCEDURES 23

- 5.1. General. 23
- 5.2. Severe Weather Action 23

| | |
|--|-----------|
| 5.3. Severe Weather Observations. | 24 |
| Chapter 6—DISSEMINATION OF WEATHER WATCHES, WARNINGS AND ADVISORIES | 25 |
| 6.1. Procedures. | 25 |
| 6.2. Watches. | 25 |
| 6.3. Warnings. | 25 |
| 6.4. Forecast Advisories. | 26 |
| 6.5. Observed Advisories. | 26 |
| 6.6. Deviations to AFMAN 15-129 Standard Watch, Warning and Advisory Criteria. ... | 26 |
| 6.7. Dissemination Tree for weather watches, warnings and advisories. | 26 |
| Chapter 7—RECIPROCAL SUPPORT | 28 |
| 7.1. General. | 28 |
| 7.2. Responsibilities. | 28 |
| Attachment 1—GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION | 31 |
| Attachment 2—SAMPLE N-TFS DISSEMINATION FORMAT | 33 |
| Attachment 3—22 OSS/OSW SEVERE WEATHER ACTION PROCEDURES | 37 |

Chapter 1

GENERAL INFORMATION

1.1. General. The 22 OSS/OSW teams with the 26 OWS to provide and arrange weather services for the 22 ARW, the 184 ARW (KA ANG), 931 ARG (AFRES), and other units assigned to McConnell AFB. Basic concepts and procedures are outlined in Air Force and Major Air Command directives. This document establishes requirements and procedures for areas of weather support that must be coordinated at the local level to meet mission needs. It consolidates weather support requirements and procedures for peacetime operations and eliminates the need for written agreements between the weather unit and supported organizations. It does not cover weather support procedures for emergency war operations or certain other special operations or procedures. These are covered in applicable plans/regulations.

NOTE: The FMQ-13 (Wind sensor clock) is the official time clock for all weather functions contained in this document.

1.1.1. Mission: The missions of the 22 ARW, 931 ARG and 184 ARW (and subordinate units) are to provide air refueling support when and where directed by higher headquarters taskings. The weapon system utilized to complete this mission is the KC-135R Stratotanker. The 22 ARW has 48 PAAs that are also utilized by the 931 ARG. In addition, the 184 ARW employs 10 KC-135R Stratotankers in support of higher headquarters taskings.

1.1.2. Requirements: The 22 OSS/OSW is required to provide planning data and forecasted weather at departure points, enroute and at destinations for aircrews. Refueling routes will be provided as needed. The 22 OSS/OSW will also provide force protection in conjunction with the 26 OWS as defined in Memorandum of Agreement 15-09.

1.1.3. Mission-Limiting Weather Sensitivities (per Joint Publication 3-59, Joint METOC Operations Handbook, Appendix G).

1.1.3.1. KC-135R Weather Sensitivities.

1.1.3.1.1. Icing: May operate for up to 10 minutes in moderate icing, never in known or expected severe icing.

1.1.3.1.2. Turbulence: Must avoid areas of moderate or greater turbulence.

1.1.3.1.3. Thunderstorms: Thunderstorms must be cleared by 10 NM if below FL230 and by 20 NM if at or above FL230.

1.1.3.1.4. Cross Wind Limits (RCR > 8): Max crosswind component is 25 knots. With RCR values of 0-5 KC-135s will not operate, RCR 6-8 max crosswind components is 20 knots.

1.1.3.1.5. Space Weather: Sensitivities include GPS signal for PACER CRAG, L-band satellite communications and HF radio communications.

1.1.3.1.6. Volcanic Ash: Avoid areas of known or reported activity. AFI 11-202, Vol. 3, para 5.25, p. 37 (6 Jun 2003)

1.1.3.1.7. Alert Take-off RVR minimums: 1,600' or less for training, 1,000' or less for contingency operations.

1.1.3.1.8. Cannot take-off with >.5 inches of slush or water on the runway.

1.1.3.1.9. Cannot take-off with ice (includes frost) present on aircraft wings or control surfaces.

1.2. Duty Priorities. Usually, a Combat Weather Team (CWT) is manned with only one forecaster; therefore, all CWT tasks (including observing and/or forecasting) cannot be accomplished simultaneously. The following priority list is arranged in order of relative importance, assuming an open airfield. Forecasters and observers will use their best judgment and may deviate from this list, particularly when there is an immediate threat to life or property.

- 1.2.1. Complete OPLAN 8044/emergency war order tasking.
- 1.2.2. Execute CWT Evacuation.
- 1.2.3. Respond to Skyhook conference calls for aircraft/ground emergencies.
- 1.2.4. Take/disseminate surface weather observations locally.
- 1.2.5. Respond to Pilot-to-Metero-Service (PMSV) Contacts.
- 1.2.6. Issue watches, warnings, and/or advisories.
- 1.2.7. Provide “Eyes Forward” / Collaborate with OWS.
- 1.2.8. Severe Weather Action Procedures (SWAP) Operations.
- 1.2.9. Relay Urgent PIREPs and Special AIREPs locally, then to OWS.
- 1.2.10. Mission Execution Forecast Process – Produce and Disseminate Forecasts.
- 1.2.11. Disseminate PIREPs/AIREPs.
- 1.2.12. Perform MISSIONWATCH Activities.
- 1.2.13. Provide Other Briefings.
- 1.2.14. Weather Function Training.
- 1.2.15. Accomplish Administrative Tasks.

1.3. Equipment Limitations. The weather flight assesses the current and forecasts the future state of the atmosphere. Inherent in such a task are equipment limitations, including but not limited to those listed below:

- 1.3.1. Doppler Weather Radar. The Doppler radar is limited by ground clutter in the Wichita area and by the volume coverage pattern of the radar. As a result, small storms over the Wichita area, including McConnell AFB, may not be detected.
- 1.3.2. Lightning Detection System. Detects all lightning strikes.
- 1.3.3. Communications. Internet Dependence. Unit relies on connectivity through the McConnell AFB Internet with various agencies for product dissemination and retrieval.

1.4. Responsibilities. The 22 OSS/OSW, in conjunction with the 26 OWS, will arrange for the following services, using the priority list in paragraph 1.3. above:

- 1.4.1. Coordinate forecasts with 26 OWS and transmit observations using the criteria in **Chapter 2** and **Chapter 3**.

- 1.4.2. Coordinate forecast McConnell AFB weather watches/warnings/advisories and transmit all warnings/advisories as required and specified in **Chapter 4** and **Chapter 5**.
- 1.4.3. The 22 OSS/OSW will call the Command Post (CP), Airfield Operations, Control Tower and 26 OWS duty forecaster to ensure receipt and acknowledgment of watches, warnings, and advisories disseminated over N-TFS.
- 1.4.4. Provide and arrange for weather briefings, as required.
- 1.4.5. Notify CP and the Control Tower upon evacuation of the 22 OSS/OSW and upon assumption of weather support at the 22 OSS/OSW.
- 1.4.6. Fax a standby roster to the CP prior to all scheduled 22 OSS/OSW station closures.
- 1.4.7. When the wind equipment is inoperative, notify the Control Tower that the winds will be estimated. The 22 OSS/OSW will also notify Control Tower personnel when the equipment is back in operation.
- 1.4.8. Provide weather facility indoctrination training (to include the cooperative weather watch program, IAW AFI 13-203) to Control Tower personnel.
- 1.4.9. Report all equipment outages to 22d Communications Squadron (22 CS), Communications Control Center (CCC), to include the following information:
 - 1.4.9.1. Equipment or circuit identification.
 - 1.4.9.2. Time of outage.
 - 1.4.9.3. Description of problem.
 - 1.4.9.4. Impact of outage.
- 1.4.10. Determine when meteorological sensing equipment may be released for scheduled maintenance (PMI).
- 1.4.11. Maintain the 22 OSS/OSW web site on the McConnell AFB Intranet Homepage. Units are encouraged to use this site to download flight and ground planning data. Additionally, units are encouraged to use the "Feedback" link (<http://www4/WEATHER/index.htm/Feedback>) to rate 22 OSS/OSW on the quality and accuracy of its products and services. This will help 22 OSS/OSW provide more responsive and accurate forecast support for operational missions.
- 1.4.12. Participate in the cooperative weather watch, as outlined in **Chapter 3**. The 22 OSS/OSW will advise Airfield Management personnel when bird activity is sighted during weather observations.
- 1.4.13. Collect, save, and provide weather data to support accident and mishap investigations.
- 1.4.14. Contact 22 CS Radio Maintenance for PMSV repair. The 22 OSS/OSW will call the Command Post (CP), Airfield Operations, ATC and 26 OWS duty forecaster to inform them of PMSV outages and estimated down time.
 - 1.4.14.1. 22 OSS/OSW will coordinate with ATC and CP for short term monitoring of the PMSV frequency.
 - 1.4.14.2. 22 OSS/OSW will coordinate with Airfield Operations (Airfield Manager) to initiate a NOTAM and an update to the CONUS IFR supplement as required by the duration of the outage.

In the event of a long term PMSV outage the 22 OSS/OSW will coordinate with OL-A, 3d WS, Ft Sill, OK (DSN 639-3200) to monitor the PMSV frequency during their operating hours.

1.4.15. Provide monthly climatologic summaries to 22 CES/CEOIS, 22 CES/CEOE, and 22 CONS/LGCA. Climatology data is available to other base agencies upon request.

1.4.16. Alternate Operating Location (AOL). (NOTE: The weather station will not be evacuated for exercise scenarios unless directed to do so by 22 ARW/CC)

1.4.16.1. Primary AOL will be BLDG 978, Room 159 (Alert Facility).

1.4.16.2. Secondary AOL. Should BLDG 978 be unavailable, 22 OSS/OSW personnel will establish a location that permits access to phone/LAN line and as close to 360° visual of the runway as possible.

1.4.16.3. Upon establishment of any AOL, 22 OSS/OSW personnel will:

1.4.16.3.1. Immediately take and disseminate a full element LOCAL observation within 10 minutes and disseminate to the tower, command post, base operations, and 26 OWS.

1.4.16.3.2. Notify the tower, command post, base operations, and 26 OWS of their location and contact information.

1.4.16.3.3. Make every effort to provide as close to normal weather services, as situation permits.

1.4.16.4. Resumption of Normal Operations. Immediately following the return (after evacuation) to BLDG 1112, 22 OSS/OSW personnel will:

1.4.16.4.1. Immediately take and disseminate a full element LOCAL observation within 10 minutes and disseminate to the tower, command post, base operations, and 26 OWS.

1.4.16.4.2. Notify the tower, command post, base operations, and 26 OWS of their return to BLDG 1112.

1.4.16.4.3. Resume normal operations IAW all applicable guidance.

1.4.16.5. If conditions warrant, 22 OSS/OSW may transfer mission responsibility to 26 OWS. If this is the case or if 22 OSS/OSW cannot be contacted in their alternate location, 26 OWS can be contacted at DSN 781-3809 for mission support.

1.4.17. Provide Chemical Downwind Messages/Emergency Downwind Messages to 22 CES/CEX upon request.

1.4.18. 22 OSS/OSW will coordinate with CP to provide and review weather information for all OPREP 3 reports generated as required.

1.4.19. 22 OSS/OSW will annually review and update this document and its contents to include the following:

1.4.19.1. Weather watch, warning, and advisory criteria specific to McConnell AFB, KS

1.4.19.2. Local and special observation criteria specific to McConnell AFB, KS

1.4.20. Limited Duty Operations. 22 OSS/OSW normally operates 24 hours/day, 7 days/week. Should the airfield close, 22 OSS/OSW will institute limited duty operations. 22 OSS/OSW will:

1.4.20.1. Ensure a 24-hour response capability for base resource protection and “eyes forward” augmentation to 26 OWS.

1.4.20.2. Provide a memorandum for record to Command Post detailing stand-by personnel, contact information and duty times prior to limited duty operations being enacted.

1.5. Release of Weather Information. The 22 OSS/OSW will attempt to satisfy the requests of non-DoD users for weather support. The weather services request should:

- 1.5.1. Be in support of noncommercial activities.
- 1.5.2. Be a one time request (and each request made formally).
- 1.5.3. Not be in direct competition with locally available commercial weather services.
- 1.5.4. Not be for use in legal proceedings unless cleared by local military legal office.
- 1.5.5. Help promote local community-military good will.
- 1.5.6. Be provided without retribution.
- 1.5.7. Be authorized by at least the operational unit commander.
- 1.5.8. Not interfere with military mission support activities.

Chapter 2

FORECASTING SERVICES

2.1. Duty Hours. The 22 OSS/OSW will provide mission and airfield services 24 hours a day, 7 days a week unless directed to close by the 22 OSS Commander. The 26 OWS in conjunction with local duty forecaster are coordinators for all official weather forecasts issued for McConnell Air Force Base.

2.2. Terminal Aerodrome Forecast (TAF) TAFs, will be issued per MOA 15-09, every 8 hours, within 15 minutes after file time and will be valid for 24 hours IAW AFMAN 15-124. See [A2.1.](#) for a sample TAF with a breakdown of the code.

2.2.1. TAF Specification Criteria. Each TAF (scheduled or amended) will specify the time of occurrence to the nearest hour (and/or minutes as appropriate), the duration, and intensity of the following criteria.

2.2.1.1. Ceiling and/or visibility decreases to less than, or if below, increases to equal or exceed:

| Ceiling | Visibility |
|--------------------|-----------------------|
| 3,000 feet | 3 miles (4800 meters) |
| 1,500 feet (Local) | 2 miles (3200 meters) |
| 1,000 feet | 1 mile (1600 meters) |
| 200 feet | ½ mile (800 meters) |

2.2.1.2. Wind:

2.2.1.2.1. Speed change of 10 knots or more.

2.2.1.2.2. Direction change of greater than 30 degrees when the predominant wind speed (including gusts) is expected to be over 15 knots.

2.2.1.2.3. Wind speeds predominant or gusting to or in excess of 25 knots.

2.2.1.3. Precipitation.

2.2.1.4. Thunderstorms.

2.2.1.5. Icing and/or turbulence (turbulence for Cat II aircraft) not associated with thunderstorms, from the surface to 10,000 feet above ground level (AGL).

2.2.1.6. Nonconvective low-level wind shear.

2.2.1.7. Any locally established criteria for weather warnings or weather advisories that can be specified in the TAF.

2.2.2. TAF Amendment Conditions. Forecasters will ensure TAFs are representative of expected or actual conditions.

2.2.2.1. Forecasters may coordinate amendment of the TAF anytime they consider it advisable in the interest of safety, efficiency of aircraft operations, flight planning, operational control, or

in-flight assistance to aircraft to ensure the forecast is representative of actual or forecast conditions.

2.2.2.2. Forecasters will ensure the TAF is amended:

2.2.2.2.1. Anytime an unforecasted change occurs, is expected to last at least 30 minutes and is not forecast by the next whole hour from the time of occurrence (e.g., if the time is 2147Z, the next whole hour is 2200Z, not 2300Z).

2.2.2.2.2. Anytime a forecasted condition does not occur by the specified hour and is not expected to occur within the next 30 minutes (e.g., a forecasted change is expected to occur by 2200Z, but doesn't happen; an amendment must be issued by 2230Z).

2.2.2.2.3. Anytime a temporary (TEMPO) group becomes predominant or do not occur within the first hour specified by the TAF (e.g., TEMPO 1518, is the specified temporary condition expressed in the TAF has not occurred by 1559Z, the TAF must be amended by that time).

2.2.2.3. TAF Amendment Criteria (See MOA 15-09). The duty forecaster will ensure the forecast is amended for the following criteria:

2.2.2.3.1. Ceiling or visibilities are observed or later forecast to increase to or exceed, or decrease to less than any of the following values:

| Ceiling | Visibility |
|------------|-------------------------------|
| 3,000 feet | 3 statute miles (4800 meters) |
| 1,000 feet | 2 statute miles (3200 meters) |
| 300 feet | 1 statute mile (1600 meters) |
| 200 feet | 1/2 statute mile (800 meters) |

2.2.2.3.2. Surface Winds:

2.2.2.3.2.1. When the difference between the predominant wind speed and the forecast wind speed is ≥ 10 knots and/or the difference between the observed gust is ≥ 10 knots from the forecast gust.

2.2.2.3.2.2. Upon a direction change of more than 30 degrees when the predominant wind speed or gusts are expected to be over 15 knots.

2.2.2.3.3. Precipitation:

2.2.2.3.3.1. Unforecasted freezing precipitation begins or forecasted freezing precipitation ends.

2.2.2.3.3.2. The beginning or ending of hail causing local weather warning or weather advisory that can be specified in the TAF to be issued, canceled, or amended.

2.2.2.3.3.3. Of such intensity to cause a change in runway condition reading (RCR) or runway surface condition (RSC).

2.2.2.3.4. Turbulence and Icing. The beginning or ending of turbulence or icing, not associated with thunderstorms, from surface to 10,000 feet (AGL) and which first meets, exceeds, or

decreases below moderate or greater thresholds (for CAT II aircraft) and was not specified in the forecast.

2.2.2.3.5. Nonconvective low-level wind shear:

2.2.2.3.5.1. Is occurring and is expected to continue, or is expected to begin, but is not specified in the forecast.

2.2.2.3.5.2. Is forecasted in the TAF, but is not expected to occur during the forecast period.

2.2.2.3.6. Weather warning criteria and/or TAF amendable weather advisory criteria:

2.2.2.3.6.1. Occur, or are expected to occur, during the forecast period, but were not specified in the forecast.

2.2.2.3.6.2. Where specified in the forecast, but are no longer occurring or expected to occur during the forecast period.

2.2.2.3.7. Thunderstorms. Incorrect by forecasted start or end time

2.3. Mission Services. The 22 OSS/OSW provides flight weather briefing to aircrews as well as staff briefings to 22 ARW, 931 ARG, and 184 ARW leadership. Any mission-related briefing that defines mission-limiting factors will be defined as a MEF.

2.3.1. Aircrew Flight Weather Briefing MEFs. Generally, these briefings will be provided through the weather website (<http://www4/WEATHER/Briefs/Briefs.htm>), by fax or face-to-face at the 22 OSS/OSW in Bldg 1112. Flight MEFs will be made available on the weather website or faxed to aircrews three hours (four hours when deicing procedures are in effect from Nov-Mar) prior to takeoff. Flight weather briefs are valid only upon receipt of the duty forecaster's initials. Flying squadrons should coordinate with the 22 OSS/OSW leadership for briefing requirements outside Bldg 1112. A 24-hour minimum notice is required.

2.3.1.1. Weather briefing documentation. The DD Form 175-1, Flight Weather Briefing, the AMC Form 181, McConnell Form 181, AMC Mission Weather Briefing (weather web page-based), are the standard briefing forms.

2.3.1.2. Weather briefing content. Flight weather briefings will include the following:

2.3.1.2.1. Brief overview of the general synoptic situation.

2.3.1.2.2. Current and forecast weather (including flight hazards) for takeoff, en route, destination, and alternates with special emphasis on severe weather and flight hazards. Hazards are briefed within 25 miles either side of the route of flight and within 5,000 feet of the planned flight level.

2.3.1.2.3. Doppler weather radar, meteorological satellite, lightning detection system data, and N-TFS products will be incorporated into the briefing whenever appropriate.

2.3.1.2.4. Space Weather impacts upon use of GPS, satellite communications and HF radios.

2.3.2. 22 ARW/CC Standup Briefing. This briefing will be presented in person by the Weather Flight commander or designated representative. The content of this briefing will be as follows:

2.3.2.1. 5-Day Mission-limiting weather impact slide for McConnell AFB.

2.3.2.2. Additional 1 to 5-day limiting factor slides for locations designated by 22 ARW leadership.

2.3.2.3. Specific threat slides such as hurricane evacuation slides or other threat-specific slides

2.3.3. Flight safety and aircrew weather instrument refresher course briefings. These briefings will be presented upon request from flying unit safety officers with a minimum of three days notice. Web-based training presentations are available on the 22 OSS/OSW (<http://www4/weather/index.htm>, Aircrew Training) and 26 OWS web pages.

2.3.4. Aircrew briefing terminal. Normally, 22 OSS/OSW will provide mission services to all aircrews departing from McConnell AFB. An aircrew briefing terminal and telephone are provided in the mission planning room of Bldg 1112. These are available to all home-based and transient aircrews to arrange support from the 26 OWS, if the aircrews prefer that form of support.

2.3.5. Contact 22 OSS/OSW for more information or to arrange mission services.

2.4. Pilot-to-Metro-Service (PMSV).

2.4.1. A PMSV, UHF channel 375.2 MHz, is continually monitored by the 22 OSS/OSW. Range is approximately 200 NM at or above Flight Level (FL) 200.

2.4.2. Aircraft commanders are encouraged to contact the McConnell Control Tower Automated Information Service (ATIS) (UHF channel 269.9 MHz or 124.65 MHz) for the latest surface observation and field conditions. Pilots should contact the 22 OSS/OSW by PMSV or by phone patch for forecasts, hazardous en route weather, pilot reports, or other weather information, as required any Pilot Reports (PIREPS) that are received meeting the following criteria:

2.4.3. Turbulence: Moderate or greater

2.4.4. Icing: Light or greater

2.4.5. Low-level wind shear (LLWS)

2.4.6. Cloud heights: bases and/or tops if ceilings at McConnell AFB are occurring or

2.4.7. Forecasted to occur at/below 3,000ft above ground level within 3 hours

2.4.8. Reports containing remarks of tornadoes, funnel clouds, and water spouts.

2.5. The 26 OWS will provide PMSV support to aircrews via phone patches (DSN 781-4775 or toll free 1-866-233-9328) when 22OSS/OSW cannot provide timely service due to workload, equipment/communications problems, etc.

Chapter 3

OBSERVING SERVICES

3.1. Duty Hours. The 22 OSS/OSW is tasked to provide “eyes forward” observation support for the 26 OWS duty forecaster as well as airfield services support of McConnell AFB. The 22 OSS/OSW is the primary source of all weather observations disseminated for McConnell Air Force Base. The 22 OSS/OSW duty forecaster will ensure a basic weather watch is maintained as needed to support mission and force protection requirements.

3.2. Basic Weather Watch (BWW). A BWW is normally conducted from the base weather station by weather personnel who, because of other weather operations duties, cannot monitor the weather continuously. Due to other weather operations duties, along with other restrictions such as a 22 OSS/OSW design that does not allow a 360-degree view of the runway complex, etc., weather personnel on duty cannot detect and report all weather changes as they occur. The BWW is augmented by the Cooperative Weather Watch as described in paragraph 3.4.

3.3. Observing Site Limitations. From the official point of observation (the flightline side of Bldg 1112), the items listed below obstruct the observer from having a full view of the horizon. 3.3.1. The Fire Station (Bldg 1201), 22 LRS/LGRRP (Bldg 1220), and trees 100 to 250 feet to the south and southeast.

3.3.1. Bldg 1218 and Boeing hangar 1/4 mile to the southwest.

3.3.2. Aircraft parked on the ramp 1/4 to 3/4 miles to the west through northwest.

3.3.3. KSANG hangar 1 mile to the northwest.

3.3.4. Numerous base buildings to the north through east through south.

3.4. Cooperative Weather Watch. To offset the 22 OSS/OSW’s observing limitations, Air Traffic Control personnel are certified to make limited observations. This arrangement is called “a cooperative weather watch.” Of primary concern is the occurrence of previously unreported weather conditions which could affect flight safety or which could be critical to the safety or efficiency of other local operations and resources. When the surface and tower prevailing visibilities differ and either is less than 4 miles (6000 meters), Air Traffic Control personnel will relay tower visibility reports for inclusion in weather observation remarks.

3.5. Observation Dissemination.

3.5.1. Observations are disseminated as an Aviation Routine (METAR), Special (SPECI), or Local (LOCAL) Surface Weather Observations, which are classified according to their purpose as described in paragraphs 3.7.-3.8.

3.5.2. All observations are disseminated with a referenced date and 24-hour Universal Time (UTC).

3.5.2.1. METAR observations will be taken 55-59 minutes past the hour.

3.5.2.2. The actual time of a SPECI or LOCAL observation shall be the time the SPECI or LOCAL criteria (listed in paragraphs 3.7. and 3.8. except runway change and aircraft mishap criteria) was first met or observed. .

3.5.2.3. The actual time of a LOCAL for a runway change or an aircraft mishap shall be the time the last element of the report was observed (i.e., pressure, wind).

3.5.3. If the New Tactical Forecast System (N-TFS) is inoperative, 22 OSS/OSW personnel will telephonically disseminate all observations to the Tower, Command Post, Base Operations, and 26 OWS (in turn) unless otherwise coordinated.

3.6. Format and Content of METAR/SPECI Observations. The following elements are included in METAR and SPECI observations, in the order indicated. Sample observations with explanations are located in [A2.2](#).

3.6.1. Type of Report. METAR or SPECI.

3.6.2. Station Identifier. For example, KIAB for McConnell AFB.

3.6.3. Date and Time of Report. For example, 011158Z indicates an observation transmitted on the first of the month at 1158 UTC.

3.6.4. Allowable report modifier. COR (correction to the observation)

3.6.5. Wind. Direction and speed including gusts. Wind direction is the direction the wind is blowing from to the nearest degree. Speeds are given in knots to the whole knot.

3.6.6. Visibility. Determined by the prevailing visibility which is the greatest visibility equaled or exceeded throughout at least one-half the horizon circle. The visibility does not have to be continuous throughout 180 consecutive degrees; i.e., it may be composed of sectors distributed anywhere around the horizon circle. Prevailing visibility may be determined by the 22 OSS/OSW observer or by ATC personnel and is reported in statute miles.

3.6.7. Runway Visual Range (RVR). RVR is reported during periods when prevailing visibility is 1 mile (1600 meters) or less or RVR is 6,000 feet (1830 meters) or less.

3.6.8. Present Weather. Present weather is reported when it is occurring at, or in the vicinity of, the station at the time of observation. The location of weather phenomena is reported as occurring at the station when within 5 statute miles (<8 kilometers) of the point of observation, in the vicinity of the station VC when between 5 (8 kilometers) and 10 statute miles (16 kilometers) of the point of observation, and distant from the station (DSNT) when beyond 10 statute miles (>16 kilometers) of the point of observation.

3.6.9. Sky Condition. A visual observation of clouds and atmospheric phenomena aloft consisting of cloud type, amount and height above the surface. Types and amounts are determined by the 22 OSS/OSW observer.

3.6.10. Temperature. Reported in degrees Celsius to the nearest whole degree. When the temperature is below zero degrees Celsius, the prefix "M" is used.

3.6.11. Dew point Temperature. Reported in degrees Celsius to the nearest whole degree. When the dew point temperature is below zero degrees Celsius, the prefix "M" is used.

3.6.12. Altimeter Setting (ALSTG). Coded and reported to the nearest hundredth of an inch of mercury in four digits (without the decimal point).

3.6.13. Remarks. Used to report operationally significant information not reported elsewhere, to elaborate on entries made in the body of the report, to report plain language remarks, and record additive data groups.

3.7. Criteria for Taking SPECI Observations. SPECI observations are taken to report significant changes in weather elements at units which are required and scheduled to transmit surface observations on longline communications. SPECI observations are recorded and transmitted for the following criteria:

3.7.1. Ceiling. The ceiling is observed to form below, decrease to less than or, if below, increase to equal or exceed:

- 3.7.1.1. 3,000 feet (AFMAN 15-111)
- 3.7.1.2. 1,500 feet (AFMAN 15-111)
- 3.7.1.3. 1,000 feet (AFMAN 15-111)
- 3.7.1.4. 800 feet (DoD FLIP)
- 3.7.1.5. 700 feet (AFMAN 15-111)
- 3.7.1.6. 600 feet (DoD FLIP)
- 3.7.1.7. 500 feet (AFMAN 15-111, DoD FLIP)
- 3.7.1.8. 400 feet (DoD FLIP)
- 3.7.1.9. 200 feet (AFMAN 15-111, DoD FLIP)

3.7.2. Visibility. Prevailing visibility (i.e., weather station, tower) is observed to decrease to less than or, if below, increase to equal or exceed:

- 3.7.2.1. 3 miles/4800 meters (AFMAN 15-111).
- 3.7.2.2. 2 3/4 miles/4400 meters (DoD FLIP).
- 3.7.2.3. 2 miles/3200 meters (AFMAN 15-111).
- 3.7.2.4. 1 1/2 miles/2400 meters (DoD FLIP).
- 3.7.2.5. 1 1/4 miles/2000 meters (DoD FLIP, TACAN RWY 19L, ALS INOP Procedures).
- 3.7.2.6. 1 mile/1600 meters (AFMAN 15-111).
- 3.7.2.7. 3/4 mile/1200 meters (DoD FLIP).
- 3.7.2.8. 1/2 mile/800 meters (DoD FLIP).

3.7.3. Tornado or funnel cloud appears or disappears from sight.

3.7.4. Thunderstorm begins or ends.

3.7.5. Precipitation of any type begins or ends

3.7.6. Freezing precipitation changes in intensity.

3.7.7. Ice pellets change in intensity.

3.7.8. Squall (SQ). 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 one minute. A SPECI is not required to report a squall if one is currently in progress.

3.7.9. Wind Shift. The wind direction changes by 45 degrees or more in less than 15 minutes with sustained winds (or gust) of 10 knots or more throughout the wind shift.

3.7.10. Runway Conditions. Upon receipt, runway conditions will be transmitted as a SPECI or appended to a METAR or SPECI being taken at the time of notification.

3.7.11. Tower Visibility. Upon receipt of a reportable Tower visibility value, when either Tower or Weather's visibility is less than 4 miles (6000 meters) and they differ by a reportable SPECI criteria value.

3.7.12. Runway Visual Range (RVR) highest value decreases to less than, or if below, increases to equal to or exceeds 2400ft (0730 meters). Due to the inability to obtain a 10-minute average, RVR SPECI observations will be taken and disseminated, but RVR will be transmitted longline as RVRNO IAW AFMAN 15-111.

3.7.13. Miscellaneous.

3.7.13.1. Real-World Nuclear Accident. Coded and transmitted when the observer is notified of a real-world nuclear accident. The remark "AEROB" is appended as the last remark.

3.7.13.2. Volcanic Ash. When first observed.

3.7.13.3. Any other meteorological situation which, in the opinion of the observer, is critical to the safety of aircraft operations.

3.7.14. Single Element SPECIs will be taken when a delay in reporting all elements of the SPECI would cause an immediate threat to life or property as in the case of a tornado.

3.7.15. Resumption of Observing Services. A SPECI will be taken, disseminated and recorded within 15 minutes after returning to duty following a break in hourly coverage, if a METAR was not filed as scheduled during that 15-minute period (e.g., station evacuated for false fire alarm for a half an hour, when the observer returned and services resumed, a SPECI would be taken).

3.8. LOCAL Observation Reporting Requirements. LOCAL observations are primarily taken to report changes in conditions significant to local airfield operations but do not meet SPECI criteria. LOCAL observations are required for the following criteria:

3.8.1. Aircraft Mishap. Coded and transmitted locally immediately following notification or sighting of an aircraft mishap at or near the station unless there has been an intervening METAR or SPECI. The remark "ACFT MISHAP" identifies this observation.

3.8.2. Change in Runway. Following notification of a change in the runway in use, weather sensors must be changed and allowed sufficient time to update with current information before taking the observation.

3.8.3. Altimeter Setting. At a frequency not to exceed 35 minutes when there has been a change of 0.01 inch Hg (0.3 hPa) or more since the last locally disseminated value. This observation may be taken and disseminated as a "single element" LOCAL.

3.8.4. RVR. LOCAL observations are coded and transmitted for RVR when:

3.8.4.1. Prevailing visibility conditions for reporting RVR are first observed and again when the prevailing visibility conditions for reporting RVR are observed to no longer exist.

3.8.4.2. Prevailing visibility is first observed below 1 mile and when prevailing visibility first increases above 1 mile.

3.8.4.3. RVR is first observed below 6000 feet and when RVR first increases above 6000 feet.

3.8.4.4. RVR for the active runway is observed to decrease to less than or, if below, increase to equal or exceed:

3.8.4.4.1. 6,000 feet or 1830 meters (AFMAN 15-111).

3.8.4.4.2. 5,000 feet or 1520 meters (AFMAN 15-111).

3.8.4.4.3. 4,000 feet or 1220 meters (DoD FLIP, Instrument Approach, ILS/LOC, minima).

3.8.4.4.4. 2,400 feet or 730 meters (DoD FLIP, Instrument Approach, ILS/LOC, minima).

3.8.4.4.5. 1,600 feet or 490 meters (MCI 11-235).

3.8.4.4.6. 1,000 feet or 300 meters (MCI 11-235).

3.8.5. Alert Forces. Whenever the klaxon sounds, or when an alert notification is received by any other method

3.8.6. Tower Visibility when different from the weather station visibility by a reportable value that doesn't meet special criteria.

3.8.7. For any other meteorological situation that in the opinion of the observer is significant to local operations.

3.9. Bird Strike Prevention Assistance. Forecasters will notify Airfield Management when they observe flocks of birds flying in the vicinity of the airfield. When required, forecasters will provide solar data to help planners pinpoint high potential periods for bird strikes.

3.10. Updating of NOTAMS, DoD FLIPs and IFR supplements. The 22 OSS/OSW leadership (or appropriate delegate) will contact the Chief of Airfield Management to initiate changes to NOTAMS, DoD FLIPs and IFR Supplements.

Chapter 4

WEATHER WARNINGS, WATCHES AND ADVISORIES

4.1. General. In all cases, weather watches (WW), forecast weather advisories (FWA) and observed weather advisories (OWA) will maintain product consistency with other forecast products. For example, if a WW is issued for wind 35 knots or greater, the TAF for that valid time will either forecast predominant and/or gust \geq 35 knots to reflect the WW winds. The 26 OWS is primarily responsible for forecast watches/warnings/advisories and the 22 OSS/OSW is primarily responsible for observed watches/warnings/advisories. The 26 OWS and the 22 OSS/OSW are afforded the flexibility to issue a watch, warning, or advisory of any type when threatening weather conditions that could impact the mission and/or resources are imminent and there is insufficient time to pre-coordinate.

4.1.1. A weather warning is a special forecast for weather phenomena of such an intensity that it poses a hazard to property or life. A weather warning for McConnell AFB will be for the area within 5 NM of the base.

4.1.2. A weather watch is a special notice provided to supported customers that alerts them of a potential for weather conditions of such intensity as to pose a hazard to life or property for which the customer must take protective action. Samples of a weather watch and warning can be found in [A2.3](#).

4.1.3. A weather advisory is a special notice provided to supported customers that alerts them of weather conditions that are occurring or forecast to occur and could affect their operations. A sample weather advisory can be found in A1.3.3

4.1.4. Valid Time: A given period during which a specified weather phenomena is expected to occur.

4.1.5. Lead Time: The time period between the time of issue and the time of weather phenomena occurrence. The minimum desired lead time (MDLT) is specified by the customer and normally reflects the time required to take necessary protective action.

4.2. Weather Watch Criteria. The criteria for weather watches at McConnell AFB are as listed below. Watches normally precede a weather warning.

4.2.1. Tornado Watch. Issued when meteorological conditions indicate possible tornado development within 5 NM of McConnell AFB.

4.2.2. Severe Thunderstorm Watch. Issued when meteorological conditions indicate severe thunderstorms (thunderstorms with surface winds of 50 knots or greater and/or hail 3/4 inch in diameter) are possible within 5 NM of McConnell AFB.

4.2.3. Non-convective surface winds greater than or equal to 50 knots

4.2.4. Winter Storm Watch. Issued when meteorological conditions indicate the potential for snowfall greater than 2 inches or freezing precipitation within 5 NM of McConnell AFB.

4.2.5. Thunderstorms/Lightning Watch. Issued when potential exists for thunderstorms/lightning to move within 5 NM of McConnell AFB within the next 30 minutes.

4.2.6. Heavy Rain accumulation of 2 inches or greater within 12 hours.

Table 4.1. Forecast Weather Watch Criteria and Associated Minimum Desired Lead-Times and Actions.

| Criteria | Desired Lead-Time | Severe Weather Impact to Supported Customers |
|--|--------------------------|---|
| Tornado | 4 hours | Increase situational awareness for potential of severe damage to aircraft, structures, and personnel. Prepare to secure all items and take protective shelter. |
| Severe Thunderstorm (Convective Surface Winds ≥ 50 Kts and/or Hail $\geq 3/4$ Inch) within 5nm of McConnell AFB | 4 hours | Increase situational awareness for potential of severe damage to flight aircraft surfaces, vehicles, windows, and personnel. Prepare to protect/cover equipment and shelter personnel. |
| Non-convective surface winds ≥ 50 Kts | 4 hours | Increase situational awareness for potential of strong winds to move aircraft or fell trees/limbs. Prepare to point aircraft into wind or tie-down. Prepare to remove/secure loose objects and shelter personnel. |
| Lightning within five nautical miles of the runway complex | 30 minutes | Increase situational awareness for potential to cease Flight line Operations and most outdoor activities. Non-essential personnel should remain indoors. |
| Heavy Snow (Potential for snowfall greater than 2" in 12 hrs) within 5nm of McConnell AFB | 4 hours | Increase situational awareness for potential of moderate mixed icing impacting flight operations. Prepare for delay of vehicular and pedestrian traffic, reporting and/or early release. Prepare for extensive plowing of the runway. |
| Heavy rain (Accumulation of 2" or GTR within the next 12 hrs.) | 4 hours | Increase situational awareness for potential of local flooding. Prepare for flood abatement that can affect buildings and aircraft ops. |
| Freezing Precipitation within 5nm of McConnell AFB | 4 hours | Increase situational awareness for potential of severe clear icing that may shut down flight operations. Prepare for delay of vehicular and pedestrian traffic, reporting and/or early release. |
| Blizzard (Duration of > 3 hours, sustained winds or gusts > 30 knots, considerable falling and/or blowing snow, with prevailing visibility frequently < 1/4 mile/0400 meters (all criteria must be met). | 4 hours | Increase situational awareness for potential of moderate mixed icing impacting flight operations. Prepare for severely affects on vehicular and pedestrian traffic, reporting and/or early release to be strongly considered. |

| Criteria | Desired Lead-Time | Severe Weather Impact to Supported Customers |
|---|-------------------|--|
| Sandstorm (prevailing visibility \leq 5/8 mile/1000 meters) | 4 hours | Decreases visibility. Can cease flight line operations and most outdoor activities. Severely effects vehicular and pedestrian traffic. Increase manned guard activities for security purposes. |

4.3. Weather Warning Criteria. The criteria and desired lead time for weather warnings at McConnell AFB are as listed below (see [Attachment 1](#) for definitions):

Table 4.2. Forecast Weather Warning Criteria and Associated Minimum Desired Lead-Times and Actions.

| Criteria | Desired Lead-Time | Severe Weather Impact to Supported Customers |
|---|-------------------|--|
| Tornado | 10 minutes | Potentially severe damage to aircraft, structures, and personnel. Secure all items and take protective shelter. |
| Severe Thunderstorm (Convective Surface Winds \geq 50 Kts and/or Hail \geq 3/4 Inch) | 120 minutes | Potential damage to flight aircraft surfaces, vehicles, windows, and personnel. Protect/cover equipment and shelter personnel. |
| Non-convective surface winds GTE 50 Kts | 90 minutes | Strong winds might move aircraft or fall trees/limbs. Point aircraft into wind direction or tie-down. Remove/secure loose objects and shelter personnel. |
| Snow accumulation \geq 2 inches in 12 hours | 120 minutes | Can cause moderate mixed icing impacting flight operations. Affects vehicular and pedestrian traffic delayed reporting and/or early release optional. Prepare for extensive plowing of the runway. |
| Rain accumulation \geq 2 inches in 12 hours | 120 minutes | Local Flooding can affect buildings and aircraft ops. Prepare for flood abatement. |
| Freezing Precipitation | 60 minutes | Can create severe clear icing—shuts down flight operations. Affects vehicular and pedestrian traffic delayed reporting and/or early release optional. |
| Blizzard (sustained wind or gusts GTE 30 Kts, considerable falling/blowing snow, and visibility frequently LTE 1/4 NM, lasting at least three hours) | 60 minutes | Can cause moderate mixed icing impacting flight operations. Severely effects vehicular and pedestrian traffic, delayed reporting and/or early release should be strongly considered. |
| Sandstorm (prevailing visibility \leq 5/8 mile/1000 meters) | 90 minutes | Decreases visibility. Can cease flight line operations and most outdoor activities. Severely effects vehicular and pedestrian traffic. Increase manned guard activities for security purposes. |

| Criteria | Desired Lead-Time | Severe Weather Impact to Supported Customers |
|---|------------------------|---|
| <u>Observed</u> Lightning within 5 NM | Issued upon occurrence | Cease Flight line Operations and most outdoor activities. Non-essential personnel should remain indoors. |
| <u>Observed</u> Freezing Precipitation | Issued upon occurrence | Can create severe clear icing—shuts down flight operations. Affects vehicular and pedestrian traffic delayed reporting and/or early release optional. |

4.4. Weather Advisory Criteria. The criteria and desired lead time for observed and forecast weather advisories issued at McConnell AFB are as listed below:

Table 4.3. Forecast Weather Advisory Criteria and Associated Minimum Desired Lead-Times and Actions.

| Criteria | Desired Lead-Time | Weather Impact to Supported Customers |
|--|------------------------|--|
| Surface winds \geq 35 Kts but < 50 Kts | 30 minutes | Strong winds might move aircraft or fall trees/limbs. Point aircraft into wind direction or tie-down. Remove/secure loose objects and shelter personnel. |
| Moderate Thunderstorm (Convective Surface Winds \geq 35 Kts but < 50 Kts and/or Hail \geq 1/2 inch but < 3/4 Inch) | 30 minutes | Potential damage to flight aircraft surfaces, vehicles, windows, and personnel. Protect/cover equipment and shelter personnel. |
| Frost | 12 hours | Can cause light to moderate rime icing impacting flight operations. Deicing procedures will be implemented. Flight weather mission execution forecast briefing times increase from 3 hours to 4 hours to accommodate deicing procedures (01 Nov – 31 Mar). |
| <u>Observed</u> Thunderstorms within 10nm of McConnell AFB | Issued upon occurrence | Potential damage to flight aircraft surfaces, vehicles, windows, and personnel. Protect/cover equipment and shelter personnel. |
| <u>Observed</u> Surface winds greater than/equal to 25 Kts | Issued upon occurrence | Strong winds affect aircraft performance and present a hazard from flying debris. Adjust/plan all flights accordingly. Remove/secure loose objects. |
| <u>Observed</u> Cross winds greater than/equal to 15 Kts | Issued upon occurrence | Affects aircraft performance (especially when runway is not dry). Adjust/plan flights accordingly. |
| <u>Observed</u> Cross winds greater than/equal to 25 Kts | Issued upon occurrence | Restricts aircraft performance (especially when runway is not dry). Adjust/plan flights accordingly. |

| Criteria | Desired Lead-Time | Weather Impact to Supported Customers |
|--|------------------------|--|
| <u>Observed</u> Equivalent wind chill temperature less than/equal to – 20F | Issued upon occurrence | Affects all outdoor activity. Outside personnel must use protective clothing to cover exposed portions of body. Early release optional. |
| <u>Observed</u> Heavy rain (>1 inch in 2 hours) (when OWS capability exists) | Issued upon occurrence | Local Flooding can affect buildings and aircraft ops. Prepare for flood abatement. |
| <u>Observed</u> Prevailing visibility 1/8 mile or less (when OWS capability exists) | Issued upon occurrence | Decreases visibility. Can cease flight line operations and most outdoor activities. Severely effects vehicular and pedestrian traffic. Increase manned guard activities for security purposes. |

4.4.1. **NOTE:** that for surface winds ≥ 35 knots but < 50 knots and Moderate Thunderstorms, McConnell AFB considers this criterion suitable for an advisory, rather than a warning as listed in AFMAN 15-129.

4.5. Dissemination of Watches/Warnings/Advisories.

4.5.1. The 26 OWS will disseminate Watches, WVs and WAs directly to the 22 OSS/OSW and all other agencies on the installation's dissemination network (e.g. N-TFS) per MOA 15-09.

4.5.2. The 22 OSS/OSW will notify (verbatim) via phone, e-mail, or fax the Air Traffic Control Tower, Command Post and Base Operations (in turn) in accordance with the dissemination tree outlined in [Chapter 6](#).

4.5.3. If all communications from the 22 OSS/OSW are out, 22 OSS/OSW personnel will hand-carry all watch and warning notifications to the Airfield Management Flight for dissemination over the CIN.

Chapter 5

TORNADO AND SEVERE WEATHER PROCEDURES

5.1. General. The 22 OSS/OSW relies on Doppler radar and the National Weather Service (NWS) spotter network to provide the base populace with sufficient lead time for protection of life and property during severe weather. In order to increase the awareness of potential tornado development, the 22 OSS/OSW will utilize the Tornado Watch/Warning System. 22 OSS/OSW will implement Severe Weather Action Plan in accordance with Weather Flight SOPs and 26 OWS MOA 15-09.

5.2. Severe Weather Action Procedures.

5.2.1. For all severe weather events, the 22 OSS/OSW Severe Weather Action Procedures will be followed as outlined in **Attachment 3** of this document.

5.2.2. **Tornados.** The 26 OWS will issue a TORNADO WATCH as early as possible to alert the base populace that meteorological conditions exist or are forecast to exist for tornadic activity. People should remain alert to changing weather conditions, and monitor the radio or television when threatening weather is moving toward the McConnell area.

5.2.2.1. If a tornado is observed, either by a qualified weather observer, local disaster management office, Control Tower personnel or law enforcement agencies, or if a tornado is indicated on radar and it poses a potential threat to McConnell AFB, a tornado warning will be issued and the warning siren activated. All personnel should seek shelter at that time. **REMEMBER:** A tornado warning means that a tornado has been sighted or detected by weather radar.

5.2.2.2. A tornado warning will be disseminated in accordance with procedures in **Chapter 7**. Airfield Management will pass **tornado warnings and severe thunderstorm warnings** over the Commander's Information Net (CIN). In addition, the weather flight commander (or representative) will verbally notify the 22 ARW/CC and the 22 ARW/CP and brief the threat, usually through a conference call. The base siren will be activated by the 22 OSS/OSW or the Command Post after verbal confirmation from the 22 OSS/OSW if time permits.

5.2.2.3. The 22 OSS/OSW will cancel all tornado warnings as quickly as possible when the severe weather moves out of the immediate McConnell area, or if it dissipates.

5.2.2.4. The Command Post will issue a cable television audio override and announce the tornado or severe thunderstorm warning over all of McConnell AFB cable TV channels.

5.2.2.5. Emphasis should be on preparedness--severe weather can develop rapidly. A tornado warning may be issued with little advance notification.

5.2.3. For all other severe weather parameters (lightning within 5 nm, GTE 50 knot surface winds, GTE ¾ inch diameter hail, heavy rain/snow GTE 2 inches in 12 hours and/or blizzards)

5.2.3.1. A severe weather watch will be issued by 26 OWS - 22 OSS/OSW forecasters to inform base senior leaders and populace of potential for severe weather.

5.2.3.2. A severe weather warning will be issued by 26 OWS – 22 OSS/OSW forecasters to warn base senior leaders and populace of expected severe weather.

5.2.3.3. All severe watches/warnings will be issued and disseminated in accordance with AFMAN 15-129, 22 OSS/OSW SOPs and this document (**Chapter 6**, **Chapter 7** and **Attachment 2**.)

5.3. Severe Weather Observations. 22 OSS/OSW currently takes manual observations. Upon installation of the FMQ-19, automated observation system, the 22 OSS/OSW will develop severe weather action procedures detailing augmented and manual input procedures during severe weather events. Tentative installation of FMQ-19 is FY05.

Chapter 6

DISSEMINATION OF WEATHER WATCHES, WARNINGS AND ADVISORIES

6.1. Procedures.

6.1.1. The 22 OSS/OSW coordinates the dissemination of a watch, warning, or advisory through N-TFS in accordance with MOA 15-09. Each agency on the dissemination net will make additional notifications to other agencies, as indicated in paragraph 6.7.

6.1.2. If all communications are out, the 22 OSS/OSW will carry watch, warning, and advisory notifications to the Airfield Management.

6.1.3. The numbers in brackets [1-20] indicate the types of watches, warnings, and/or advisories each agency requires.

6.2. Watches. The following weather watches are provided by the 26 OWS:

- [1] Tornado
- [2] Severe Thunderstorm
- [3] Surface winds, steady or gusting ≥ 50
- [4] Heavy Snow
- [5] Heavy Rain
- [6] Freezing Precipitation
- [7] Blizzard
- [8] Sandstorm
- [9] Lightning within 5-NM

6.3. Warnings. The following forecast weather warnings are provided by the 26 OWS:

- [10] Tornado
- [11] Severe Thunderstorm
- [12] Surface winds, steady or gusting ≥ 50 knots
- [13] Heavy Snow
- [14] Heavy Rain
- [15] Freezing precipitation
- [16] Blizzard
- [17] Sandstorm
- [18] Thunderstorms/lightning within 5NM

6.3.1. The 22 OSS/OSW will issue an observed warning upon the first occurrence of [15] (deviates from standard WWA criteria in AFMAN 15-129) and [18].

6.4. Forecast Advisories. The following forecast weather advisories are provided by the 26 OWS:

[19] Surface winds ≥ 35 knots but < 50 knots. Deviates from standard WWA criteria in AFMAN 15- 129 per customer request.

[20] Moderate Thunderstorm (convective wind ≥ 35 knots but < 50 knots and/or $\geq \frac{1}{2}$ inch but $< \frac{3}{4}$ inch hail). Deviates from standard WWA criteria in AFMAN 15-129 per customer request.

[21] Frost. Deviates from standard WWA criteria in AFMAN 15- 129 per customer request.

6.5. Observed Advisories. The following observed weather advisories are provided by the 22 OSS/ OSW.

[22] Thunderstorms within 10nm

[23] Cross winds ≥ 15 knots

[24] Cross winds ≥ 25 knots

[25] Surface winds ≥ 25 knots

[26] Equivalent wind chill temperature ≤ -20 F

[27] Rain > 1 inch in 2 hours

[28] Prevailing visibility 1/8 mile or less

NOTE: Because of the frequency of winds in excess of 20 knots at McConnell AFB, units needing to know when winds are exceeding or will exceed 20 knots should call the duty forecaster at ext. 3707.

6.6. Deviations to AFMAN 15-129 Standard Watch, Warning and Advisory Criteria.

6.6.1. 22 ARW requests an observed freezing precipitation warning and frost advisory to provide heightened situational awareness and to support implementation of de-icing procedures.

6.6.2. 22 ARW does not take action for surface winds ≥ 35 knots but < 50 knots and/or $\geq \frac{1}{2}$ inch but $< \frac{3}{4}$ inch hail in diameter. Advisories are substituted for the standard watches and warnings to provide heightened situational awareness to the customer.

6.7. Dissemination Tree for weather watches, warnings and advisories.

Combat Weather Team (N) TFS, Telephonic or In Person)

Air Traffic Control Tower [1-28]

Airborne/Taxiing aircraft [1-3, 6-28]

Command Post [1-28]

Airborne aircraft [1-3, 6-28]

22 ARW/CC [1-28] (backup to CIN)

22 OG/CC [1-25] (backup to CIN)

22 MSG/CC [1,2, 4-21] (backup to CIN)

22 MXG/CC [1-22, 26, 27] (backup to CIN)

344 ARS/DO [9-25]
349 ARS/DO [9-25]
350 ARS/DO [9-25]
384 ARS/DO [9-25]
184 ARW/CP [1-28] (backup to CIN)
184 ARW/CC
184 ARS/DO and sub-ordinate units

Airfield Management (CIN) [1-28]

Crisis Action Team (when in session) [1-28]
22 ARW/CC [1-28]
22 OG/CC [1-25]
931 ARG/CC [1-28]
22 MSG/CC [1-4, 21]
22 MXG/CC [1-22, 26, 27]
22 ARW/SE [1-28]
22 ARW/PA [1-10]
DCMA Wichita [10, 18, 24]
127 ARS/CC [1-10, 12, 23-24]
22 LRS/LGRVO [1-20, 26, 27]
22 CONS/LGC [1-10, 15, 20, 22-24, 27, 28]
22 MOS/MOC [1-27]
22 LRS/LGRF [1-27]
22 MXS/LGMCF [1-10, 12, 22-24, 26]
22 CS/SCBNH [1-28]
EMCS [1-24, 27]
22 SVS/SVML [1-18]
22 CES/CEOE1 [1-21, 25- 27]
22 SFS/SFO [1-21, 24, 27, 28)
184 ARW/CP [1-28]
184 ARW/CC
184 ARS/DO and sub-ordinate units

Chapter 7

RECIPROCAL SUPPORT

7.1. General. The 22 OSS/OSW relies on the assistance of several base agencies to accomplish its weather support mission. This chapter explains the responsibilities and procedures to be followed by these agencies.

7.2. Responsibilities.

7.2.1. **22 ARW/SE** will notify the 22 OSS/OSW of all mishaps or accidents when weather, weather services, or weather personnel are involved or may be a factor.

7.2.2. The **22 OG, 22 MSG, 22 MXG, and associate units** will establish operational weather support requirements and procedures with 22 OSS/OSW. These agencies will:

7.2.2.1. Determine severe weather notification requirements and establish notification procedures for their subordinate units.

7.2.2.2. Provide changes in requirements and points of contact to the 22 OSS/OSW.

7.2.2.3. Ensure that using agencies notify the 22 OSS/OSW when their N-TFS is out of service and when it is restored to service.

7.2.3. 22 ARW Command Post will:

7.2.3.1. Notify the 22 OSS/OSW of changes to alert/readiness status.

7.2.3.2. Will disseminate weather watches, warnings, and advisories as instructed in **Chapter 7**, using discretion and factors such as flying activity, severity of weather, etc. during non-duty hours.

7.2.3.3. Notify the 22 OSS/OSW of an Alert/Crisis Action Team recall.

7.2.3.4. Notify the 22 OSS/OSW when their N-TFS terminal is out of service and when it is returned to service.

7.2.3.5. Notify the designated 22 OSS/OSW standby personnel upon receipt of any watch, warning and/or advisory issued by the 26 OWS during 22 OSS/OSW station closure.

7.2.3.6. Provide PIREPs via UHF and/or phone patches to the 22 OSS/OSW as they are received or when requested for short-term Pilot-to-Metro Service outages.

7.2.3.7. Issue a cable television audio override and announce the tornado or severe thunderstorm warning over all of McConnell AFB cable TV channels.

7.2.3.8. Solicit weather data from 22 OSS/OSW for inclusion into all OPREP-3 messages when severe weather is a causing factor for initiation of an OPREP-3 message. Such messages will include the following addresses as addressees:

7.2.3.8.1. AFOC Washington DC, HQ USAF Washington DC//XOW//

7.2.3.8.2. AFWA Offutt AFB NE//CC//

7.2.3.8.3. HQ AMC Scott AFB IL//A36W//

7.2.3.8.4. 26 OWS Barksdale AFB LA//CC//

7.2.4. **Airfield Management (22 OSS/OSAA)** will:

- 7.2.4.1. Disseminate weather watches, warnings and advisories over the CIN as indicated in **Chapter 6** and **Chapter 7**.
- 7.2.4.2. Notify the 22 OSS/OSW of all mishaps and emergencies.
- 7.2.4.3. Provide the 22 OSS/OSW with the RSC and RCR for the active runway when reportable conditions begin, are amended, or end.
- 7.2.4.4. Publish 22 OSS/OSW hours of operation and PMSV information in Flight Information Publications (FLIPs).
- 7.2.4.5. Provide 22 OSS/OSW with updated flight publications as requested and required.

7.2.5. **Air Traffic Control (22 OSS/OSAB)** will:

- 7.2.5.1. Participate in the cooperative weather watch program as outlined in **Chapter 3. Chapter 4**.
- 7.2.5.2. Ensure the 22 OSS/OSW personnel are notified of changes in the active runway.
- 7.2.5.3. Notify of light setting changes, if applicable, for RVR.
- 7.2.5.4. Relay all PIREPs of weather phenomena encountered within 100 NM of McConnell AFB, giving location, time, weather event, type aircraft, flight level, and other available information.
- 7.2.5.5. When it is suspected or becomes obvious that the wind equipment is unreliable, notify the weather observer, who will request maintenance. (NOTE: Notification of service restoration is a 22 OSS/OSW responsibility)
- 7.2.5.6. Upon request, provide the 22 OSS/OSW with a radio check of PMSV radio frequency 375.2 MHz.
- 7.2.5.7. Request a weather observation from the 22 OSS/OSW when Instrument Meteorological Conditions (IMC) exists and a runway not designated as the active is being used. This will ensure the RVR for the runway of intended use is available to aircrews conducting an approach.
- 7.2.5.8. Relay any PMSV information or requests through the hotline during 22 OSS/OSW PMSV outages.
- 7.2.5.9. **The Chief, Air Traffic Control Training (CATCT)**, will conduct indoctrination training for 22 OSS/OSW personnel. The following items will be covered with the 22 OSS/OSW personnel, in detail:
 - 7.2.5.9.1. Mission of the ATC (initial assignment).
 - 7.2.5.9.2. Requirements for relaying weather to aircraft.
 - 7.2.5.9.3. Dissemination of weather information IAW FAAH 7110.65.
 - 7.2.5.9.3.1. PIREP.
 - 7.2.5.9.3.2. Significant meteorological conditions (SIGMETs).
 - 7.2.5.9.3.3. RVR and RCR.
 - 7.2.5.9.4. Air Traffic Control:

- 7.2.5.9.4.1. Type and purpose.
- 7.2.5.9.4.2. Effect of weather on handling traffic.
- 7.2.5.9.4.3. Weather information required.
- 7.2.5.9.4.4. Verification of altimeter setting.
- 7.2.5.9.4.5. Radio/telephone procedures.
- 7.2.5.9.4.6. Provide a tour of the tower and give a briefing on equipment use.

7.2.6. **22 CS/SCMW (METNAV)** will:

- 7.2.6.1. Ensure a 24-hour response capability for repairing weather equipment.
- 7.2.6.2. Follow guidance in 22d Communications Squadron Operating Instruction 33-4 for restoral precedence of 22 OSS/OSW equipment.

7.2.7. **22 CES/CEOIP** will:

- 7.2.7.1. Provide emergency power backup for the 22 OSS/OSW.
- 7.2.7.2. Coordinate monthly generator power tests with the 22 OSS/OSW.

7.2.8. **22 CS/SCBJ** will:

- 7.2.8.1. Record all 22 OSS/OSW outage reports, to include a job control number.
- 7.2.8.2. Notify the responsible repair agent for contract maintenance of leased equipment and communication lines.
- 7.2.8.3. Follow up with the responsible repair agent until service has been restored.
- 7.2.8.4. Coordinate all outage restoration times with the 22 OSS/OSW.
- 7.2.8.5. Coordinate with the 22 OSS/OSW duty forecaster prior to performing scheduled maintenance.

7.2.9. **22CS/SCMR** will:

- 7.2.9.1. Provide maintenance for the 22 OSS/OSW PMSV.
- 7.2.9.2. Coordinate PMSV restoration times with the 22 OSS/OSW.
- 7.2.9.3. Coordinate with the 22 OSS/OSW duty forecaster prior to performing scheduled maintenance.

MICHELLE D. JOHNSON, Colonel, USAF
Commander, 22 ARW

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

AFPD 15-1, *Atmospheric and Space Environmental Support*

AFMAN 15-111, *Surface Weather Observations*

AFMAN 15-128, *Aerospace Weather Operations - Roles and Responsibilities*

AFMAN 15-129, *Aerospace Weather Operations - Processes and Procedures*

AFMAN 15-135, *Combat Weather Team Operations*

AFSPC PAM 15-2, *Space Environmental Impacts on DoD Operations*

DoD Flight Information Publications

Abbreviations and Acronyms

ATC—Air Traffic Control

N-TFS—Automated Meteorological Information System

AWN—Automated Weather Network

CWT—Combat Weather Team

CIN—Commander's Information Network

FLIP—Flight Information Publication

MEF—Mission Execution Forecast

TAF—Terminal Aerodrome Forecast

UTC—Coordinated Universal Time

Terms

Aviation LOCAL Observation—LOCAL observations are primarily taken to report changes in conditions significant to local airfield operations that do not meet SPECI criteria.

Advanced Aviation Routine Weather Reports (METAR)—METAR is a routine scheduled observation, as well as the primary observation code used by the United States to satisfy requirements for reporting surface meteorological data. METAR contains a report of wind, visibility, runway visual range, present weather, sky condition, temperature, dew point, and altimeter setting collectively referred to as “the body of the report.” In addition, coded and/or plain language information which elaborates on data in the body of the report may be appended to the METAR. This significant information can be found in a section referred to as “Remarks.”

Aviation Selected Special Weather Report (SPECI)—SPECI is an unscheduled observation taken when any of the criteria given in paragraph 3.7. have been observed. SPECI shall contain all data elements found in a METAR, plus additional plain language information which elaborates on data in the body of the report. All SPECIs shall be made as soon as possible after the relevant criteria are observed.

Blizzard—Duration of > 3 hours, sustained winds or gusts > 30 knots, considerable falling and/or blowing snow, with prevailing visibility frequently < 1/4 mile/0400 meters. All criteria must be met.

Forecast Weather Advisory—A special notice to supported agencies giving them advance notification (with sufficient time for protective actions) of mission-limiting, non-severe weather conditions expected to directly affect a designated geographic area or an area within a set nautical mile distance of a designated location.

Heavy Snow—Potential for snow fall greater than 2 inches in 12 hours.

Heavy Rain—Accumulation of 2 inches or greater within the next 12 hours.

New Tactical Forecast System (N-TFS)—An integrated automated system designed to provide weather and air traffic control products to support the missions of base weather stations, weather support units, air traffic control agencies, and DoD command posts.

Moderate Thunderstorm—Convective surface winds \geq 35 knots but < 50 knots and/or hail \geq 1/2 inch but < 3/4 inch. McConnell AFB considers this criterion suitable for an advisory rather than a warning as listed in AFMAN 15-129.

Observed Weather Advisory—A special notice provided to supported agencies notifying them that non-severe weather conditions which could affect their operations are occurring within a designated geographic area or within a set nautical mile distance of a designated location. An observed weather advisory is issued on the first occurrence of the designated criteria. An observed weather advisory is used when agencies do not require advanced notification prior to the onset of the weather conditions.

Observed Weather Warning—A special notice to supported agencies giving them notification that weather conditions of intensity to pose a hazard to life or property are occurring within a designated geographic area or within a set nautical mile distance of a designated location. An observed weather warning is issued on the first occurrence of the designated criteria. An observed weather warning is used when agencies do not require advanced notification prior to the onset of the weather conditions.

Sandstorm—Prevailing visibility \leq 5/8 mile/1000 meters.

Severe Thunderstorm—Convective surface winds \geq 50 knots and/ or hail \geq 3/4 inch.

Terminal Aerodrome Forecast (TAF)—These are forecasts for a 24-hour period and are issued every 6 hours. Unless otherwise specified, forecast elements in the main body of the forecast text (clouds, weather, wind, etc.) apply to the area within a 5 statute mile (8 kilometers) radius of the runway complex. The qualifier vicinity (VC) may be used, however, when the phenomenon is expected between 5 miles (8 kilometers) to 10 miles (16 kilometers) of the station.

Weather Warning—A special notice provided to supported agencies giving them advance notification (with sufficient time for protective actions) of weather conditions, of intensity to pose a hazard to life or property, expected to directly affect a designated geographic area or an area defined within a set nautical mile distance of a designated location.

Weather Watch—A special notice to supported agencies alerting them of the potential for weather condition of intensity to pose a hazard to life or property. The weather watch can be thought of as a “heads up” that agencies need to consider making plans to take required protective actions should an actual weather warning be issued later.

Attachment 2

SAMPLE N-TFS DISSEMINATION FORMAT

A2.1. Sample Terminal Aerodrome Forecast (TAF) Format: The following is an example TAF for McConnell AFB KS with explanations and definitions of the code format.

```
KIAB TAF 011616 03008KT 4800 FGPR FEW000 BKN005 BKN012 QNH3001INS FG FEW000
  TEMPO 1821 14012G18KT 3200 -SN -BLSN FEW000 OVC006 620065 SN FEW000
  FM2146 15012G20KT 9999 NSW SCT030 QNH2992INS
  BECMG 2324 15012G20KT 3200 -SN FEW000 OVC004 620046 QNH2983INS SN FEW000
  TEMPO 0103 13015G25KT 0200 -FZDZ VV001 660002 LAST NO AMDS AFT 1721 NEXT
  1810 LIMITED METWATCH 1721 TIL 1810 AUTOMATED SENSOR METWATCH 1721
  TIL 1810
```

The forecast is for McConnell AFB KS KIAB, valid from 011600Z to 021600Z. The initial condition (1600Z to 2400Z) is for winds from 030 degrees at 8 knots, visibility 4,800 meters in fog, sky cover is few (either a surface based partial obscuration or a layer lower than 50 feet), sky is broken (ceiling) at 500 feet and 1,200 feet. The lowest altimeter setting between 011600Z and 012146Z will be 30.01 inches. There is a fog-induced surface based partial obscuration of from 1/8th to 2/8ths in coverage. Between 1800Z and 2100Z, conditions will vary temporarily (frequently but for short periods) to winds from 140 degrees at 12 knots gusting to 18 knots, visibility 3,200 meters in light snow and light blowing snow, sky cover is few (either a surface based partial obscuration or a layer lower than 50 feet), overcast at 600 feet (the ceiling), the light rime icing from 600 to 5,600 feet AGL. There is a snow-induced surface based partial obscuration of from a 1/8th to 2/8ths in coverage. Beginning at 2146Z conditions will change to wind from 150 degrees at 12 knots gusting to 20 knots, visibility greater than 9,000 meters, no significant weather, sky cover scattered at 3,000 feet and the minimum altimeter setting from 012146Z until 012400Z will be 29.92 inches. Between 012300Z and 012400Z conditions will change gradually to wind from 150 degrees at 12 knots gusting to 20 knots, visibility 3,200 meters in light snow, sky cover is few (either a surface based partial obscuration or a layer lower than 50 feet), sky is overcast at 400 feet (light rime icing from 400 to 6,400 feet AGL; the lowest altimeter setting from 020000Z until 021600Z will be 29.83 inches). There is a snow-induced surface based partial obscuration from 1/8th to 2/8ths in coverage. Between 0100Z and 0300Z will vary intermittently to winds from 130 degrees at 15 knots gusting to 25 knots, visibility 200 meters with light freezing drizzle, sky totally obscured with vertical visibility 100 feet, and moderate clear icing from surface to 2,000 feet AGL.

LAST NO AMDS AFT 1721 NEXT 1810 – indicates that the airfield is closed, the customer does not require a TAF, and the station begins limited duty on the 17th at 2100Z and will resume operations on the 18th at 1000Z (will be omitted if station remains in 24/7 operations).

LIMITED METWATCH 1721 TIL 1810 – indicates that the TAF continues and is amended for, at minimum, all weather warning criteria by the supporting OWS from the 17th at 2100Z until the 18th at 1000Z.

AUTOMATED SENSOR METWATCH 1721 TIL 1810 – indicates that the TAF continues and is amended for ALL amendment criteria and conditions based on data from an automated surface observation system (not supplemented by on station weather personnel) from the 17th at 2100Z until the 18th at 1000Z.

A2.2. Sample Observation Formats.

A2.2.1. Sample Routine METAR Observation. The following is a sample routine METAR observation from Altus AFB OK:

KLTS METAR 011157Z 24012KT 10SM -TSRA FEW008 FEW025TCU SCT030CB 25/20 A2992
RMK PK WND 28045/10 OCNL LTGCG TS 5 NE MOV SE SLPNO SCT030 V BKN TCU SE-S FU
FEW008 60010 70010 52010 FIRST/LAST;

This is a routine (hourly) METAR observation for Altus AFB OK on the 1st of the month at 1157Z. Surface winds are from 240 degrees at 12 knots. Visibility is 10 statute miles with thunderstorms and light rain. Sky condition is a few clouds at 800 feet, few clouds at 2500 feet with cloud type of towering cumulus, scattered clouds at 3000 feet with cloud type cumulonimbus. Temperature is 25° Celsius and the dew point is 20° Celsius. Altimeter is 29.92 inches of mercury. The observation includes a remark indicating peak wind for the past hour has been from 280 degrees at 45 knots, 10 minutes past the hour. There is cloud-to-ground lightning and a thunderstorm 5 statute miles to the northeast moving southeast. Sea level pressure is unavailable. Scattered clouds are varying to broken clouds at 3000 feet. Towering cumulus clouds are visible from southeast to south. Smoke is obscuring the sky at 2/8ths or less at 800 feet. Additive data indicates there has been .10 inches of precipitation in the last 3 hours and .10 inches of precipitation in the past 24 hours. There is 3/8ths of low cloud present and pressure has been increasing in the past 3 hours by 0.010 inches of mercury.

A2.2.2. Sample SPECI Observation. The following is a sample SPECI observation from Scott AFB IL:

KBLV SPECI 010812Z 24020G40KT 2 1/2SM +FC +TSRAGR SQ FEW030CB SCT040 BKN050
25/22 A2992 RMK TORNADO 5SW MOV NE FUNNEL CLOUD B02E09 3W MOV NE PK WND
24041/01 TWR VIS 1 1/2 FRQ LTGCCACG TSB59 5S-3W MOV NE GR 1/2 PRESFR VIS SW 1
1/2 WR//;

This observation is a METAR SPECI from Scott AFB IL on the 1st of the month at 0812Z. Winds are from 240 degrees at 20 knots, gusting to 40 knots. Visibility is 2½ statute miles. There is a tornado and severe thunderstorm with rain and large hail occurring with a squall. Sky condition is few clouds at 3000 feet with cloud type cumulonimbus, scattered clouds at 4000 feet, broken clouds at 5000 feet. Temperature is 25° Celsius and the dew point is 22° Celsius. The altimeter setting is 29.92 inches of mercury. The remarks section indicates there is a tornado 5 miles southwest of the station moving northeast.

Funnel cloud began 2 minutes after the hour and ended 9 minutes after the hour 3 miles west of the station moving northeast. Peak wind was from 240 degrees at 41 knots and occurred 1 minute after the hour. Tower visibility is 1½ statute miles. There is frequent cloud-to-cloud, cloud-to-air, and cloud-to-ground lightning. A thunderstorm began 59 minutes after the previous hour and is 5 miles south through 3 miles west of the station moving northeast. Hail is 1/2" in diameter. Pressure is falling rapidly and visibility to the southwest is 1½ miles. The runway is wet.

FIRST/LAST – FIRST is encoded in the first observation upon resumption of observing services. LAST is encoded in the last observation prior to termination of observing services.

A2.3. Sample Weather Watch, Warning and Advisories Formats.

A2.3.1. Sample Weather Watch Format.

WEATHER WATCH 07-002

VALID 23/2300Z (23/1800L) TO 24/0400Z (23/2300L)

CONDITIONS ARE FAVORABLE FOR THE FORMATION OF SEVERE THUNDERSTORMS IN THE MCCONNELL AFB AREA FOR THE INDICATED VALID TIME. A WARNING WILL BE ISSUED LATER IF REQUIRED.

Explanation. This weather watch is the second issued in the month of July and is valid 23 July at 2300Z (1800L) to 24 July at 0400Z (23/2300L). The weather watch is for severe thunderstorms at McConnell AFB.

A2.3.2. Sample Weather Warning format.

AREA WEATHER WARNING 07-002

VALID 23/2300Z (23/1800L) TO 24/1100Z (24/0600L)

THUNDERSTORMS WITH WINDS IN EXCESS OF 50 KNOTS AND HAIL LARGER THAN OR EQUAL TO 3/4" DIAMETER ARE EXPECTED AT MCCONNELL AFB FOR THE INDICATED VALID TIME. PEAK WIND WILL BE 60 KNOTS.

Explanation. This weather warning is the second issued in the month of July and is valid from the 23rd at 2300Z (1800L) to the 24th at 1100Z (0600L). The warning indicates that thunderstorms are expected within 5nm of McConnell AFB and will have winds of approximately 60 knots and hail with 3/4" diameter or larger.

A2.3.3. Sample Weather Advisory format.

ADVISORY 06-004

VALID 08/1900Z (08/1400L) TO 08/2300Z (08/1800L)

WINDS IN EXCESS OF 25 KNOTS ARE EXPECTED AT MCCONNELL AFB FOR THE INDICATED VALID TIME. PEAK WIND WILL BE 38 KNOTS.

Explanation. This advisory is the 40th issued for the month of June and is valid from the 8th at 1900Z (1400L) to the 8th at 2300Z (1800L). The advisory is for winds of approximately 38 knots within 5NM of McConnell AFB.

Attachment 3**22 OSS/OSW SEVERE WEATHER ACTION PROCEDURES**

REFERENCES: AFMAN 15-129, AFI 10-229, HQ USAF SWAP Policy, Local Policy

A3.1. The 26 OWS – 22 OSS/OSW team will activate the Severe Weather Action Procedures (SWAP) when:

A3.1.1. The potential for severe weather exists within the next 4 hours

A3.1.2. Or any situation, which, in the opinion of the duty MetWatch requires additional personnel (surge in workload, winter storm, hurricane evacuation, etc.).

A3.2. If severe weather is imminent, the 26 OWS will issue the warning immediately and then activate the SWAP. Otherwise, the SWAP will be activated 4 hours prior to the expected severe weather.

A3.3. If the McConnell AFB weather station is closed 26 OWS, in conjunction with the 22 ARW/CP will recall the standby forecaster. The recalled CWT member will evaluate the situation and determine the need for additional manning.

A3.4. If severe weather defined as tornado, gusts GTE 50 knots or hailstones GTE 3/4" occur, the CWT will prepare an OPREP 3 Data Collection Form and by email or FAX to the 22 ARW Command Post, 22 OSS CC, and 26 OWS CCD as soon as duties permit following the severe weather event (normally within 4 hours post event).

A3.5. 22 OSS/OSW will inform 26 OWS and request assistance with a data save for the severe weather event, if required.

A3.6. Perform a data save, if necessary, for a forecast review or training

A3.7. Phone numbers of key agencies:

A3.7.1. 22 OSS/OSW Chief, Weather Station Operations (CWSO): DSN 743-3706

A3.7.2. 22 OSS/OSW Mission Execution Forecaster: DSN 743-3707/4311

A3.7.3. 22 ARW Command Post: DSN 743-3251

A3.7.4. 26 OWS: DSN 781-3809

A3.8. Severe Weather Action Team (SWAT) Composition. Minimum team composition will be three (3): 1 – on-duty forecaster, 1 – stand-by person, and 1 – 26 OWS forecaster. The duty schedule will indicate which person will be on stand-by for severe weather recall. Recall additional personnel if required or warranted (as duty schedule permits). If recalled, the Flight Commander or Chief, Weather Station Operations will be the primary SWAT member.

A3.9. SWAT Recall Procedures. The following procedures will be followed for SWAT recall:

A3.9.1. The duty forecaster will call the standby SWAT member (and contact the flight commander and/or station chief) whenever any of the following conditions are met:

A3.9.1.1. A tornado watch is issued by the NWS for Sedgwick county.

A3.9.1.2. Doppler radar indicates severe weather may reach McConnell AFB within the next hour or less.

A3.9.1.3. When the duty forecaster feels the situation warrants recall. This could include, but is not limited to, the following:

A3.9.1.3.1. Sedgwick county is placed under a severe thunderstorm warning.

A3.9.1.3.2. AFWA issues a point weather warning for McConnell (KS3) for moderate or severe thunderstorms or freezing precipitation.

A3.9.2. If SWAT recall is warranted, he will contact the other member of the SWAT for immediate dispatch to the BWS. SWAT members should go to the BWS immediately (i.e. do not change into uniform, etc.)

A3.9.3. If severe weather is imminent, the 26 OWS will issue the warning immediately and then activate the SWAP. Otherwise, activate the SWAP 4 hours prior to the expected severe weather.

A3.10. SWAT Operations. Once the SWAT arrives at the BWS, the procedures outlined in [Attachment 1](#) to this SOP will be followed.

A3.10.1. All severe weather products issued will be coordinated with 26 OWS through a collaborative teaming process to insure that both 22 OSS and 26 OWS are in agreement. Prior to issuance, a METCON between the two will include the following:

A3.10.1.1. Current/forecasted state of atmosphere (to include current observation and forecast)

A3.10.1.2. Current/forecasted upstream conditions that will affect the KIAB aerodrome and resources

A3.10.1.3. Expected times (beginning, duration, and ending) of severe weather onset

A3.10.1.4. Severe weather thresholds that are expected

A3.10.1.5. Weather Watches/Warnings/Advisories that bear consideration and the expected time of issuance

A3.10.1.6. Aircraft launched that may be affected by severe weather (contact 22 ARW/CP if possibility exists that aircraft may need to be diverted. Inform 26 OWS of aircraft tail numbers of diverted aircraft)

A3.10.2. All collaboration will be thoroughly logged on 22 OSS/OSW Hub Coordination Sheet

A3.11. Severe Weather Exercises. Per AFMAN 15-129, paragraph 3.2.9.2.4, 22 OSS/OSW will conduct semi-annual Severe Weather Management Procedure exercises (Spring and Fall). The exercises will normally coincide and be directed by 22 ARW/XPI, however occurrence of real world severe weather events (severe thunderstorm/tornado in Spring and/or freezing precipitation/icing in Fall) and the coinciding documentation meet the intent of testing the procedures as outlined in AFMAN 15-129. Documentation of the exercise/event is maintained by 22 ARW/XPI and contained in 22 OSS/OSW SOPs.

**Customer Response Matrix
Watch Protective Actions**

Table A3.1. Watch Criteria.

| Watch Criteria | Agency | Detailed Customer Action |
|---|---------------------------|---|
| 1. Tornado Watch | Youth Center/ CDC | Weather is monitored by desk staff |
| | Base Pool | Evacuate the pool, send patrons home |
| | Lodging | Notify all guests and have them be prepared to evacuate |
| | Outdoor Rec | Monitor weather reports |
| | Vehicle Ops | Follow checklist. Notify all Trans flights |
| | Maintenance/ Pro-Super | Disseminate information, secure support equipment and GOVs as necessary, account for on-shift personnel. |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. Tower: advise aircraft via frequency or Automatic Terminal Information System (ATIS). Prepare for evacuation. |
| 2. Severe Thunderstorm (Convective Surface Winds \geq 50 Kts and/or Hail \geq 3/4 Inch) within 5nm of McConnell AFB | Youth Center/ CDC | Children remain in the building - no outside play. |
| | Base Pool | Watch for change in weather, watch for increased winds, have individuals exit pool and take shelter in pool house |
| | Lodging | No action taken |
| | Outdoor Rec | Monitor weather reports, cover equipment, cancel trips |
| | Vehicle Ops | Notify Trans flights of hail watch. (Bring in all newer vehicles into the barn to keep them from getting hail damage |
| | Maintenance/ Pro-Super | Disseminate information, secure support equipment and GOVs as necessary. |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. Tower: advise aircraft via frequency or ATIS. Prepare for evacuation. |

| Watch Criteria | Agency | Detailed Customer Action |
|--|---------------------------|--|
| 3. Non-convective surface winds GTE 50 Kts | Youth Center/ CDC | None |
| | Base Pool | Check with weather and watch for increase in winds. Have swimmers evacuate pool. |
| | Lodging | No action taken |
| | Outdoor Rec | Monitor weather reports |
| | Vehicle Ops | No action taken |
| | Maintenance/ Pro-Super | Disseminate information, secure support equipment and GOVs as necessary |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. Tower: advise aircraft via frequency or ATIS. Prepare for evacuation |
| 4. Lightning Watch within 5 nautical miles of the runway complex | Youth Center/CDC | Children remain in the building - no outside play. |
| | Base Pool | Watch for lightning, if lightning sighted evacuate pool, take shelter in pool house, swimmers allowed to enter water after 30 minutes of last sighting |
| | Lodging | No action taken |
| | Outdoor Rec | Monitor weather reports, cancel outdoor activities |
| | Vehicle Ops | Notify Trans flights |
| | Maintenance/Pro-Super | Disseminate information. |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. Tower: advise aircraft via frequency or ATIS |

| Watch Criteria | Agency | Detailed Customer Action |
|---|---------------------------|--|
| 5. Heavy Snow Watch ($\geq 2''$ in 12 hrs) | Youth Center/ CDC | None |
| | Base Pool | Pool closed |
| | Lodging | Advise customers that most facilities will close and stock up on essentials and food |
| | Outdoor Rec | Cancel trips |
| | Vehicle Ops | Notify Trans flights |
| | Maintenance/ Pro-Super | Disseminate information, secure support equipment and GOVs as necessary. |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. Tower: Advise aircraft via frequency or ATIS |
| | Civil Engineer | Initiate standby procedures for snow removal |
| 6. Heavy Rain Watch ($\geq 2''$ in 12 hrs) | Youth Center/ CDC | None |
| | Base Pool | Watch for weather changes, inform the flight chief, close if needed |
| | Lodging | No action taken |
| | Outdoor Rec 6 | None |
| | Vehicle Ops | Notify Trans flights |
| | Maintenance/ Pro-Super | Disseminate information, secure support equipment and GOVs as necessary |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. Tower: Advise aircraft via frequency or ATIS |

| Watch Criteria | Agency | Detailed Customer Action |
|--|--|---|
| 7. Freezing Precipitation Watch | Youth Center/ CDC | None |
| | Base Pool | Pool closed |
| | Lodging | No action taken |
| | Outdoor Rec | Cancel trips |
| | Vehicle Ops | Notify Trans flights |
| | Maintenance/ Pro-Super | Disseminate information. |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. Tower: Advise aircraft via frequency or ATIS |
| | Civil Engineer | Initiate standby procedures for road sanding |
| 8. Blizzard Watch (wind \geq 30 Kts and vis $<$ 1/2 NM for 3+ hours) | Youth Center/ CDC | During winter weather conditions, children 12 months of age and older shall be taken outdoors only when the equivalent chill temperature is higher than fifteen degrees Fahrenheit. For children younger than 12 months, the temperature and wind chill must be greater than thirty-five degrees Fahrenheit. Outdoor play for both of these should not exceed 30 minutes. |
| | Base Pool | Pool closed |
| | Lodging | Release non-essential personnel; Advise customers that most facilities will close and stock up on essentials and food |
| | Outdoor Rec | Cancel trips |
| | Vehicle Ops | Notify Trans flights |
| | Maintenance/ Pro-Super | Disseminate information, secure support equipment and GOVs as necessary, account for on-shift personnel. |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. Tower: Advise aircraft via frequency or ATIS. Prepare for evacuation if winds exceed 45 knots |
| | Civil Engineer | Initiate standby procedures for snow removal |
| Security Forces | Prepare to increase perimeter guard to accommodate for reduced visibility. | |

| Watch Criteria | Agency | Detailed Customer Action |
|--|---------------------------|---|
| 9. Sandstorm (prevailing visibility LTE 5/8 mile/1000 meters) | Youth Center/ CDC | No action taken. |
| | Base Pool | No action taken. |
| | Lodging | No action taken. |
| | Outdoor Rec | No action taken. |
| | Vehicle Ops | No action taken. |
| | Maintenance/ Pro-Super | No action taken. |
| | Airfield Ops | No action taken. |
| | Security Forces | Increase perimeter guard to accommodate for reduced visibility. |

Table A3.2. Warning Protective Actions.

| Warning Criteria | | Detailed Customer Action |
|--|---------------------------|---|
| 1. Tornado Warning | Youth Center/ CDC | Evacuate personnel and children to interior rooms and barricade the doors with nap mats. Personnel will remain in assigned areas until the danger has passed. |
| | Base Pool | Evacuate pool, inform flight chief, close the pool |
| | Lodging | Vacate TLF and Lodging. Those evacuated come immediately to basement of Bldg 173 |
| | Outdoor Rec | Shelter personnel |
| | Vehicle Ops | Evacuate dispatch office and seek shelter in one of the restrooms. Let Command Post know that dispatch will be empty. Call when back in dispatch |
| | Maintenance/ Pro-Super | Disseminate information and seek shelter, account for on-shift personnel. |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. Tower: Advise aircraft via frequency or ATIS. Prepare for evacuation |
| 2. Severe TSTMS (Convective Surface Winds \geq 50 Kts and/or Hail \geq 3/4 Inch) within 5nm of McConnell AFB | Youth Center/ CDC | Children remain in the building - no outside play |
| | Base Pool | Watch for change in weather, evacuate pool, swimmers take shelter in pool house |
| | Lodging | No action taken |
| | Outdoor Rec | Shelter equipment and personnel |
| | Vehicle Ops | Notify Trans Flights |
| | Maintenance/ Pro-Super | Disseminate information, secure support equipment and GOVs as necessary. |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. Tower: Advise aircraft via frequency or ATIS, prepare for evacuation if winds exceed 60 knots |

| Warning Criteria | | Detailed Customer Action |
|---|---------------------------|---|
| 3. Non-convective surface winds GTE 50 Kts | Youth Center/ CDC | None |
| | Base Pool | Inform flight chief of situation, watch for weather changes, evacuate pool, close pool |
| | Lodging | No action taken |
| | Outdoor Rec | Shelter equipment and personnel |
| | Vehicle Ops | Notify Trans Flights |
| | Maintenance/ Pro-Super | Disseminate information, secure support equipment and GOVs as necessary, cease maintenance actions. |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. Tower: Advise aircraft via frequency or ATIS. Prepare for evacuation if winds exceed 60 knots |
| 4. Heavy Snow ($\geq 2''$ in 12 hrs) | Youth Center/ CDC | None |
| | Base Pool | Pool closed |
| | Lodging | Advise customers that most facilities will close and stock up on essentials and food |
| | Outdoor Rec | Cancel trips |
| | Vehicle Ops | Notify Trans flights |
| | Maintenance/ Pro-Super | Disseminate information, secure support equipment and GOVs as necessary. |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. Tower: Advise aircraft via frequency or ATIS |
| | Civil Engineer | Initiate procedures for snow removal |
| 5. Heavy Rain Warning ($\geq 2''$ in 12 hrs) | Youth Center/ CDC | Children remain in the building - no outside play. |
| | Base Pool | Watch for weather changes, inform flight chief, swimmers exit pool during heavy rain, may enter when rain slows and deck is safe |
| | Lodging | No action taken |
| | Civil Engineer | Prepare for flood abatement procedures |

| Warning Criteria | | Detailed Customer Action |
|-----------------------------------|---------------------------|--|
| 6. Freezing Precipitation Warning | Youth Center/ CDC | Children remain in the building - no outside play. Sometimes we receive emails or phone messages requesting off base personnel be sent home. This is accommodated as soon as possible. |
| | Base Pool | Pool closed |
| | Lodging | No action taken |
| | Outdoor Rec | Cancel trips |
| | Vehicle Ops | Notify Trans Flights |
| | Maintenance/ Pro-Super | Disseminate information, secure support equipment and GOVs as necessary, cease maintenance actions as necessary. |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. Tower: Advise aircraft via frequency or ATIS |
| | Civil Engineer | Initiate procedures for road sanding |

| Warning Criteria | | Detailed Customer Action |
|--|---|---|
| 7. Blizzard (wind ≥ 30 Kts and vis < 1/2 NM for 3+ hours) | Youth Center/ CDC | During winter weather conditions, children 12 months of age and older shall be taken outdoors only when the equivalent chill temperature is higher than fifteen degrees Fahrenheit. For children younger than 12 months, the temperature and wind chill must be greater than thirty-five degrees Fahrenheit. Outdoor play for both of these should not exceed 30 minutes. |
| | Base Pool | Pool closed |
| | Lodging | Release non-essential personnel; Advise customers that most facilities will close and stock up on essentials and food |
| | Outdoor Rec | Cancel trips |
| | Vehicle Ops | Notify Trans flights |
| | Maintenance/ Pro-Super | Disseminate information, secure support equipment and GOVs as necessary, account for on-shift personnel. |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. Tower: Advise aircraft via frequency or ATIS. Prepare for evacuation if winds exceed 60 knots |
| | Civil Engineer | Initiate standby procedures for snow removal |
| Security Forces | Increase perimeter guard to accommodate for reduced visibility. | |
| 8. Sandstorm (prevailing visibility LTE 5/8 mile/1000 meters) | Youth Center/ CDC | No action taken. |
| | Base Pool | No action taken. |
| | Lodging | No action taken. |
| | Outdoor Rec | No action taken. |
| | Vehicle Ops | No action taken. |
| | Maintenance/ Pro-Super | Curtail runway activities to mission essential. |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. Tower: Advise aircraft via frequency or ATIS. |
| | Security Forces | Increase perimeter guard to accommodate for reduced visibility. |

Table A3.3. Forecast Advisory Protective Actions.

| Advisory Criteria | | Detailed Customer Action |
|---|---------------------------|---|
| 1. Surface Winds GTE 35 Kts but LT 50 Kts | Youth Center/ CDC | None |
| | Base Pool | Watch for changes in weather, evacuate pool, swimmers take shelter in pool house, swimmers may enter pool when winds slow |
| | Lodging | No action taken |
| | Outdoor Rec | None |
| | Vehicle Ops | None |
| | Maintenance/ Pro-Super | Disseminate information, secure support equipment and GOVs as necessary, cease maintenance actions as necessary. |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. RAPCON: Advise airborne aircraft. Tower: Advise aircraft via frequency or ATIS. Prepare for evacuation if winds exceed 60 knots |
| 2. Moderate Thunderstorm (Convective Surface Winds GTE 35 Kts but LT 50 Kts and/or Hail GTE ½ inch but LT ¾ inch) | Youth Center/ CDC | Children remain in the building - no outside play |
| | Base Pool | Watch for change in weather, evacuate pool, swimmers take shelter in pool house |
| | Lodging | No action taken |
| | Outdoor Rec | Shleter equipment and personnel |
| | Vehicle Ops | Notify Trans Flights |
| | Maintenance/ Pro-Super | Disseminate information, secure support equipment and GOVs as necessary. |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. RAPCON: Advise airborne aircraft. Tower: Advise aircraft via frequency or ATIS |

| Advisory Criteria | | Detailed Customer Action |
|--------------------------|---|--|
| 3. Frost | Youth Center/ CDC | No action taken |
| | Base Pool | No action taken |
| | Lodging | No action taken |
| | Outdoor Rec | No action taken |
| | Vehicle Ops | No action taken |
| | Maintenance/ Pro-Super/Flying Squadrons | Initiate standby procedures for deicing when issued. Initiate deicing procedures NLT 4 hours prior to first departure. |
| | Airfield Ops | No Action Taken |

Table A3.4. Observed Warning Protective Actions.

| Warning Criteria | | Detailed Customer Action |
|---------------------------|--|---|
| 1. Lightning within 5 NM | Youth Center/CDC | Children remain in the building - no outside play. |
| | Base Pool | Watch for lightning, evacuate pool, take shelter in pool house, swimmers allowed to enter water after 30 minutes of last sighting |
| | Lodging | No action taken |
| | Outdoor Rec | Monitor weather reports, cancel outdoor activities |
| | Vehicle Ops | Notify Trans flights |
| | Maintenance/Pro-Super/ Flying Squadrons | Disseminate information. Runway activity ceases. |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. Tower: advise aircraft via frequency or ATIS |
| 2. Freezing Precipitation | Youth Center/ CDC | None |
| | Base Pool | Pool closed |
| | Lodging | No action taken |
| | Outdoor Rec | Cancel trips |
| | Vehicle Ops | Notify Trans flights |
| | Maintenance/ Pro-Super | Disseminate information. |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. Tower: Advise aircraft via frequency or ATIS |
| | Civil Engineer | Initiate procedures for road sanding |

Table A3.5. Observed Advisory Protective Actions

| Advisory Criteria | | Detailed Customer Action |
|---------------------------------------|---------------------------|---|
| 1. TSTMS within 10nm of McConnell AFB | Youth Center/ CDC | Children remain in the building - no outside play |
| | Base Pool | Watch for change in weather, evacuate pool, swimmers take shelter in pool house |
| | Lodging | No action taken |
| | Outdoor Rec | Shleter equipment and personnel |
| | Vehicle Ops | Notify Trans Flights |
| | Maintenance/ Pro-Super | Disseminate information, secure support equipment and GOVs as necessary. |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. RAPCON: Advise airborne aircraft. Tower: Advise aircraft via frequency or ATIS |
| 2. Surface Winds GTE 25 Kts | Youth Center/ CDC | None |
| | Base Pool | Watch for changes in weather, evacuate pool, swimmers take shelter in pool house, swimmers may enter pool when winds slow |
| | Lodging | No action taken |
| | Outdoor Rec | None |
| | Vehicle Ops | None |
| | Maintenance/ Pro-Super | Disseminate information, secure support equipment and GOVs as necessary, cease maintenance actions as necessary. |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. Tower: Advise aircraft via frequency or ATIS. Prepare for evacuation if winds exceed 60 knots |

| Advisory Criteria | | Detailed Customer Action |
|------------------------------|---|---|
| 3. Cross Winds GTE 15 Kts | Youth Center/ CDC | None |
| | Base Pool | None |
| | Lodging | None |
| | Outdoor Rec | None |
| | Vehicle Ops | None |
| | Maintenance/ Pro-Super/Flying Squadrons | Disseminate information, secure support equipment and GOVs as necessary, cease maintenance actions as necessary. Consider/reevaluate flight plans regarding take-off/landing. |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. Tower: Advise aircraft via frequency or ATIS. Prepare for evacuation if winds exceed 60 knots |
| 4. Cross Winds GTE 25 Kts | Youth Center/ CDC | None |
| | Base Pool | None |
| | Lodging | None |
| | Outdoor Rec | None |
| | Vehicle Ops | None |
| | Maintenance/ Pro-Super/Flying Squadrons | Disseminate information, secure support equipment and GOVs as necessary, cease maintenance actions as necessary. Consider/reevaluate flight plans regarding take-off/landing. |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. Tower: Advise aircraft via frequency or ATIS. Prepare for evacuation if winds exceed 60 knots |

| Advisory Criteria | | Detailed Customer Action |
|-------------------------------|--|---|
| 5. Surface winds GTE 25 Knots | Youth Center/ CDC | N/A |
| | Base Pool | N/A |
| | Lodging | N/A |
| | Outdoor Rec | N/A |
| | Vehicle Ops | N/A |
| | Maintenance/ Pro-Super/Flying Squadrons | Disseminate information, secure support equipment and GOVs as necessary, cease maintenance actions as necessary. Consider/reevaluate flight plans regarding take-off/landing. |
| | Airfield Ops | N/A |
| 6. Wind Chill (\leq -20F) | Youth Center/ CDC | Children Not Allowed Outside |
| | Base Pool | N/A |
| | Lodging | No action taken |
| | Outdoor Rec | No action taken |
| | Vehicle Ops | Begin Work/Warming Regiment 30min./30min. Implement Buddy System, Inspect personnel for cold injuries. Cover all skin. |
| | Maintenance/ Pro-Super | Begin Work/Warming Regiment 30min./30min. Implement Buddy System, Inspect personnel for cold injuries. Cover all skin. |
| | Airfield Ops | No Action Taken |

| Advisory Criteria | | Detailed Customer Action |
|--|---------------------------|--|
| 7. Heavy Rain (GT 1 inch in 2 hours) (when OWS capability exists) | Youth Center/ CDC | Children remain in the building - no outside play. |
| | Base Pool | Watch for weather changes, inform flight chief, swimmers exit pool during heavy rain, may enter when rain slows and deck is safe |
| | Lodging | No action taken |
| | Outdoor Rec | No action taken |
| | Vehicle Ops | Curtail runway activities to mission essential. |
| | Maintenance/ Pro-Super | Curtail runway activities to mission essential. |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. Tower: Advise aircraft via frequency or ATIS. |
| | Civil Engineer | Prepare for flood abatement procedures |
| 8. Prevailing visibility LTE 1/8 mile (when OWS capability exists) | Youth Center/ CDC | No action taken |
| | Base Pool | No action taken |
| | Lodging | No action taken |
| | Outdoor Rec | No action taken |
| | Maintenance/ Pro-Super | Curtail runway activities to mission essential. |
| | Airfield Ops | Base Ops: Secondary Crash Net is activated. Tower: Advise aircraft via frequency or ATIS. |
| | Security Forces | Increase perimeter guard to accommodate for reduced visibility. |