

**BY ORDER OF THE COMMANDER
3D WING**



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Weather**

WEATHER SUPPORT PROCEDURES

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This instruction implements Air Force Policy Directive (AFPD) 15-1, *Weather Operations*, and is used in conjunction with Air Force Manual (AFMAN) 15-111, *Surface Weather Observations*, and AFMAN 15-129, *Air and Space Weather Operations*. It establishes responsibilities and weather support procedures for Joint Base Elmendorf-Richardson (JBER). It provides general information for weather services including weather observations, weather watches, warnings, and advisories (WWAs), the dissemination of information, and reciprocal support. It applies to units assigned to the 673d Air Base Wing (ABW), 3rd Wing (WG), and 176 WG to include Air National Guard and tenant organizations. Ensure all records generated as a result of processes prescribed in this publication adhere to AFI 33-322, *Records Management and Information Governance Program*, and are disposed in accordance with the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the Department of the Air Force (DAF) Form 847, *Recommendation for Change of Publication*. Route DAF Forms 847 from the field through the appropriate chain of command. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the DAF.

SUMMARY OF CHANGES

This publication has been substantially revised to include changes to operating location, procedures, and updated references, and must be completely reviewed.

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Chapter 1

WEATHER OPERATIONS

1.1. General. The 3d Operations Support Squadron Weather Flight (OSS/OSW) provides weather support to 3 WG, 673 ABW, 176 WG, aircrews transiting through Elmendorf airfield, and other installation entities as outlined in this document. This instruction, along with the Installation Data Page (IDP) established between 3 OSS/OSW and the 15th Operational Weather Squadron (OWS), establishes roles and responsibilities for providing collaborative weather support.

1.2. Location and Hours of Operation. 3 OSS/OSW is next to Airfield Management personnel in Building 11525, Slammer Avenue, JBER, AK, 99506 and provides weather services 24 hours a day, 7 days a week.

Table 1.1. Weather Flight Contacts and Links.

3 OSS/OSW CONTACTS AND LINKS	
Weather Flight Commander	DSN 317-552-5201
Weather Flight Chief	DSN 317-552-9815
Airfield Weather Forecaster	DSN 317-552-4903/4397
Alternate Operating Location (AOL)	DSN 317-552-7916
Email	3ossweather@us.af.mil
Website	https://usaf.dps.mil/sites/jber/3WG/3OG/3OSS/OSW/SitePages/Home.aspx

1.3. Duty Priorities. 3 OSS/OSW has established duty priorities to ensure task accomplishment in order of relative importance. Weather forecasters may only deviate from the priority list in the best interest of flight safety and protection of life and property. All personnel use the concept of Risk Management when applying duty priorities. **Table 1.2** outlines duty priorities for 3 OSS/OSW personnel.

Table 1.2. Duty Priority List.

Order of Priority	DUTIES
1	Perform Emergency War Order Tasks
2	Respond to Alaska NORAD Region (ANR) Alerts
3	Execute Evacuation/AOL Procedures
4	Respond to Aircraft and Ground Emergencies
5	Respond to Pilot to Metro Service (PMSV) Contacts
6	Issue/Disseminate Imminent Hazardous Weather Warnings
7	Provide Weather Information for Alaska Rescue Coordination Center (AKRCC)
8	Provide Weather Information for Supervisor of Flying (SOF)
9	Issue/Disseminate Imminent Hazardous Weather Advisories
10	Perform Severe Weather Action Plan (SWAP) Operations
11	Augment AN/FMQ-19 Sensor Observations for Mandatory Elements
12	Disseminate/Amend Terminal Aerodrome Forecast (TAF)
13	Produce and Disseminate Mission Execution Forecast (MEF) Products
14	Provide “Eyes-Forward” / Collaborate with the 15 OWS
15	Disseminate Urgent Pilot Reports (PIREPs)
16	Disseminate PIREPs
17	Perform MISSIONWATCH
18	Provide MEF Briefing Support
19	Provide Briefing Support (Transient/Other)
20	Accomplish Weather Functional Training
21	Accomplish Administrative Tasks

1.4. Surface Weather Observations.

1.4.1. The FMQ-19 is a fixed-base weather observing system that is capable of measuring and disseminating fully automated weather observations 24 hours a day, 7 days a week, and is the primary source for producing objective weather observations at Elmendorf airfield. Sensor groups are located at the approach end of runways 06, 24, 16, and 34. 3 OSS/OSW forecasters will supplement and/or back-up the automated system IAW AFMAN 15-111.

1.4.1.1. **Figure 1.1** shows the official observation point for supplementing or backing-up the FMQ-19 with human observations. The point is located near aircraft parking spot number one on Gold Ramp. **Figure 1.2** shows the painted symbol that marks the location of the weather observation point.

Figure 1.1. Official Weather Observation Location.



Figure 1.2. Official Weather Observation Location Marker.



1.4.2. The Joint Environmental Toolkit (JET) software is the primary dissemination system for surface observations. If JET is unable to disseminate data, 3 OSS/OSW will pass all Elmendorf airfield weather observations via telephone, first to Elmendorf Air Traffic Control Tower (ATCT), then the SOF, 673d Air Base Wing Command Post (ABW/CP), and the 15 OWS.

1.4.3. Aviation Routine Weather Report (also known as and henceforth referred to as "METAR" throughout this instruction). A 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 at specific aerodromes. METARs contain a complete report of wind, visibility, runway visual range (RVR), present weather, sky condition, temperature, dew point, and altimeter setting (ALSTG) which are collectively referred to as "the body of the observation."

1.4.3.1. In addition, encoded and/or plain language information that elaborates on data in the body of the observation is appended in the METAR remarks ("RMK") section. The contents of the remarks vary according to the mode of operation (e.g., automated or augmented), and are defined in AFMAN 15-111.

1.4.3.2. A METAR is produced between 55 to 59 minutes past the hour.

1.4.4. Aviation Selected Special Weather Report (also known as and henceforth referred to as “SPECI” throughout this instruction). A SPECI is an unscheduled weather observation that is completed and transmitted when pre-determined criteria are observed or sensed. SPECIs will contain all data elements found in a METAR plus additional remarks that elaborates on data in the body of the observation.

1.4.4.1. All SPECI reports will be prepared and transmitted as soon as possible after the relevant criteria are observed. The time ascribed to a SPECI reflects the time, to the nearest minute, that the SPECI criteria are first met or observed.

1.4.4.2. For a METAR with SPECI criteria, the actual time ascribed to the observation is 55 to 59 minutes past the hour (standard time of a METAR observation) when the last element of an observation is recorded.

1.4.4.3. Contact 3 OSS/OSW for current Elmendorf airfield SPECI criteria. Air Force standard SPECI criteria are outlined in the following paragraphs.

1.4.4.3.1. Visibility: Surface visibility, as reported in the body of the observation, decreases to less than or, if below, increases to equal or exceed the standard thresholds listed in **Table 1.3**, as prescribed in AFMAN 15-111. Additional thresholds will be included based on all current published airfield landing/takeoff minima (including circling), as listed in the Department of Defense (DoD) Flight Information Publications (FLIPs), aircraft specific AFI 11-2 Series Volume 3, MAJCOM supplements, and service publications applicable to aircraft assigned to the installation.

Table 1.3. Standard Visibility Aviation Selected Special Weather Report “SPECI” Criteria.

Standard Visibility SPECI Criteria
3 Statute Miles
2 Statute Miles
1 1/2 Statute Miles
1 Statute Mile
3/4 Statute Mile
1/2 Statute Mile
1/4 Statute Mile

1.4.4.3.2. Ceiling: The observed ceiling (rounded off to reportable values) forms or dissipates below, decreases to less than, or if below, increases to equal or exceed the standard thresholds indicated in **Table 1.4**. Additional thresholds will be included based on all current published airfield landing/takeoff minima (including circling), as listed in the DoD FLIPs, aircraft specific AFI 11-2 Series Volume 3, MAJCOM supplements, and service publications applicable to aircraft assigned to the installation.

Table 1.4. Standard Ceiling Aviation Selected Special Weather Report “SPECI” Criteria.

Standard Ceiling SPECI Criteria
3000 feet
2000 feet
1500 feet
1000 feet
800 feet
700 feet
500 feet
300 feet
200 feet
100 feet

1.4.4.3.3. Sky Condition: A layer of clouds or obscuring phenomena aloft is observed below the highest published instrument landing minimum (including circling) applicable to the airfield, and no layer aloft was reported below this height in the previous METAR or SPECI.

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

1.4.4.3.5. Squall: A strong wind event characterized by a sudden increase in speed of at least 16 knots with sustained speeds of at least 22 knots for at least 1 minute.

1.4.4.3.6. Volcanic Eruption: Eruption or volcanic ash cloud first noted.

1.4.4.3.7. Thunderstorm: Start or end of a thunderstorm occurring on station. A SPECI is not required to report the beginning of a new thunderstorm if one is currently reported.

1.4.4.3.8. Precipitation:

1.4.4.3.8.1. Hail begins or ends.

1.4.4.3.8.2. Freezing precipitation begins, ends, or changes intensity.

1.4.4.3.8.3. Ice pellets begin, end, or change intensity.

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

1.4.4.3.9. Tornado, Funnel Cloud, or Waterspout is observed, disappears from sight, or ends.

1.4.4.3.10. Runway Visual Range (RVR): Reported, using reportable values in AFMAN 15-111 Table 9.1, whenever the prevailing visibility is less than or equal to 1 Statute Mile (SM) and/or when RVR for the active runway is less than or equal to 6,000 feet.

1.4.4.3.10.1. When an RVR reporting requirement is occurring, but the 10-minute average cannot be determined, no value will be reported and “RVRNO” will be included in the remarks. **Note:** RVR is an instrument derived measurement, there is not a manual observing method to determine RVR values.

1.4.4.3.10.2. A SPECI is generated when RVR for the active runway decreases to less than or, if below, increases to equal or exceed the standard thresholds listed in **Table 1.5** Additional thresholds will be included based on all current published RVR minima applicable to the runway in use.

Table 1.5. Standard Runway Visual Range Aviation Selected Special Weather Report “SPECI” Criteria.

Standard RVR SPECI Criteria
6000 feet
5000 feet
4000 feet
2400 feet
2000 feet
1600 feet
1200 feet
1000 feet
600 feet

1.4.4.3.11. Tower Visibility: A SPECI is generated when either the tower or prevailing visibility is less than 4 SM and differ by at least one reportable value. Tower visibility does not replace the prevailing visibility reported in the body of the observation.

1.4.4.3.12. Upon Resumption of Observing Function: A SPECI is generated within 15 minutes after weather personnel return to duty following a break in observing coverage or augmentation at the observing location unless a METAR observation is filed during that 15-minute period.

1.4.4.3.13. Aircraft Mishap (when in supplement or back-up mode only): A SPECI is generated immediately following notification or sighting of an aircraft mishap at or near the observing location unless there has been an intervening observation.

1.4.4.3.14. Any other meteorological situation that, in the weather observer’s opinion, is deemed critical.

1.4.5. Aviation Selected Local Weather Report (also known as and henceforth referred to as “LOCAL” throughout this instruction): An unscheduled observation, reported to the nearest minute, not meeting SPECI criteria. LOCALs are only taken when there is a requirement in support of local operations.

1.4.5.1. LOCALs taken in support of aircraft operations are encoded in METAR format. For LOCALs taken and disseminated to agencies other than the ATCT, the contents are established locally and documented in base/host unit support plans or standard operating procedures.

1.4.5.2. Altimeter setting (ALSTG) LOCALs are single element observations that contain the time and ALSTG. When Air Traffic Control (ATC) does not have access to real-time ALSTGs, 3 OSS/OSW will disseminate an ALSTG LOCAL observation at an interval not to exceed 35 minutes when there has been a change of 0.01 inches of mercury (iHg) (0.3 hectopascals [hPa]) or more since the last disseminated ALSTG value. **Note:** A METAR or SPECI taken within the established time interval fulfills this requirement.

1.5. Observing Limitations.

1.5.1. Due to the proximity of the FMQ-19 sensors to the active runway, persistent snow removal efforts can cause false low visibility/ceiling readings to occur.

1.5.2. A low ridgeline north of Runway 06/24 blocks the observer's view toward the North, to include the Knik Arm waterway. When available, weather technicians utilize web-based cameras to monitor the Knik Arm for additional situational awareness.

1.5.3. Buildings obstruct the observer's view toward the South.

1.6. Continuity of Operations. In the event of evacuation or loss of communication capabilities at the primary operating location, 3 OSS/OSW will relocate operations to the AOL in Hangar 1 on Slammer Ave (Building 11551). The forecaster will operate in room 256 and can be reached at DSN 552-7916. In the event of an emergency preventing utilization of a viable alternate location, 3 OSS/OSW will request support from the 15 OWS.

1.6.1. 3 OSS/OSW forecasters will contact the following agencies immediately in the event of an evacuation to the AOL. Agencies annotated without an asterisk (*) will be notified as time permits.

1.6.1.1. *Elmendorf ATCT and SOF (DSN 552-2728/4620)

1.6.1.2. *673 ABW/CP (DSN 552-3000)

1.6.1.3. *Airfield Management (DSN 552-2107 or in-person before evacuation)

1.6.1.4. 15 OWS (DSN 312-576-9699)

1.6.1.5. 3 OSS/OSW Flight Commander and/or Flight Chief (DSN 552-5201/9815)

1.6.1.6. During active flying days:

1.6.1.6.1. 90th Fighter Squadron (FS) Top 3 (DSN 552-9000)

1.6.1.6.2. 525 FS Top 3 (DSN 552-6520)

1.6.2. While conducting operations from the AOL, supplemental and back-up observations are taken IAW AFMAN 15-111. The official observation point is approximately 300 feet to the west of Hangar 1.

Figure 1.3. Alternate Operating Location and Observation Point.

1.6.3. 3 OSS/OSW forecasters will continue to perform duties IAW [Table 1.2](#) and local shift checklists.

1.6.4. AOL Limitations. Surface observations are not available during the initial execution of an evacuation. The observer will disseminate a surface observation within 15 minutes of arrival at the AOL.

1.6.4.1. When back-up equipment is used, station pressure, wind, and ALSTG values are estimated.

1.6.4.2. PMSV is not available at the AOL. Phone patch capabilities are available through the 673 ABW/CP at DSN 552-3000.

1.6.4.3. Hangar 1 obscures the observer's view to the east-southeast.

1.6.4.4. A low ridgeline north of Runway 06/24 blocks the observer's view toward the North, to include the Knik Arm waterway. When available, weather technicians utilize web-based cameras to monitor the Knik Arm for additional situational awareness.

1.7. Resource Protection.

1.7.1. Issuance of weather watches, warnings, and advisories (WWAs) are the primary method of installation resource protection.

1.7.1.1. Watches and warnings provide notice of weather events posing a hazard to life or property.

1.7.1.2. Advisories provide specific notice to an operational agency of environmental phenomena with the potential to impact operations.

1.7.1.3. All WWAs are defined within a 5 nautical mile radius of Elmendorf airfield, unless indicated otherwise in the text of the WWA message.

1.7.2. Required WWA criteria is coordinated annually with all supported customers.

1.7.3. All WWAs will be issued, amended, extended, and canceled IAW AFMAN 15-129. See [Table 1.6](#) for a full list of Elmendorf airfield WWAs and operational impacts.

1.7.3.1. 3 OSS/OSW is the authority and primary source for issuing weather WWAs for Elmendorf airfield.

1.7.3.2. The 15 OWS is the authority and primary source for all Bryant airfield (airport identifier: PAFR) WWAs.

1.7.3.3. 673 ABW/CP is responsible for base-wide notification of WWAs for JBER, to include Elmendorf and Bryant airfields.

1.7.4. The 15 OWS and 3 OSS/OSW will coordinate dissemination of any required National Weather Service WWAs IAW the IDP.

1.7.5. Automated phone, text, and email notifications of WWAs are distributed via the Integrated Weather Warning Capability (IWWC) within the JET software interface and is the primary method of dissemination for all WWAs.

1.7.5.1. 3 OSS/OSW ensures Elmendorf ATCT, SOF, 673 ABW/CP, and 3d Operations Support Squadron Airfield Flight (OSS/OSAA) have received all issued WWAs.

1.7.5.1.1. Each agency is responsible for further disseminating the information to appropriate units IAW their notification procedures.

1.7.5.1.2. Agencies encountering issues with their JET software should contact 3 OSS/OSW at 552-4397.

1.7.5.2. Backup dissemination of all WWAs is via telephone to Elmendorf ATCT, SOF, 673 ABW/CP, and 3 OSS/OSAA.

Table 1.6. Elmendorf Airfield Watches, Warnings, and Advisories (WWAs).

WEATHER WATCHES			
PHENOMENA	DESIRED LEAD TIME	TYPE	OPERATIONAL IMPACT
Tornado, Waterspout, or Funnel Cloud	As potential exists	Forecast	Immediate threat of catastrophic damage to personnel and property.
Severe Thunderstorms Surface winds \geq 45 knots and/or hail \geq 1/2 inch	As potential exists	Forecast	Immediate threat to exposed personnel. High risk of damage to facilities and exposed aircraft and equipment.
Moderate Thunderstorms Surface winds \geq 35 knots but \leq 44 knots, and/or hail \geq 1/4 inch	As potential exists	Forecast	Increased risk: - to exposed personnel. - of damage to unsecured property. - to flight line activities and damage to exposed aircraft or vehicles.

Damaging Winds > 45 knots (not associated with thunderstorms)	As potential exists	Forecast	Immediate threat to exposed personnel. Increased risk of damage to facilities and equipment.
Strong Winds ≥ 35 knots but ≤ 44 knots (not associated with thunderstorms)	As potential exists	Forecast	Increased risk: - to exposed personnel. - of damage to unsecured property. - to flight line activities and damage to exposed aircraft or vehicles.
Snow accumulation ≥ 10 inches within 4 hours	As potential exists	Forecast	Installation-wide hazard. Potential for delayed reporting and/or early release.
Snow accumulation ≥ 4 inches within 12 hours	As potential exists	Forecast	Flying operations delayed, road conditions deteriorate.
Freezing Precipitation (any type and any intensity)	As potential exists	Forecast	Flying operations cease, road conditions deteriorate.
Blizzard Conditions All of the following must occur: a) Surface visibility $\leq 1/4$ SM b) Considerable falling and/or blowing snow c) Wind (sustained or gusts) ≥ 30 knots d) Duration greater than or equal to 3 hours	As potential exists	Forecast	Imposes significant risk to: - personnel movement. - maneuver or flight line activities. - flying operations.
Heavy Rain ≥ 2 inches of liquid precipitation accumulation ≤ 12 hours	As potential exists	Forecast	Increased threat of flash flooding or systemic flooding posing credible threat to unprotected resources and personnel. Disrupts flight line and maneuver activities. Imposes increased risk on personnel movement.
Lightning occurring within 5 nautical miles from the center of Elmendorf airfield	30 minutes	Forecast	Immediate threat to exposed personnel.

WEATHER WARNINGS			
PHENOMENA	DESIRED LEAD TIME	TYPE	OPERATIONAL IMPACT
Tornado, Waterspout, or Funnel Cloud	15 minutes	Forecast	Immediate threat of catastrophic damage to personnel and property.
Severe Thunderstorms Surface winds ≥ 45 knots and/or hail $\geq 1/2$ inch	60 minutes	Forecast	Immediate threat to exposed personnel. High risk of damage to facilities and exposed aircraft and equipment.
Moderate Thunderstorms Surface winds ≥ 35 knots but ≤ 44 knots, and/or hail $\geq 1/4$ inch	60 minutes	Forecast	Increased risk: - to exposed personnel. - of damage to unsecured property. - to flight line activities and damage to exposed aircraft or vehicles.
Damaging Winds ≥ 45 knots (not associated with thunderstorms)	60 minutes	Forecast	Immediate threat to exposed personnel. Increased risk of damage to facilities and equipment.
Strong Winds ≥ 35 knots but ≤ 44 knots (not associated with thunderstorms)	60 minutes	Forecast	Increased risk: - to exposed personnel. - of damage to unsecured property. - to flight line activities and damage to exposed aircraft or vehicles.
Snow accumulation ≥ 10 inches within 4 hours	60 minutes	Forecast	Installation-wide hazard. Potential for delayed reporting and/or early release.
Snow accumulation ≥ 4 inches within 12 hours	60 minutes	Forecast	Flying operations delayed, road conditions deteriorate.
Freezing Precipitation (any type and any intensity)	60 minutes	Forecast	Flying operations cease, road conditions deteriorate.
Blizzard Conditions All of the following must occur: a) Surface visibility $\leq 1/4$ SM	60 minutes	Forecast	Imposes significant risk to: - personnel movement. - maneuver or flight line activities. - flying operations.

b) Considerable falling and/or blowing snow c) Wind (sustained or gusts) \geq 30 knots d) Duration greater than or equal to 3 hours			
Heavy Rain \geq 2 inches of liquid precipitation accumulation \leq 12 hours	60 minutes	Forecast	Increased threat of flash flooding or systemic flooding posing credible threat to unprotected resources and personnel. Disrupts flight line and maneuver activities. Imposes increased risk on personnel movement.
Dust storm	60 minutes	Forecast	Disrupts personnel movement and aviation operations.
Lightning occurring within 5 nautical miles from the center of Elmendorf Airfield	N/A	Observed	Immediate threat to exposed personnel.
Equivalent Chill Temperature \leq -20F	N/A	Observed	Risk of injury to personnel.
Equivalent Chill Temperature \leq -30F	N/A	Observed	Risk of injury to personnel.
Equivalent Chill Temperature \leq -40F	N/A	Observed	Risk of injury to personnel.
Equivalent Chill Temperature \leq -50F	N/A	Observed	Risk of injury to personnel.
WEATHER ADVISORIES			
PHENOMENA	DESIRED LEAD TIME	TYPE	OPERATIONAL IMPACT
Crosswinds \geq 15 knots on the active runway.	N/A	Observed	Risk to flying operations.
Low Level Wind Shear is occurring at or below 2,000 feet above ground level (AGL).	N/A	Observed	Risk to flying operations.

Snow accumulation \geq 1 inch but < 4 inches within 12 hours.	60 minutes	Forecast	Road conditions deteriorate.
Induction Icing Ambient temperature between 10 degrees Celsius ($^{\circ}$ C) and -20° C with a dew point spread less than or equal to 3° C. Or Ambient temperature between 10° C and -20° C with visible moisture (rain, sleet, snow, or fog/mist with visibility of one mile or less) or standing water, snow or ice.	N/A	Observed	Damage to aircraft engines.
Freezing Fog.	N/A	Observed	Flying operations hindered, road conditions deteriorate.
Volcanic Ash Fall.	N/A	Observed	Flying operations hindered, air quality impacted for base personnel.

1.8. Terminal Aerodrome Forecast (TAF) Support.

1.8.1. A TAF is a 30-hour aviation weather forecast for a specific aerodrome. Elmendorf airfield's TAF is issued 24 hours a day, 7 days a week, every 8 hours and is amended any time that forecasted elements within the TAF differ from observed or previously forecasted conditions based on the criteria set forth in [Table 1.7](#).

1.8.1.1. TAFs are encoded IAW AFMAN 15-124, *Meteorological Codes*. Air Force standard TAF specification and amendment criteria are defined in [Table 1.4](#).

1.8.1.2. Current Elmendorf airfield TAF specification and amendment criteria are outlined in the IDP, which can be found on the 3 OSS/OSW website listed in [Table 1.1](#).

1.8.2. JET is the primary dissemination system for TAFs. During back-up operations, 3 OSS/OSW will pass TAF information, via telephone, first to Elmendorf ATCT, then the SOF, 673 ABW/CP, and the 15 OWS.

Table 1.7. Standard Terminal Aerodrome Forecast (TAF) Specification and Amendment Criteria.

STANDARD TAF SPECIFICATION AND AMENDMENT CRITERIA		
Reference: AFMAN 15-129; AFMAN 11-202V3_PACAFSUP, and Applicable DoD FLIP(s).		
Ceiling or visibility observed or expected to decrease to less than, or if below, increase to equal or exceed:		
Ceiling	Visibility	Category
Greater than or equal to 2,000 feet.	Greater than or equal to 3 SM (4800 Meters [M]).	E
Less than 2,000 feet but greater than or equal to 1,000 feet.	Less than 3 SM (4800M) but greater than or equal to 2 SM (3200M) or lowest published visibility minima, whichever is greater.	D
Less than 1,000 feet but greater than or equal to lowest published landing minimum plus 500 feet.	Less than 3 SM (4800M) but greater than or equal to 2 SM (3200M) or lowest published visibility minima, whichever is greater.	C
Less than the lowest published landing minimum plus 500 feet and greater than or equal to the lowest published landing minimum.	Less than 2 SM (3200M) but greater than or equal to lowest published airfield landing minimum.	B
Less than the lowest published airfield landing minimum.	Less than the lowest published airfield landing minimum.	A
Forecast Element	Criteria	
Surface Winds.	a.) Wind Speed: The difference between the predominant wind speed and the forecast wind speed is ≥ 10 knots. b.) Wind Gusts: The difference between observed gusts and the forecast is ≥ 10 knots. c.) Wind Direction: A change > 30 degrees when the predominant wind speed or gusts are expected to be 15 knots or greater.	
Icing, not associated with thunderstorms, from the surface to 10,000 feet AGL.	The beginning or ending of icing first meets, exceeds, or decreases to less than moderate (or greater) thresholds and was not specified in the forecast.	
Turbulence (for weather category II aircraft), not associated with thunderstorms from the surface to 10,000 feet AGL.	The beginning or ending of turbulence first meets, exceeds, or decreases below moderate or greater thresholds and was not specified in the forecast.	
Weather Warning Criteria Note: Watches are exempt from this requirement. Forecasters may specify watch criteria in the TAF when, in their judgment, the specific nature of the threat dictates.	Occur, or are expected to occur during the forecast period, but were not specified in the forecast. Specified in the forecast but are no longer expected to occur during the forecast period.	

Altimeter Setting (ALSTG)	ALSTG meets or exceeds 31.00 inches and was not specified in the forecast. ALSTG, if above, drops below 31.00 inches and was not specified during the forecast period. ALSTG drops below 28.00 inches and was not specified in the forecast. ALSTG, if below 28.00 inches, increases above 28.00 inches and was not specified in the forecast.
Forecast Weather Advisory Criteria issued for amendable TAF criteria Note: Advisories issued for an area not including the TAF area are exempt from this policy.	Occur, or are expected to occur during the forecast period, but were not specified in the forecast. Specified in the forecast but are no longer expected to occur during the forecast period.
Thunderstorms.	Incorrect forecast start or end time.
Specification of Temporary Conditions.	Forecast conditions specified as temporary become predominant conditions. Forecast conditions specified as temporary do not occur during the cardinal hour as forecast. Forecast conditions specified as temporary are no longer expected to occur.
Changes to Predominant Conditions (becoming “BECMG” or from “FM” group).	Forecast change conditions occur before the beginning of the specified period of change and are expected to persist. Forecast change conditions do not occur within 30 minutes after the specified time. Forecast change conditions are no longer expected to occur.
Representative Conditions.	Forecast conditions are not considered representative of existing or forecast conditions and amending the forecast improves safety, flight planning, operations efficiency, or assistance to in-flight aircraft.

1.9. Mission-Scale Meteorological Watch “MISSIONWATCH”.

1.9.1. The 3 OSS/OSW will conduct MISSIONWATCH for all supported aviation customers, which includes monitoring terrestrial and space weather conditions for specific mission-limiting environmental factors. This process identifies and alerts decision makers to changes affecting mission success.

1.9.2. The 3 OSS/OSW will coordinate MISSIONWATCH criteria annually with supported aviation customers, including mission weather product dissemination/amendment procedures, and will document in local standard operating procedures.

1.10. Low Level Wind Shear (LLWS) Detection Equipment.

1.10.1. Elmendorf airfield is equipped with mobile instrumentation that can detect the presence of hazardous LLWS conditions on the approach to Runways 16 and 24. **Figure 1.4** shows the current locations of the LLWS Detection System.

Figure 1.4. Low Level Wind Shear Detection System Locations.



1.10.2. The LLWS Detection System continuously measures and reports a vertical profile of wind speed and direction from the surface to at least 2,000 feet AGL over the equipment sites. 3 OSS/OSW personnel utilize this data to assess LLWS presence in vicinity of the airfield.

1.10.3. If 3 OSS/OSW personnel determine that LLWS conditions are present in vicinity of Elmendorf airfield, they will issue an observed LLWS advisory IAW [paragraphs 1.7](#) and immediately inform the SOF and ATCT of the conditions by phone.

Chapter 2

ROLES AND RESPONSIBILITIES

2.1. General.

2.1.1. 3 OSS/OSW provides weather support to various customers and receives support from various agencies. This chapter is broken down by the responsibilities that each organization has in support to and from the 3 OSS/OSW.

2.1.2. 3 OSS/OSW is the primary provider of weather information for missions departing from Elmendorf airfield. 3 OSS/OSW provides direct support or arranges for support from another source based on the circumstances of the mission.

2.1.3. For all missions, whether they originate from Elmendorf airfield or off-station, it is the responsibility of the mission commander to coordinate weather support requests with advance notice of at least 2 hours prior to requested brief time.

2.1.4. If just the office or organization is identified in this chapter, the head of that office or organization is the responsible party.

2.2. 673d Air Base Wing (ABW).

2.2.1. Ensures 3 OSS/OSW is notified of all scheduled meetings where a weather briefing is requested or changes to standard meeting time/location occurs.

2.2.2. Meets with 3 OSS/OSW annually to discuss reciprocal support requirements in order to enhance weather integration into operations.

2.3. 673d Air Base Wing Command Post (ABW/CP).

2.3.1. Ensures the Weather Flight Commander or Flight Chief is notified immediately of all initial special staff recalls that include weather support requirements.

2.3.2. Includes 3 OSS/OSW on dissemination/notification lists for any weather-related Operational Report (OPREP)-3 or incidents.

2.3.3. Disseminates to base agencies and general base populace all WWAs issued for Elmendorf airfield IAW JBElmendorf-RichardsonI 91-201, *Adverse Weather Notification Procedures* and Quick Reference Checklist (QRC) 500 series weather checklists.

2.3.3.1. Language shall be read verbatim from JET or an automated email that is generated by the same system.

2.3.3.2. If JET is inoperable, 673 ABW/CP personnel will use the exact language as given to them by the weather technician over the phone.

2.3.4. Notifies base agencies and general base populace of any amendments, corrections, extensions, or cancellations of WWAs for Elmendorf airfield.

2.3.5. Relays to 3 OSS/OSW all PIREPs received from airborne aircraft or aircraft that have recently landed.

2.3.6. Notifies 3 OSS/OSW in the event of severe weather that causes damage at Elmendorf airfield, then submits an OPREP-3 report IAW AFMAN 10-206, *Operational Reporting (OPREP)*. Weather information contained within an OPREP-3 will be coordinated with 3 OSS/OSW and a copy of all finalized OPREPs will be provided to 3 OSS/OSW and 15 OWS.

2.3.7. Relays mission-critical forecast changes via ultra high frequency radio or other available means to any aircraft transiting JBER outside radio range of ATC or PMSV, when requested by 3 OSS/OSW.

2.3.8. Unit leadership meets with 3 OSS/OSW annually to discuss requirements and increase integration into operations.

2.4. Crisis Action Team (CAT).

2.4.1. Notifies 3 OSS/OSW of any regulation changes impacting weather support requirements to the installation.

2.4.2. Provides a dedicated workstation (desk, computer, monitor, and telephone) for weather personnel involved in CAT operations.

2.4.3. Maintains weather personnel on all distribution lists and recall rosters for all CAT exercises and activations.

2.4.4. Ensures weather personnel have access to all necessary shared drives and information-sharing platforms utilized by the CAT.

2.4.5. Notifies 3 OSS/OSW of any changes to the battle rhythm.

2.4.6. Routes all weather requests through the CAT Director.

2.4.7. Unit leadership meets with 3 OSS/OSW annually to discuss reciprocal support requirements in order to enhance weather integration into operations.

2.5. 3d Operations Group (OG) Supervisor of Flying (SOF).

2.5.1. Contacts 3 OSS/OSW for an official weather brief prior to assuming shift.

2.5.2. Relays all received PIREPs to 3 OSS/OSW and requests PIREPs from aircrews when feasible.

2.5.3. Notifies 3 OSS/OSW when a divert/alternate airfield has been declared or changed.

2.5.4. Coordinates seasonal weather briefings, as needed.

2.5.5. Meets with 3 OSS/OSW annually to discuss reciprocal support requirements in order to enhance weather integration into operations.

2.6. 3d Operations Group (OG) Combat Alert Cell.

2.6.1. Coordinates any changes to weather support required as far in advance as possible.

2.6.2. Unit Leadership meets with 3 OSS/OSW annually to discuss reciprocal support requirements in order to enhance weather integration into operations.

2.7. 3d Wing (WG).

2.7.1. Ensures 3 OSS/OSW is notified of all scheduled meetings where a weather briefing is requested or changes to standard meeting times/locations.

2.7.2. Meets with 3 OSS/OSW annually to discuss reciprocal support requirements in order to enhance weather integration into operations.

2.8. 3d Wing Safety (WG/SE).

2.8.1. Notifies 3 OSS/OSW of any aircraft mishaps or incidents when weather assistance is required.

2.8.2. Notifies 3 OSS/OSW of any ground mishaps or damage caused by weather.

2.8.3. Shares any weather-related safety investigation board findings with 3 OSS/OSW leadership.

2.8.4. Unit leadership meets with 3 OSS/OSW annually to discuss reciprocal support requirements in order to enhance weather integration into operations.

2.9. Fighter, Airlift, Airborne Air Control Squadrons, and Rescue Squadrons.

2.9.1. This section pertains specifically to 90/525/302 FS, 517/144 AS, 962 AACS, 210 RQS, and 211 RQS.

2.9.1.1. Coordinates off-station weather requests IAW **section paragraphs 2.22** of this instruction.

2.9.1.2. Ensures the mission commander or designated representative contacts 3 OSS/OSW when there are mission changes or cancellations.

2.9.1.3. Provides PIREPs as frequently as possible directly to 3 OSS/OSW personnel via PMSV at 346.6 MHz.

2.9.1.4. Unit leadership meets with 3 OSS/OSW annually to discuss requirements and increase integration into operations.

2.9.1.5. **90/525/302 FS** only:

2.9.1.5.1. Provides feedback on mission weather products.

2.9.1.5.2. Ensures the mission commander or designated representative receives a weather briefing by 3 OSS/OSW prior to departing on a mission, via integrated squadron forecaster or telephone.

2.9.1.6. **517/144 AS** only:

2.9.1.6.1. Requests flight weather briefings as far in advance as possible, at least two hours prior to the requested brief time.

2.9.1.6.2. Provides feedback on flight weather briefings.

2.9.1.6.3. Ensures the mission commander or designated representative receives a weather briefing by 3 OSS/OSW (or designated weather authority) prior to departing on a mission, via integrated squadron forecaster or telephone.

2.9.1.7. **962 AACS** only:

2.9.1.7.1. Ensures the mission commander or designated representative receives a weather briefing by 3 OSS/OSW (or designated weather authority) prior to departing on a mission, via face-to-face briefer or telephone.

2.9.1.7.2. Provides feedback mission weather products.

2.9.1.8. 210 RQS, 211 RQS, Alaska Rescue Coordination Center only:

2.9.1.8.1. Ensures civilian and non-military aircraft supporting Alaska Rescue Coordination Center missions are familiar with proper procedures for requesting weather support.

2.9.1.8.2. Requests flight weather briefings as far in advance as possible, at least two hours prior to the requested brief time.

2.9.1.8.3. Ensures the mission commander or designated representative receives a weather briefing by 3 OSS/OSW (or designated weather authority) prior to departing on a mission, via face-to-face briefing or telephone.

2.10. 3d Operations Support Squadron Airfield Management Operations (OSS/OSA).

2.10.1. Coordinates with 3 OSS/OSW on all changes to airfield publications that impact weather operations.

2.10.2. Ensures 3 OSS/OSW is notified of all AOB meetings.

2.10.3. Unit leadership meets with 3 OSS/OSW annually to discuss reciprocal support requirements in order to enhance weather integration into operations.

2.11. 3d Operations Support Squadron Airfield Management Operations (OSS/OSAA).

2.11.1. When requested by 3 OSS/OSW, provides current Runway Surface Condition/Runway Condition Reading.

2.11.2. Notifies the forecaster via Secondary Crash Network of all notifications over the Primary Crash Alarm System.

2.11.3. Transmits WWAs via the Secondary Crash Network.

2.11.4. Notifies 3 OSS/OSW of locally initiated changes to the FLIP affecting landing minimums and coordinates weather updates for the FLIP and Instrument Flight Rules (IFR) supplement with the Air Force Flight Standards Agency.

2.11.5. Notifies 3 OSS/OSW when evacuation of the operations section is required.

2.11.6. Issues a Notice to Airmen for any PMSV or FMQ-19 outage lasting longer than 1 hour, as notified by 3 OSS/OSW.

2.11.7. Provides current FLIP and Federal Aviation Administration (FAA) publications.

2.11.8. Unit Leadership meets with 3 OSS/OSW annually to discuss reciprocal support requirements in order to enhance weather integration into operations.

2.12. 3d Operations Support Squadron Air Traffic Control (OSS/OSAT).

2.12.1. Performs Cooperative Weather Watch (CWW) with 3 OSS/OSW IAW with AFMAN 15-111 and AFMAN 13-204V3.

2.12.1.1. Schedules all ATC personnel for weather familiarization and visibility observation indoctrination training prior to positional certification and coordinates training requests with 3 OSS/OSW.

2.12.1.2. Requires certified 3 OSS/OSAT personnel to take tower visibility observations when the tower visibility is less than 4 SM.

2.12.1.3. Requires certified 3 OSS/OSAT personnel to report tower visibility to 3 OSS/OSW by telephone when tower visibility is less than 4 SM and differs from the prevailing surface visibility by at least one reportable value.

2.12.1.4. Notifies 3 OSS/OSW:

2.12.1.4.1. Immediately if they observe unreported fog, lightning, funnel clouds, or a tornado moving on or near the airfield.

2.12.1.4.2. When necessary to use inactive runway sensors when authorizing aircraft to land using inactive runway.

2.12.1.4.3. Of any Airfield Automation System outages.

2.12.1.4.4. When the active runway is changed.

2.12.1.5. Relays all pertinent weather information to 3 OSS/OSW passed from aircrews, to include PIREPs and any occurrence of previously unreported weather conditions that could affect flight safety or is critical to the safety or efficiency of other local operations and resources. **NOTE:** 3 OSS/OSAT will relay PIREP information as soon as practical, within ATC established duty priorities.

2.12.1.6. Conducts a daily PMSV radio check with 3 OSS/OSW.

2.12.1.7. Coordinates the validation of visibility markers annually.

2.13. 3d Operations Support Squadron Radar, Airfield, and Weather Systems (OSS/OSAM).

2.13.1. Responds to weather equipment/circuit outages, as reported by 3 OSS/OSW. Timeliness of troubleshooting and maintenance actions is determined by the level of mission impact assigned to the outage by 3 OSS/OSW:

2.13.1.1. Significant Outage: 3 OSS/OSAM will immediately respond.

2.13.1.2. Minimal Outage: 3 OSS/OSAM will respond during normal duty hours only.

2.13.2. Coordinates with 3 OSS/OSW prior to taking equipment or circuits off-line for maintenance or training.

2.13.3. Provides job control numbers when opening and closing tickets with 3 OSS/OSW. Coordination will be done prior to closing a ticket.

2.13.4. Provides a summary of fix actions or estimated completion time/date for outages.

2.13.5. Provides airfield weather sensor familiarization tours for 3 OSS/OSW personnel.

2.13.6. Unit leadership meets with 3 OSS/OSW annually to discuss requirements and increase integration into operations.

2.13.7. Maintains TMQ-53 tactical weather sensors and reports all outages or operational deficiencies to 3 OSS/OSW.

2.14. 3d Operations Support Squadron Current Operations Flight (OSS/OSO).

- 2.14.1. Coordinates environmental inputs to all applicable plans with 3 OSS/OSW.
- 2.14.2. Provides information on software updates to PEX and assists with technical issues.
- 2.14.3. Provides short and long-range flying schedules.
- 2.14.4. Unit leadership meets with 3 OSS/OSW annually to discuss requirements and increase integration into operations.

2.15. 3d Maintenance Group Maintenance Operations Center (MXG/MXOC).

- 2.15.1. Unit leadership meets with 3 OSS/OSW annually to discuss requirements and enhance integration of operations.
- 2.15.2. Grants 3 OSS personnel routine maintenance access to the Perle server device housed in the communications closet within the Maintenance Operations Center.

2.16. 673d Communications Squadron (CS).

- 2.16.1. Dispatches personnel to resolve local network outages based on 3 OSS/OSW's mission impact determination.
 - 2.16.1.1. Significant outages: A 673 CS technician will respond immediately upon notification of a significant outage.
 - 2.16.1.2. Minimal outages: 673 CS will respond to minimal outages during normal duty hours.
- 2.16.2. Unit leadership meets with 3 OSS/OSW annually to discuss requirements and increase integration into operations.

2.17. 673d Communications Squadron Cyber Operations (CS/CYNTR).

- 2.17.1. Responsible for maintaining MARK IVB systems to include repair actions, system administration, coordination on connectivity issues, and coordination with other work centers when necessary.
 - 2.17.1.1. Will perform preventative maintenance in accordance with the Mark IVB technical orders and notify 3 OSS/OSW of changes in system status, equipment status, and/or client access.
 - 2.17.1.2. Notify 3 OSS/OSW of scheduled base network outages expected to impact external or internal access to their local MARK IVB server or the reception and processing of satellite data.
 - 2.17.1.3. All outages for MARK IVB are considered significant. If the outage is outside of normal duty hours, 3 OSS/OSW will notify the on-call 673 CS/CYNTR technician immediately.
- 2.17.2. Responds to PMSV outages impacting the ability to maintain 24/7 weather operations.
 - 2.17.2.1. Significant outages: On call 24/7 technician will respond immediately upon notification of a significant outage.
 - 2.17.2.2. Minimal outage: 673 CS/CYNTR will respond to a minimal outage during duty hours.

2.17.3. Unit leadership meets with 3 OSS/OSW annually to discuss requirements and increase integration into operations.

2.18. 673d Communications Squadron Server Operations (CS/CYNV).

2.18.1. Provides light touch maintenance on the JET Server, when requested by the JET Helpdesk or 3 OSS/OSW.

2.18.2. Responds to JET server outages impacting the ability to maintain weather operations.

2.18.2.1. Significant outages: On-call technician will respond immediately upon notification of a significant outage.

2.18.2.2. Minimal outage: 673 CS/CYNV will respond to minimal outages during normal duty hours only.

2.18.3. Unit leadership meets with 3 OSS/OSW annually to discuss requirements and increase integration into operations.

2.19. 773d Civil Engineer Squadron Emergency Management (CES/CEX).

2.19.1. Notifies 3 OSS/OSW of upcoming Emergency Management Working Group meetings.

2.19.2. Notifies 3 OSS/OSW of any regulation changes impacting provided weather support to JBER.

2.19.3. Provides a work center (desk, computer, monitor, and telephone) for weather personnel involved in Emergency Operations Center (EOC) operations.

2.19.4. Maintains weather personnel on distribution lists/recall rosters for EOC exercises and activations.

2.19.5. Unit leadership meets with 3 OSS/OSW annually to discuss requirements and increase integration into operations.

2.20. 673d Operational Medical Readiness Squadron Bioenvironmental Engineering (OMRS/SGXB).

2.20.1. Consults with 3 OSS/OSW to review historical climate information as well as predictive analysis.

2.20.2. Unit leadership meets with 3 OSS/OSW annually to discuss requirements and increase integration into operations.

2.21. 3d Operations Support Squadron Distributed Mission Operations (OSS/DMO). Requests weather support for Instrument Refresher Courses at least 5 business days before the required date.

2.22. 3d Wing Operations Support Squadron Weather Flight (OSS/OSW).

2.22.1. Notifies appropriate agencies (i.e., 673 CS, 673 CS/CYNTR, 673 CS/CYNV, 3 OSS/OSAM) of outages described in agency specific guidance within [section paragraphs 2.22](#) of this instruction. Outages will be reported as either “minimal” or “significant” (see *Terms* in [Attachment 1](#)) based on the operational limitations on 3 OSS/OSW.

2.22.2. Advises 673 ABW leadership and staff, 3 WG leadership and staff, and CAT staff on all matters pertaining to weather.

2.22.3. Provides a representative to brief:

2.22.3.1. A 5-day weather outlook at weekly 673 ABW stand-up meetings.

2.22.3.2. At 3 WG stand-up meetings.

2.22.4. Notifies 673 ABW leadership and 3 WG leadership of significant weather impacts to the installation via WWAs relayed by 673 ABW/CP, as defined in [paragraph 1.7.3](#) The 3 OSS/OSW may disseminate additional direct email notifications for unique or unusual weather impacts not defined in WWA criteria.

2.22.5. Ensures the Weather Flight Commander and Flight Chief possess a Restricted Area Badge with Area 2 access privileges and have active Non-Secure Internet Protocol Router (NIPR) and Secure Internet Protocol Router (SIPR) accounts.

2.22.6. **Supports the 673 ABW/CP** by:

2.22.6.1. Provides Elmendorf Airfield weather observations, TAF, and notification of required WWAs via the JET system or backup methods.

2.22.6.2. Provides additional weather or environmental information as requested, to include more detailed information on severe weather forecasts.

2.22.6.3. Provides information pertaining to severe weather events for use in OPREP-3s.

2.22.7. **Supports the 3 WG/SE** by:

2.22.7.1. Upon notification of an aircraft mishap or incident, collects all weather data necessary to investigate the mishap.

2.22.7.2. Provides weather information to 3 WG/SE, as required, for aircraft and ground mishap investigations.

2.22.8. **Supports the 3 OG SOF** by:

2.22.8.1. Briefs weather conditions impacting Elmendorf Airfield, local area, alternate airfield locations, and military operating areas.

2.22.8.2. Notifies the SOF of any changing weather conditions that are significant to flying operations at Elmendorf airfield, in the local area, or at alternate airfield locations and military operating areas.

2.22.8.3. Requests PIREPs from the SOF.

2.22.8.4. Relays all PIREPs received on the PMSV to the SOF.

2.22.8.5. Provides Elmendorf airfield observations, TAF, and notification of required WWAs via the JET system or backup methods.

2.22.8.6. Provides seasonal weather briefings, when requested.

2.22.9. **Supports the 90/525/302 FS, 571/144 AS, and 962 AACS** by:

2.22.9.1. When requested, as manning permits, provides a face-to-face weather briefer for mission planning and step briefings. **Note:** If not requested, or due to manning constraints, step and mission planning briefings will be conducted via telephone.

2.22.9.2. Provides a face-to-face briefer for specific off-station missions (i.e. TDYs, deployment movements), when advanced coordination has been made and if requested by the mission commander.

2.22.9.3. Develops an internal process, focused on the continuous improvement of mission weather products, based on customer feedback (i.e., debrief form).

2.22.9.4. Continuously refines mission weather products to meet aircraft sensitivities and mission profiles.

2.22.9.5. Provides or arranges for weather support during off-station operations IAW **section paragraphs 2.22** of this instruction.

2.22.9.6. Provides climate data to mission commanders for mission planning, as requested.

2.22.9.7. Provides seasonal weather briefings as requested.

2.22.9.8. Coordinates an annual review of defined aircraft weather limitations.

2.22.9.9. **Specific to 90/525/302 FS only:** Provides a daily mission execution weather forecast and next day planning weather forecast via 3 OSS/OSW SharePoint® or Mattermost™ “JBER Airfield Ops” channel, one hour prior to the mission brief time listed in Patriot Excalibur (PEX).

2.22.9.10. **Specific to 571/144 AS and 962 AACS only:**

2.22.9.10.1. When requested, provides flight weather briefing products, via DD Form 175-1, *Flight Weather Briefing*, or verbal briefing.

2.22.9.10.2. Ensures flight weather briefings are posted to SharePoint®, emailed to the aircrew, or posted to the “Weather 175-1 Briefings” channel in Mattermost™ at the requested brief time.

2.22.10. **Supports the 210 RQS, 211 RQS, and AKRCC by:**

2.22.10.1. When requested, provides routine flight weather briefing products, via DD Form 175-1 or verbal briefing.

2.22.10.2. Provides on-the-spot 9-line weather briefings for real-world AKRCC missions.

2.22.10.3. Develops an internal process, focused on the continuous improvement of mission weather products, based on customer feedback (i.e. Debrief Form).

2.22.10.4. Continuously refines the mission weather products to meet aircraft sensitivities and the mission profile, and annually reviews the defined aircraft weather limitations and verifies them with each squadron’s operations officer.

2.22.10.5. Provides or arranges for weather support during off-station operations IAW **section paragraphs 2.22** of this instruction.

2.22.10.6. Ensures flight weather briefings are posted to SharePoint® or emailed to the aircrew at the requested briefing time.

2.22.11. Support for missions originating off-station regarding 90/525/302 FS, 517/144 AS, 962 AACs, and 210 RQS, 211 RQS.

2.22.11.1. 3 OSS/OSW is the primary provider of weather information for missions departing from Elmendorf airfield. For all missions, whether they originate from Elmendorf airfield or off-station, it is the responsibility of the mission commander to coordinate weather support requests with sufficient advance notice, at least 2 hours prior to requested brief time. 3 OSS/OSW provides direct support or arranges for support from another source based on the circumstances of the mission.

2.22.11.2. 3 OSS/OSW will make every effort to provide mission weather products to supported flying units operating from a location other than Elmendorf airfield by one of the following methods:

2.22.11.2.1. Deploying with the unit.

2.22.11.2.2. Arranging for the supported flying unit to reach back to the Elmendorf airfield forecaster via telephone.

2.22.11.3. If direct support is not possible, 3 OSS/OSW may:

2.22.11.3.1. Request assistance from the designated Operational Weather Squadron (OWS) servicing the operating location by entering mission data into the servicing OWS' JET Mission Management. Contact information and briefing number assigned by JET Mission Management will be relayed to the aircrew.

2.22.11.3.2. Request assistance from the local Weather Flight at the operating location.

2.22.11.4. If follow-on mission data is not known at time of departure from home station, 3 OSS/OSW will provide appropriate OWS web site or telephone contact information to the aircrew to receive further support as required.

2.22.12. Supports the 3 OG Combat Alert Cell by:

2.22.12.1. Provides current and planning product weather via 3 OSS/OSW website and/or telephone.

2.22.12.2. Provides immediate verbal updates of weather conditions in the event of an alert launch.

2.22.13. Supports the 3 OSS/OSA by:

2.22.13.1. Sends a representative to Airfield Operations Board (AOB) meetings.

2.22.13.2. Briefs significant weather impacts at the AOB, as necessary.

2.22.14. Notifies the 3 OSS/OSAA:

2.22.14.1. When changes in weather operations require an update to the FLIP manuals, IFR Supplement, or other FAA publications.

2.22.14.2. When a weather station evacuation is required.

2.22.14.3. Of any PMSV or FMQ-19 outages, for creation of a Notice to Airmen.

2.22.14.4. Of required WWAs via the JET system, in person, or backup methods.

2.22.15. **Supports the 3 OSS/OSAT** by: **Note:** This section serves as the CWW agreement IAW AFMAN 15-111.

2.22.15.1. Provides Elmendorf airfield observations, TAF, and notification of required WWAs via the JET system or backup methods.

2.22.15.2. Notifies 3 OSS/OSAT when the PMSV radio is inoperative so they can include an outage announcement on the Automatic Terminal Information Services (ATIS) recording.

2.22.15.3. Provides initial training and certification, and refresher training as necessary, to 3 OSS/OSAT controllers to take limited weather and visibility observations and document Initial Limited Weather Observation training on the AF Form 3622, *Air Traffic Control/Weather Certification and Rating Record*, IAW AFMAN 13-204V3.

2.22.15.4. Assists with annual Elmendorf tower visibility marker identification updates and validates visibility markers annually and when requested.

2.22.15.5. Notifies 3 OSS/OSAT as soon as possible when conditions warrant the evacuation of the Weather Flight to the AOL.

2.22.16. **Supports 3 OSS/OSAM** by:

2.22.16.1. Logs all weather equipment/circuit outages and assigns a mission impact level of “minimal” or “significant” IAW [paragraph 2.13.1](#).

2.22.16.2. Contacts 3 OSS/OSAM personnel by phone (via standby phone outside of normal duty hours) to report all weather equipment/circuit outages or when a previous outage has returned to “fully operational” status.

2.22.16.3. Approves all scheduled and unscheduled maintenance downtime of weather equipment and circuits, based on the meteorological and mission support situation at the time.

2.22.16.4. Coordinates airfield weather sensor familiarization tours for 3 OSS/OSW personnel with 3 OSS/OSAM.

2.22.17. **Supports 3 OSS/OSO** by:

2.22.17.1. Submits inputs to 3 OSS/OSO on all 3 WG plans, as required.

2.22.17.2. Provides climatological information and long-range forecasts, as required.

2.22.18. **Supports the 3 OSS/DMO** by providing a representative for Instrument Refresher Courses.

2.22.19. **Supports 3 MXG/MXOC** by providing notification of weather WWA information via JET software.

2.22.20. **Supports 673 CS** by notifying them of network outages that impact the ability to maintain 24/7 weather operations. Outages will be reported as either “minimal” or significant”.

2.22.21. **Supports 673 CS/CYNTR** by:

2.22.21.1. Follows procedures outlined in PACAFI 15-101, *Weather Support for PACAF*, for MARK IVB Meteorological Satellite Coordinator responsibilities. **Note:** All outages for MARK IVB are considered significant. If the outage is outside of normal duty hours, 3 OSS/OSW will notify the on-call 673 CS/CYNTR technician immediately.

2.22.21.2. Notifies 673 CS/CYNTR of PMSV outages impacting the ability to communicate with aircraft. Report PMSV outages to 673 CS/CYNTR as either "minimal" or "significant."

2.22.22. **Supports 673 CS/CYNV** by:

2.22.22.1. Coordinates JET Sensor Collection Appliance (SCA) updates with 673 CS/CYNV.

2.22.22.2. Report outages to 673 CS/CYNV as either "minimal" or "significant."

2.22.23. **Supports 773 CES/CEX** by:

2.22.23.1. Notifies 773 CES/CEX via IWWC and the 673 ABW/CP, when:

2.22.23.1.1. A weather watch or warning is issued for snowfall in excess of 4 inches in 12 hours exists.

2.22.23.1.2. A weather advisory is issued for snowfall greater than 1 inch but less than 4 inches in 12 hours.

2.22.23.1.3. A weather warning is issued for freezing precipitation.

2.22.23.2. Sends a representative to Emergency Management Working Group meetings.

2.22.23.3. Provides weather data for integration into Chemical, Biological, Radiological, and Nuclear Integrated Systems (CBRN-IS) for hazard plotting.

2.22.23.4. Recommends and provides the most appropriate weather type for 773 CES/CEX to run their chosen Chemical, Biological, Radiological, and Nuclear (CBRN) model.

2.22.23.5. Provides initial ash fall data and updates to EOC throughout the duration of the event.

2.22.23.6. Provides severe weather information to Emergency Management related OPREP-3s.

2.22.23.7. When the EOC is activated, provides weather forecasts for EOC leadership.

2.22.23.8. Provides Chemical Downwind Messages (CDMs).

2.22.23.9. Provides climatology summaries, when requested.

2.22.24. **Supports 673 OMRS/SGXB** by:

2.22.24.1. Supports and assists the Thermal Injury Prevention Program with current weather data and in obtaining and interpreting historical weather data and information, to include local installation, future deployment locations, and other operational needs.

2.22.24.2. Provides weather data for input into CDMs, Effective Downwind Messages (EDMs), and CBRN hazard prediction models.

KEVIN M. JAMIESON, Colonel, USAF
Commander

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

AFPD 15-1, *Weather Operations*, 14 November 2019
AFMAN 10-206, *Operational Reporting*, 18 June 2018
AFMAN 11-202V3_PACAFSUP, *Flight Operations*, 2023
AFMAN 15-111, *Surface Weather Observations*, 12 March 2019
AFMAN 15-124, *Meteorological Codes*, 16 January 2019
AFMAN 15-129, *Air and Space Weather Operations*, 09 July 2020
AFMAN 13-204V3, *Air Traffic Control*, 22 July 2020
PACAFI 15-101, *Weather Support for PACAF*, 10 August 2016
JBERI 91-201, *Adverse Weather Notification Procedures*, 23 June 2021

Prescribed Forms

None

Adopted Forms

DD Form 175-1, *Flight Weather Briefing*
DAF Form 847, *Recommendation for Change of Publication*
AF Form 3622, *Air Traffic Control/Weather Certification and Rating Record*
QRC 500, *Weather Checklist*

Abbreviations and Acronyms

AFPD—Air Force Policy Directive
AFMAN—Air Force Manual
AGL—Above Ground Level
AKRCC—Alaska Rescue Coordination Center
ALSTG—Altimeter Setting
ANR—Alaska NORAD Region
AOB—Airfield Operations Board
AOL—Alternate Operating Location
ATC—Air Traffic Control
ATCT—Air Traffic Control Tower
ATIS—Automatic Terminal Information Services

°C—Degrees Celsius

CAT—Crisis Action Team

CBRN—Chemical, Biological, Radiological, and Nuclear

CBRN-IS—Chemical, Biological, Radiological, and Nuclear Integrated Systems

CDM—Chemical Downwind Message

CWW—Cooperative Weather Watch

DAF—Department of the Air Force

DoD—Department of Defense

EDM—Effective Downwind Message

EOC—Emergency Operations Center

FAA—Federal Aviation Administration

FLIP—Flight Information Publication

IDP—Installation Data Page

IFR—Instrument Flight Rules

IWWC—Integrated Weather Warning Capability

JBER—Joint Base Elmendorf-Richardson

JET—Joint Environmental Toolkit

LLWS—Low Level Wind Shear

LOCAL—Aviation Selected Local Weather Report

M—Meters

MEF—Mission Execution Forecast

METAR—Aviation Routine Weather Report

MISSIONWATCH—Mission-Scale Meteorological Watch

NIPR—Non-Secure Internet Protocol Router

OPREP—Operational Report(ing)

PEX—Patriot Excalibur

PIREP—Pilot Report

PMSV—Pilot to Metro Service

QRC—Quick Reference Checklist

RVR—Runway Visual Range

SCA—Sensor Collection Appliance

SIPR—Secure Internet Protocol Router

SM—Statute Mile

SOF—Supervisor of Flying

SPECI—Aviation Selected Special Weather Report

SWAP—Severe Weather Action Plan

TAF—Terminal Aerodrome Forecast

WWA—Watch, Warning, Advisory

Office Symbols

AACS—Airborne Air Control Squadron

ABW—Air Base Wing

ABW/CP—Air Base Wing Command Post

AS—Airlift Squadron

CES/CEX—Civil Engineer Squadron Emergency Management

CS—Communications Squadron

CS/CYNTR—Communications Squadron Cyber Operations

CS/CYNV—Communications Squadron Server Operations

FS—Fighter Squadron

MXG/MXOC—Maintenance Group Maintenance Operations Center

OG—Operations Group

OMRS/SGXB—Operations Medical Readiness Squadron Bioenvironmental Engineering Flight

OSS/DMO—Operations Support Squadron Distributed Mission Operations

OSS/OSA—Operations Support Squadron Airfield Operations Flight

OSS/OSAA—Operations Support Squadron Airfield Management Operations

OSS/OSAM—Operations Support Squadron Radar, Airfield, and Weather Systems

OSS/OSAT—Operations Support Squadron Air Traffic Control

OSS/OSO—Operations Support Squadron Current Operations Flight

OSS/OSW—Operations Support Squadron Weather Flight

OWS—Operational Weather Squadron

WG—Wing

WG/SE—Wing Safety

Terms

MARK IVB—The MARK IVB is an Air Force meteorological satellite system that comprises a set of three weather satellites that receive data from polar orbiting and geostationary meteorological satellites managed by the Department of Commerce and DoD.

Minimal Outage—An outage, impairment, or disruption of equipment, although important, imposes little operational limitation and/or a backup capability exists.

Significant Outage—An outage, impairment, or disruption of equipment imposes an operational limitation on the units supported and/or no backup capability exists.