BY ORDER OF THE COMMANDER
DYESS AIR FORCE BASE

DYESS AIR FORCE BASE
INSTRUCTION 15-101

1 JUNE 2020

Weather

WEATHER SUPPORT PROCEDURES

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESSIBILITY: Publications and forms are available on the e-Publishing website at **www.e-Publishing.af.mil** for downloading or ordering

RELEASABILITY: There are no releasability restrictions on this publication

---

OPR: 7 OSS/OSW

Certified by: 7 OSS/CC
(Lt Col Thomas Walsh)

Supersedes: DYESSAFBI15-101, 29 June 2014

Pages: 74

This instruction implements Air Force Policy Directive (AFPD) 15-1, Air Force Weather Operations, AFMAN 10- 206, Operational Reporting, AFI 10-206 AFGSC SUP, Operational Reporting, AFI 15-114, Weather Technical Performance Evaluation; AFI 15-128, Air Force Weather Roles and Responsibilities, Air Force Manual (AFMAN) 15-111, Surface Weather Observations; AFMAN 15-124, Meteorological Codes; AFMAN 15-129V1, Air and Space Weather Operations - Characterization; AFMAN 15-129V2, Air and Space Weather Operations – Exploitation, Air Mobility Command Instruction (AMCI) 15-101, Weather Operations and Support; AFI13-204V3, Airfield Operations Procedures and Programs, AFI13-204V3 AFGSC SUP, Airfield Operations Procedures and Programs, AFI 11-2B-1V3, B-1 Operations Procedures, AFI 11-2B-1V3 DYESS AFB SUP ADDENDUM-A, B-1 Operations Procedures, AFI 11-2C-130JV3, C-130J Operations Procedures, AFI 11-202V3, General Flight Rules, AFI 11-202V3 AFGSC SUP, General Flight Rules, DAFI 11-250, Airfield Operations and Dyess Flying Procedures. It establishes responsibilities and weather support procedures for Dyess AFB. It provides general information for weather services, including weather observations and forecasts; weather Warnings, Watches and Advisories; space weather supported services and dissemination of information and reciprocal support. It applies to units assigned to the 7th Bomb Wing (7 BW), 317th Airlift Wing (317 AW), subordinate units and units assigned to, attached to, or supported by Dyess Air Force Base (AFB). Ensure that all records created as a result of processes prescribed in this publication are maintained IAW AFI33-322, *Records Management and Information Governance Program*, and disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). Contact supporting records managers as required. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, Recommendation for

Change of Publication; route AF Forms 847 from the field through the appropriate functional chain of command.

SUMMARY OF CHANGES

This change supersedes DYESSAFBI15-101 IC-1 by affecting numerous and significant changes to the document. Major changes include the realignment of Dyess AFB to AFGSC, the standing up of the 317 AW, the creation of AFI 15-114, and updates to the following weather publications: AFI 15-128, AFMAN 15-111, AFMAN 15-129V1, AFMAN 15-129V2.

Chapter 1

GENERAL INFORMATION

1.1. General. This instruction, along with the Dyess AFB Installation Data Page (IDP) between the 7th Operations Support Squadron Weather Flight (7 OSS/OSW) and the 26th Operational Weather Squadron (26 OWS) establishes roles and responsibilities for providing collaborative weather support to the 7th Bomb Wing (7 BW), 317th Airlift Wing (317 AW), and all other tenant organizations and agencies at Dyess Air Force Base. It consolidates weather support requirements and procedures for peacetime operations and eliminates the need for written agreements between the weather unit and supported operations.

1.2. The 7 OSS/OSW Normal Hours of Duty and Key Contact Information. Mission weather forecasting and airfield services are provided IAW this instruction 24 hours a day, 365 days a year, with the exception of when the Dyess Tower and aerodrome are closed. Dyess weather personnel can be reached at the following numbers: Mission Weather/Airfield Services Forecaster, DSN 461-2524/4857; Flight Chief, DSN 461-4634; Flight Commander, DSN 461-2504. The Dyess Command Post (7 BW/CP) at DSN 461-1921 can recall a weather forecaster during non-duty hours. To call commercial to Dyess, dial (325) 696-xxxx, where the xs are the last four digits of the DSN number. Normal duty hours for staff weather support services are 0800L to 1600L Monday through Friday, with the exception of federal holidays. The 7 OSS/OSW is located in Building 9001, 674 Alert Avenue.

1.3. Duty Priorities. The 7 OSS/OSW establish duty priorities to ensure task accomplishment in order of relative importance. The forecaster 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 (RM) when using the duty priorities.

Table 1.1. Duty Priority List (7 OSS/OSW).

Order of Priority	*DUTIES*
1	Perform Emergency War Order (EWO) Tasks.
2	Respond to Klaxon Alarm
3	Execute Evacuation / AOL Procedures
4	Respond to Aircraft and Ground Emergencies.
5	Respond to Pilot to Metro Service (PMSV) Contacts.
6	Provide Weather Information for Supervisor of Flying (SOF)/Fox 3
7	Issue/Disseminate Imminent Hazardous Weather Warnings
8	Issue/Disseminate Imminent Hazardous Weather Advisories
9	Augment AN/FMQ-19 Observations for Mandatory Elements
10	Perform Severe Weather Action Process (SWAP) Operations
11	Provide "Eyes-Forward" / Collaborate with the OWS
12	Disseminate Terminal Aerodrome Forecast (TAF)
13	Produce and Disseminate Mission Weather Products (MWP)
14	Relay Urgent Pilot Reports (PIREPs) to OWS
15	Disseminate PIREPs
16	Perform MISSIONWATCH
17	Provide MWP Briefing Support.
18	Provide Briefing Support (Transient/Other)
19	Accomplish Weather Functional Training

1.4. Observing Limitations.

1.4.1. While there are six known and documented limitations to the AN/FMQ-19 system, there are no known local limitations due to sensor siting.

1.4.2. When backing up or supplementing the AN/FMQ-19 Automated Meteorological Observing System (AMOS), the alternate observation point is on the airfield side of Building 9001, on the red marked (DV) pavement. The view from this location is restricted from the E to the SE by buildings.

1.4.3. The forecaster may not detect weather changes as they occur due to other duties performed inside the building away from the outdoor elements. A cooperative weather watch with Dyess tower Air Traffic Control (ATC) personnel IAW **Chapter 3** reduces the impact of this limitation.

1.5. Release of Weather Information. Refer any requests for weather information by non-Department of Defense (DoD) agencies to the 7 BW Public Affairs (7 BW/PA), who then determines if providing the information is in the best interest of the installation.

1.6. Primary Product Dissemination. The Joint Environmental Toolkit (JET) is the primary dissemination system for TAFs, surface observations, watches, warnings and advisories (WWAs) and PIREPS. The Mission Weather Product (MWP) is posted under the Weather Briefings Library, Mission Weather Folder on the SharePoint Weather Webpage (**https://cs2.eis.af.mil/sites/11150/default.aspx**).

1.7. Pilot-to-Metro Service (PMSV). PMSV is available by contacting "Dyess Metro" at frequency 383.25 Megahertz, or through a global phone patch to DSN 461-2524. The 7 OSS/OSW monitors PMSV and relays any observation/forecast or update weather briefings upon request. The operating range of the PMSV is restricted to line-of-sight resulting in a maximum operational range of approximately 200 NM. No backup PMSV capability currently exists, however Sheppard AFB will provide alternate PMSV service at 339.65. All weather stations within a 200 NM radius of Dyess operate on frequency 344.6. When the PMSV is inoperative the 7 OSS/OSW immediately notifies Airfield Management (7 OSS/OSAA), and in turn, a NOTAM is issued to reflect the outage.

1.8. Backup Product Dissemination and Data Retrieval.

1.8.1. The 7 OSS/OSW forwards local weather observations, TAFs, and PIREPS first to the Dyess Tower (7 OSS/OSAT), and secondly to the Supervisor of Flying (SOF)/Fox 3 using the hotline/phone. These calls are tracked on an AF Form 9, Local Dissemination Log.

1.8.2. The AFW-WEBS internet site is the primary backup method for long-line dissemination of weather observations, TAFs and PIREPS.

1.8.3. The 7 OSS/OSW disseminates weather watches/warnings and advisories via telephone to the 7 OSS/OSAT, the SOF, 7 BW/CP, 7 OSS/OSAA, and National Airborne Operations Center (NAOC) (if applicable).

1.8.4. The 7 OSS/OSW disseminates the MWP via email or runner to all flying squadrons and the SOF.

1.8.5. When the 26 OWS web site is inoperative, the 7 OSS/OSW uses alternative data sources in preparing the MWP and conducting METWATCH/MISSIONWATCH. Links to alternate sources are on the weather intranet webpage.

1.9. Alternate Operating Location (AOL). The AOL is located in the Dyess Tower on 1017 Herk Drive (Building 4300). The forecaster will operate out of the 4th floor, DSN 461-5302. Any additional 7 OSS/OSW personnel will relocate to the 4th floor to perform mission support services.

1.9.1. The forecaster notifies the following agencies of evacuation/arrival to the AOL:

1.9.1.1. The 7 OSS/OSAT and SOF/Fox 3 at 325-696-1400/4684, or in person after evacuation.

1.9.1.2. The 7 BW/CP at 325-696-1921/1984.

1.9.1.3. The 7 OSS/OSAA at 325-696-2515, or in person before evacuation.

1.9.1.4. During wing flying days: the 9 BS/489 BG at 325-696-7453; 28 BS at 325-696-2828; 337 TES/77 WS at 325-696-8000; 39 AS at 325-696-4045; 40 AS at 325-696-4004, and NAOC (if applicable) at 325-696-2105/2106.

1.9.1.5. The 26 OWS to coordinate mission essential backup support at DSN 331-2618.

1.9.1.6. The 7 OSS/OSW Flight CC and/or Flight Chief.

1.9.2. Alternate Operating Location (AOL): When required, the forecaster will take supplemental/backup observations from the AOL. The observation point is on the flight line directly adjacent to the Dyess tower. Elevation is 1775 feet above MSL.

1.9.2.1. Weather services from the alternate operating location are limited. During evacuations, personnel safety and RM take priority over all other duties. Surface observations are not available during the initial execution of an evacuation. Airfield and mission weather services will resume after the forecaster has relocated to the alternate facility and has transmitted the first observation.

1.9.3. The forecaster continues to perform normal duties according to the Duty Priorities List (**Table 1.1**) and Shift Checklists (i.e. MWP, MISSIONWATCH, METWATCH, Eyes Forward, etc.).

1.9.4. The 7 OSS/OSW personnel will transmit the observation, via JET within 15 minutes of arriving to the AOL.

1.9.5. The 7 OSS/OSW conducts AOL evacuation training on a quarterly basis in conjunction with their monthly continuation training.

1.9.6. Alternate Operating Location (AOL) Limitations: Visibility is determined from the observation point along the flight line directly adjacent from the Dyess tower. Due to limited backup resources, product and service delays may be experienced during peak production times.

Chapter 2

MISSION WEATHER ELEMENT

2.1. General.

2.1.1. Mission integration requires an in-depth understanding of supported mission platforms, equipment, and systems capabilities/sensitivities as well as mission processes in order to reliably inject timely, accurate, and relevant environmental information at every decision point in the mission planning and execution process in an effort to optimize mission success.

2.1.2. The 7 OSS/OSW will have personnel on-duty during published airfield hours, when their supported units are performing their primary operation, duty, or mission.

2.1.3. The 7 OSS/OSW provides or arranges weather support for all transient aircrew IAW duty priorities. The 26 OWS will provide Flight Weather Briefing (FWB) support for flights conducted outside published operating hours. The 7 OSS/OSW will enter the FWB request via the 26 OWS web page when: the supported unit provides advance notification (>2 hrs) of intent to conduct operations, and the 7 OSS/OSW personnel are unable to provide MWPs.

2.1.4. Aero Club Activities. Support will be provided IAW 15-128V2, Chapter 2, paragraph 2.5.3.

2.2. Mission Weather Products (MWPs). The MWP is a mission-specific forecast developed using a continuous cycle that adapts as the supported unit's needs change. MWPs are "living documents" and any/all feedback will be applied to internal processes to enhance training, forecast proficiency, and product accuracy. MWPs include flight weather briefings, Intelligence Preparation of Operational Environment (IPOE) products, mission planning briefs, environmental inputs to mission analysis, environmental staff estimates, and any other weather product prepared to meet the needs of a supported unit. MWPs are developed using the Mission Execution Forecast Process (MEFP) identified in AFMAN 15-129V2. The forecaster fuses and tailors products from operational weather centers and local units to produce and amend the MWP, as needed, when rapidly changing conditions exist or when conditions threaten resource protection.

2.2.1. The 7 OSS/OSW will ensure environmental information is integrated into all phases of the supported unit's operations by developing, documenting, and applying the following:

2.2.1.1. Identify and document critical points in each phase of the operation cycle (i.e., assessment, planning, execution, military decision-making process (MDMP), IPOE) and exploit opportunities to provide decision-makers with actionable environmental information at these points.

2.2.1.2. Use information obtained from supported units or derived from authoritative sources such as AFPD 11-2, Aircrew Operations, technical orders, 11-series AFI Volume 3s on specific Aircraft Operations Procedures, AFI 11-202V3, General Flight Rules, and AR 95-1, Flight Regulations, including any supplements to identify and tailor the MWP for all critical (Go/No-Go) mission-limiting environmental thresholds applicable to supported unit operations.

2.2.1.3. Use access to locally available command and control/mission planning systems (i.e. EPEX) and integrate into supported units to the maximum extent possible in order to collect relevant information about mission planning and execution and to provide timely accurate, and relevant environmental information for planning and execution.

2.2.1.4. Obtain feedback from supported units on forecast and observed environmental conditional applicable to their respective missions (i.e. MWP Debrief Form)

2.2.2. The 7 OSS/OSW will coordinate with their supported agencies to determine the content, format, delivery method and timing of MWPs to ensure it contains decision-grade information and mission requirements are met.

2.2.3. All briefings are conducted IAW AFMAN 15-129V2. The 7 OSS/OSW presents the following forms of MWP products/briefings.

2.2.3.1. Verbal Briefing (over the counter/phone). The forecaster is available during published operating hours to brief aircrews on weather affecting the take-off location, enroute, destination and alternate(s).

2.2.3.2. Mass briefing. Upon request, the 7 OSS/OSW provides face-to-face mass briefings. The planning weather briefing is the most common mass brief, normally incorporated into the 28 BS aircrew brief. It is available to any 7 BW flying or tenant unit.

2.2.3.3. DD Form 175-1, Flight Weather Briefing. DD Form 175-1 briefings are available to aircrews upon request. These briefings are primarily for off-station missions and are typically given when aircrews depart Dyess AFB and land at another station location.

2.2.3.4. Mission Weather Product. The forecaster prepares a Dyess specific MWP daily for all 7 BW, 317 AW, 337 TES, 77 WS and 489 BG flying squadrons performing local training missions, unless the mission is tasked by AMC or when another unit is the Lead Weather Unit (LWU). This product is used for local missions, including round-robin missions without intervening stops. The 618 AOC (TACC)/XOW is responsible for providing all MWPs/briefings for all AMC-gained missions that are under 618 AOC (TACC) command and control, designated AMC and AMC-gained, and non-IFM missions flown by the 317 AW flying squadrons.

2.2.3.4.1. The MWP is built based on the 7 BW and 317 AW flying schedule. It is posted under the Weather Briefings library, Mission Weather folder on the 7 OSS/OSW SharePoint Site three hours prior to the first scheduled take-off (**https://cs.eis.af.mil/sites/11150/default.aspx**).

2.2.3.4.2. The AM MWP is completed and posted to the 7 OSS/OSW SharePoint Site three hours prior to the first scheduled take-off. The forecast is valid from one hour prior to the scheduled take-off till 1500L. The PM MWP is posted at 1200L and the forecast is valid from 1500L till two hours after the last scheduled land time. Each AM and PM MWP will have assigned MWP numbers.

2.2.3.4.3. Amendments are made when necessary, based on the criteria listed in **Table 2.1 and 2.2** Amendments are made, as needed, until one hour after the last mission on the MWP lands. Amended MWPs will have an "AMD ##" appended to the number of the last MWP issued. Amendment times will be posted on each MWP.

2.2.3.4.3.1. Amendment criteria applies to KDYS aerodrome and mission areas (MOA/IR/AR/DZ/LZ) from the surface to 30,000 feet MSL (CAT III for C-130 or CAT IV for B-1 aircraft).

2.2.3.4.3.2. Amendments are made anytime the TAF is updated and/or the MWP falls out of category with the ceiling or visibility criteria in **Table 2.1** The ceiling and visibility category is determined by the lower of the two values. The lowest published airfield minimum for the ceiling/visibility category is Category A.

Table 2.1. MWP Ceiling/Visibility Categories.

Ceiling	Visibility	Category
Ceiling or Visibility observed or expected to decrease to less than or if below, increase to equal or exceed:		
> 3000 feet	> 3SM (4800M)	H
≤ 3000 feet but > 2200 feet		G
≤ 2200 feet but > 2000 feet		F
≤ 2000 feet but > 1700 feet		E
≤ 1700 feet but > 1500 feet		D
≤ 1500 feet but ≥ 0800 feet	≤ 3SM (4800M) but ≥ 2SM (3200M)	C
< 0800 feet but ≥ 0200 feet	< 2SM (3200M) but ≥ 1/2SM (0800M)	B
< 0200 feet	< 1/2SM (0800M)	A

Table 2.2. MWP Weather Phenomena Criteria.

Phenomena	Criteria
Surface Winds	a. Wind Speed: The difference between the predominant wind speed and the forecast wind speed is > 10 knots. 10 knots. b. Wind Gusts: The difference between observed and predominant wind speed or gusts are expected to be 15 knots or greater.
Icing, not associated with thunderstorms from the surface to 10,000 FT Above Ground Level (AGL)	The beginning or ending of icing first meets, exceeds, or decreases to any threshold and was not specified in the forecast.
Turbulence (for weather category II aircraft), not associated with thunderstorms from the surface to 10,000 FT Above Ground Level (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 WWA Criteria	Occur, or are expected to occur during the forecast period, but were not specified in the forecast. Specified in the forecast but are not longer expected to occur during the forecast period.
Altimeter Setting	Altimeter setting meets or exceeds 31.00 INS and was not specified in the forecast. Altimeter setting, if above, drops below 31.00 INS and was not specified during the forecast period. Altimeter setting drops below 28.00 INS and was not specified in the forecast. Altimeter setting, if below 28.00 INS, increases to above 28.00 INS and was not specified in the forecast.
Thunderstorms	Incorrect forecast start or end time
Specification of Temporary Conditions (TEMPO group)	Forecast conditions specified as temporary become predominant conditions. Forecast conditions specified as temporary do not occur during the cardinal hour as forecast. Forecast conditions specified as temporary are no longer expected to occur.

Changes to Predominant Conditions	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

2.2.3.4.4. Refer to **Attachment 3** for an example of the MWP.

2.2.3.4.4.1. **Attachment 3** **Figure A3.3**, Alternate Airspace Forecast, identifies common MOAs/IRs used by the 7 BW and requested as alternate mission areas. They are Lancer/Snyder, Pecos, IR-126, IR-128 and IR-178. Should these common areas need to be changed, the 7 OSS/OSW will coordinate the change request with the 7 BW supported units.

2.2.3.5. Mission Planning Weather. Part of the B-1 planning weather support and tailored to each B-1 flying squadron, their missions, and mission limiting thresholds. This product will be issued once a day, NLT 0800L Monday through Friday and will not be amended/updated. It will be posted under the Weather Briefings library, Planning Weather folder on the 7 OSS/OSW SharePoint Site (**https://cs.eis.af.mil/sites/11150/default.aspx**).

2.2.3.6. KDYS Next Day Planning. This product is used to forecast planning weather for Dyess AFB. This product can be used by any supported flying unit and/or any transient aircrew. The product will be posted once a day, NLT 0400L Monday through Friday, and will not be amended or updated unless there are significant changes (i.e. moderate or severe weather conditions are forecasted and were not previously reflected). It will be posted under the Weather Briefings library, Planning Weather folder on the 7 OSS/OSW SharePoint Site **https://cs.eis.af.mil/sites/11150/default.aspx**.

2.2.4. Off-Station Briefing Support. The 7 OSS/OSW will provide support to these missions or will arrange for support with other weather agencies after determining if duties and time permit. Support can be in the form of a verbal telephone briefs, DD Form 175-1, or updates to briefs. Briefs can be given over the telephone or via email. See **Chapter 8** for unit specific off-station support.

2.3. Mission Watch. A deliberate process for monitoring terrestrial and space weather for mission-limiting environmental factors, from take-off through mission completion. Through the MISSIONWATCH process, the forecaster will actively monitor conditions in all 7 BW and 317 AW operating areas and notify the appropriate Top 3, Operations Supervisor and SOF of any significant, un-forecasted weather. The 7 BW and 317 AW MISSIONWATCH thresholds are defined in **Attachment 4**.

2.4. Low-Level Instrument Route (IR) Closures. The 7 OSS/OSW will immediately notify the SOF/Fox 3 when the meteorological conditions listed in **Attachment 4** are or will affect IR-178/187, IR-128/180, and IR-126/266.

2.4.1. Once the SOF/Fox 3 has determined low-level route closure, the 7 OSS/OSW forecaster will maintain a vigorous MISSIONWATCH of affected routes and provide continuous updates to the SOF.

2.4.1.1. The 7 OSS/OSW will assist the SOF/Fox 3 by:

2.4.1.1.1. Contacting the 7 BW/CP to inform them of the closure, specifying what condition closed the route and when conditions are expected to improve.

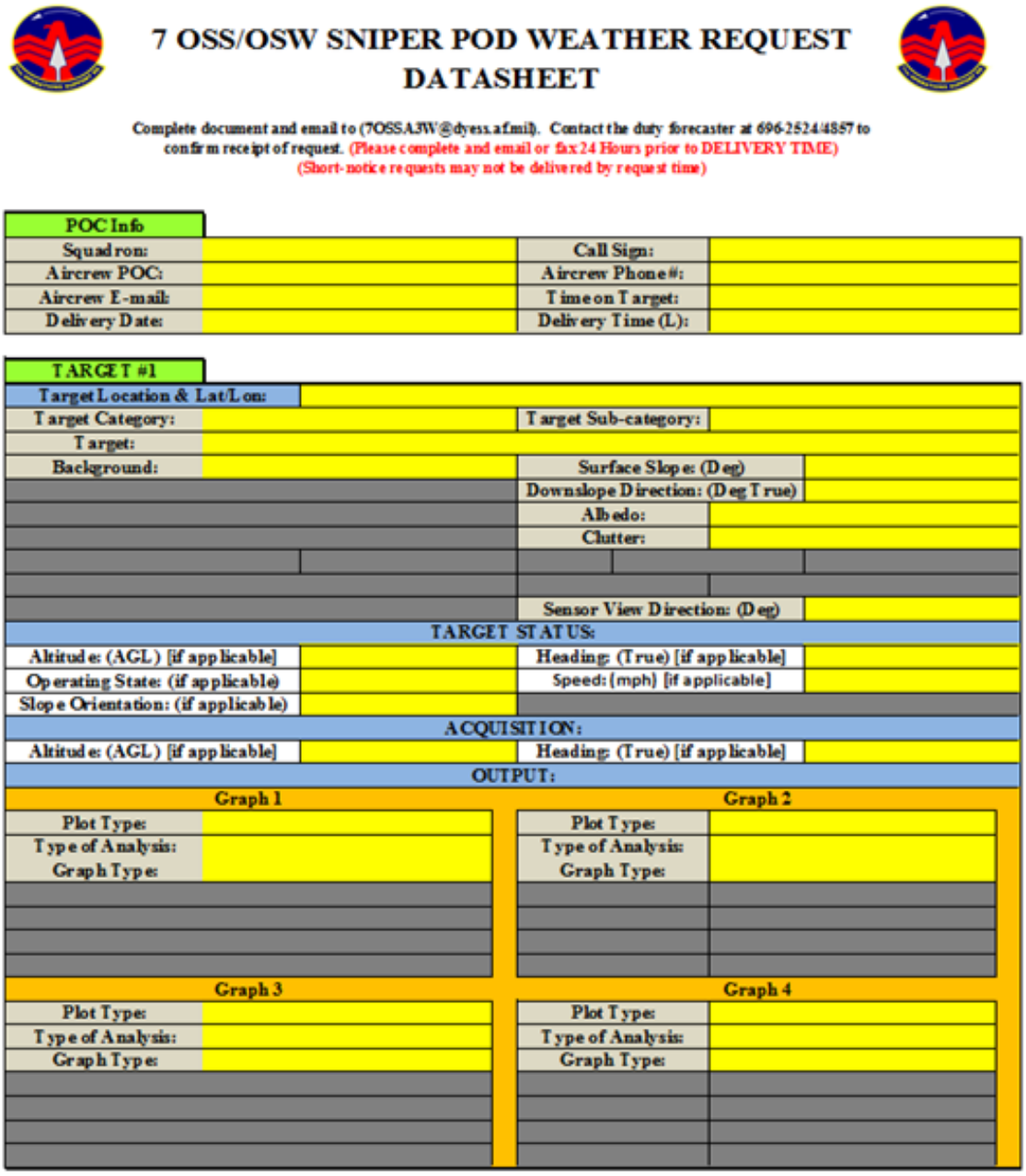
2.4.1.1.2. Notifying the 9 BS/28 BS/77 WPS/337 TES duty desks, and 7 OSS/OSR, 7 BW Airspace Manager, at 325-696-3666 or 325-668-4416 (cell) when low-level routes have been closed/opened.

2.5. TAWS Support. The 7 OSS/OSW creates Electro-Optical Decision Aid (EOTDA) data for B-1 Sniper Pod missions using Target Acquisition Weapon Software (TAWS).

2.5.1. The "Sniper Pod Request Datasheet" (**Figure 2.1**) can be found on the 7 OSS/OSW SharePoint page under the "Weather Requests" folder. Requests must be e-mailed to the 7 OSS/OSW organizational email at **7OSSA3W@us.af.mil** 24 hrs prior to the requested delivery time. The Mission Commander will need to call and confirm receipt of the request once it is sent.

2.5.2. The 7 OSS/OSW will provide thermal crossover, target detection range, and solar/lunar data for requested target locations and times.

Figure 2.1. Sniper Pod Request Datasheet.



7 OSS/OSW SNIPER POD WEATHER REQUEST DATASHEET

Complete document and email to (7OSS.A3W@dyess.af.mil). Contact the duty forecaster at 696-2524/4857 to confirm receipt of request. (Please complete and email or fax 24 Hours prior to DELIVERY TIME)
(Short-notice requests may not be delivered by request time)

POC Info			
Squadron:		Call Sign:	
Aircrew POC:		Aircrew Phone #:	
Aircrew E-mail:		Time on Target:	
Delivery Date:		Delivery Time (L):	

TARGET #1			
Target Location & Lat/Lon:			
Target Category:		Target Sub-category:	
Target:			
Background:		Surface Slope: (Deg)	
		Downslope Direction: (Deg True)	
		Albedo:	
		Clutter:	
		Sensor View Direction: (Deg)	
TARGET STATUS:			
Altitude: (AGL) [if applicable]		Heading: (True) [if applicable]	
Operating State: (if applicable)		Speed: (mph) [if applicable]	
Slope Orientation: (if applicable)			
ACQUISITION:			
Altitude: (AGL) [if applicable]		Heading: (True) [if applicable]	
OUTPUT:			

Graph 1		Graph 2	
Plot Type:		Plot Type:	
Type of Analysis: Graph Type:		Type of Analysis: Graph Type:	
Graph 3		**Graph 4**	
Plot Type:		Plot Type:	
Type of Analysis:		Type of Analysis:	
Graph Type:		Graph Type:	

Chapter 3

AIRFIELD WEATHER SERVICES

3.1. General.

3.1.1. The 7 OSS/OSW forecaster is responsible for taking surface weather observations, creating and issuing the TAF, issuing WWAs, and assuming briefing support when the mission briefers are not embedded in the flying squadrons.

3.1.2. The FMQ-19 sensor group at the approach end of the active runway is the official point of observation. The alternate observation point when supplementing or backing-up the FMQ-19 is on the airfield side of Building 9001, on the red marked (DV) pavement.

3.1.3. The FMQ-19 produces fully automated observations 24/7 and disseminates them through JET. An augmented FMQ-19 observation is only available when the weather station is open and/or when the criterion in **Table 3.1** for supplementing an observation is met.

3.2. FMQ-19 Automated Meteorological Observing System (AMOS). The FMQ-19 is capable of taking and disseminating fully automated weather observations 24/7 (reports with no human interaction). The official weather observation is produced using the FMQ-19 AMOS. The FMQ-19 observations are augmented IAW AFMAN 15-111. Augmentation is the process of having position-qualified weather technicians manually add or edit data to an observation generated by a properly sited AMOS. The two augmentation processes used are supplementation and back-up. The forecaster will maintain situational awareness of the current weather conditions, AMOS observations, and will augment (supplement/back-up) the observations as required.

3.2.1. Supplementing is a method of manually adding meteorological information to an automated observation that is beyond the capabilities of the AMOS to detect and/or report. **Table 3.1** identifies elements that are mandatory to supplement. Weather technicians will supplement observations during controlled airfield hours and check the weather at intervals not to exceed 20 minute, whenever mandatory supplemental criteria in **Table 3.1** are observed and/or forecast to occur within 1 hour. Weather technicians may also supplement the observation if they determine that it is necessary in order to maintain safe flight/ground operations. Note: This does not relieve weather personnel of SWAP responsibilities to respond to severe weather events during non-duty hours IAW AFI 15-128 and AFMAN 15-129V2. 7 OSS/OSW will continue to have SWAP personnel in place to respond to severe weather threats and will concentrate their SWAP efforts on eyes forward resource protection and notification efforts during airfield closure hours. Refer to **Chapter 6** for detailed SWAP responsibilities.

Table 3.1. Mandatory Supplementary Weather Conditions Criteria.

Tornado (+FC) (Notes 1 & 2)
Waterspout (+FC) (Notes 1 & 2)
Funnel Cloud (FC) (Notes 1 & 2)
Freezing Precipitation (FZDZ/FZRA)
Ice Pellets (PL)
Hail (GR)
Sandstorm (SS) (Note 3)
Volcanic Ash (VA)
Tower Visibility (Note 4)
Notes: 1. The immediate reporting of tornadic activity takes precedence over all other phenomena. 2. Be prepared to supplement whenever a tornado watch is valid or warning has been issued; regardless of airfield closure status. 3. Based on local weather warning criteria 4. Only required during controlled airfield hours.

3.2.2. Back-up is the method of manually providing meteorological data and/or dissemination to an AMOS observation when the primary automated method is not operational or unavailable due to sensor and/or communication failure. 7 OSS/OSW personnel are responsible for backing-up the FMQ-19 only when the airfield is open. The forecaster will make every attempt to immediately log out any broken equipment, except when immediate flight safety warrants otherwise. When in back-up mode, weather personnel will only augment the malfunctioning sensor; they will not replace the entire automated observation.

3.2.3. During controlled airfield hours, after allowing the FMQ-19 sensor(s) the required averaging time, the following criteria will be augmented if unrepresentative due to RM concerns:

3.2.3.1. Any SPECI criteria with ceilings at or below 3,000 feet AGL or visibility at or below 3 statute miles (SM).

3.2.3.1.1. Any criteria warranting a watch, warning, and/or advisory.

3.2.3.2. There is no requirement to back-up the system/sensor when the airfield is closed except when:

3.2.3.2.1. SWAP has been implemented.

3.2.3.2.2. WWA criteria is met but is not accurately reported by the sensor. Back-up is then done in the interest of resource protection.

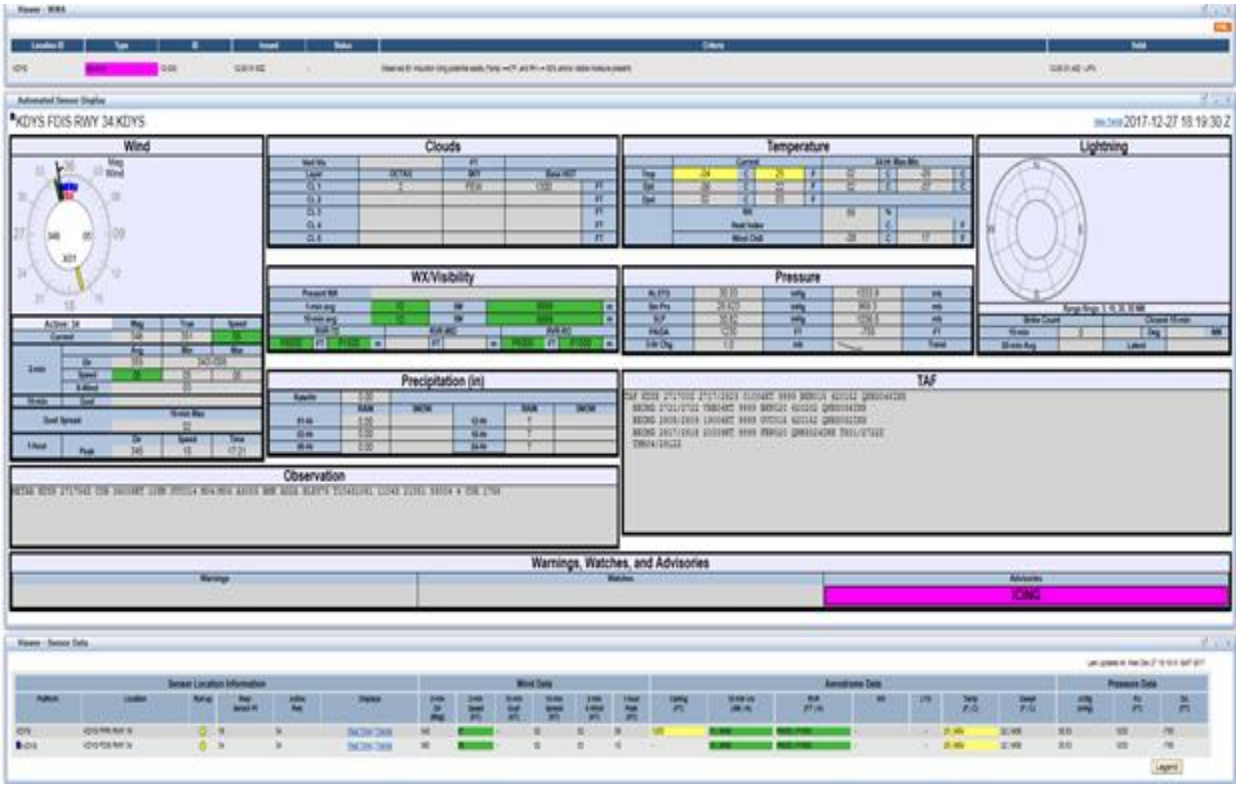
3.2.3.2.3. Elements triggering weather warnings are erroneously observed by the AMOS.

3.2.4. In addition to the above minimum requirements, weather technicians will remain alert for any other changes in weather conditions that will require a SPECI observation. Weather technicians will also monitor local area observational and forecast products as often as necessary to keep abreast of changes expected to affect their area of responsibility.

3.2.5. When a reliable source (Dyess Tower personnel, pilots, etc.) reports weather conditions different from the previous report, weather personnel will re-evaluate atmospheric conditions and, if required, disseminate a new observation

3.2.6. Automated Sensor display (ASD): The JET web server produces the ASD and is available on the AWOS/WWA portlet to JET users. The display derives data from sensors and weather instruments on the field to provide a graphic representation of wind and weather elements. The 26 OWS uses this display as a METWATCH tool when the 7 OSS/OSW is closed.

Figure 3.1. JET View



3.3. Cooperative Weather Watch (CWW). The CWW is a program where qualified non-weather personnel monitor the weather to assist in the reporting of weather conditions that could affect flight safety or are critical to the safety or efficiency of other local operations and resources. 7 OSS/OSAT personnel participate in the CWW IAW AFI 13-204V3, Airfield Operations Procedures and Programs and the 7 OSS/OSW provides initial weather training to all 7 OSS/OSAT controllers in support of this program. Specific responsibilities are outlined in **Paragraph 8.5**

3.4. Eyes Forward Role for 26 OWS.

3.4.1. The 7 OSS/OSW forecaster will function as the “eyes forward" for the 26 OWS by relaying significant, time-sensitive information not found in coded meteorological reports. The forecaster will contact the 26 OWS when/to:

3.4.1.1. Developing situations not coded in meteorological reports could potentially drive an amendment to forecast products from the OWS or impact flight safety.

3.4.1.2. Provide the 26 OWS severe weather reports not normally available through standard observations. These include reports from local indigenous sources, local law enforcement, local news media, and unit personnel. These reports will be passed immediately after fulfilling any local distribution requirement (i.e., a special weather observation). If this is not possible, pass the reports as soon as practical to assist the 26 OWS in post-analysis and verification.

3.4.1.3. Relay all PIREPs to the 26 OWS.

3.4.1.4. Notify the 26 OWS when MISSIONWATCH indicates 26 OWS regional level products may be, or may become, unrepresentative when compared to current or expected weather conditions.

3.5. Surface Weather Observations.

3.5.1. Surface Observation Elements: The following elements are observed and disseminated locally and long line. See AFMAN 15-111 for a complete breakdown of the METAR/SPECI code.

3.5.1.1. Winds: Wind velocity is recorded using sensors at both ends of the runway and the wind value for the active runway is reported in the observation. Locally, wind direction is reported in magnetic North to the nearest ten degrees. For observational records, values are converted to true North. Speed is measured to the nearest knot.

3.5.1.1.1. The 7 OSS/OSAT and 7 OSS/OSW equipment provide digital readings for wind direction in degrees magnetic, speed, gust, and variability. The weather observation represents a 2-minute average for the period preceding the time of observation with maximum wind gusts based on a 10-minute period before the observation.

3.5.1.2. Prevailing Visibility: The FMQ-19 on the approach end of the active runway determines prevailing visibility. When augmenting the FMQ-19, the forecaster uses known landmarks, buildings, or unfocused lights as markers to determine prevailing visibility. This is the visibility considered to be representative of the conditions at the official observing location. This representative visibility is the greatest visibility equaled or exceeded throughout at least half the horizon circle, but not necessarily continuous (i.e., it may be composed of sectors distributed anywhere around the horizon circle).

3.5.1.3. Runway Visual Range (RVR): The range over which the pilot on the center line of a runway can see the runway surface markings and the lights delineating the runway or identify its center line. The FMQ-19 located near the approach end of the runway is used to measure RVR. RVR will be determined when prevailing visibility is 1 statute mile or less and/or RVR is 6000 feet or less. It will be reported in thousands of feet.

3.5.1.4. Present Weather: The FMQ-19 and/or the forecaster will report any weather phenomenon that decreases prevailing visibility to less than 7 statute mile (SM). This includes precipitation, obscurations (obstructions to visibility) and other weather phenomena, such as tornadic activity and sandstorms/dust storms.

3.5.1.5. Sky Condition and Ceiling: A visual observation of the clouds and atmospheric conditions consisting of cloud type or phenomena, amount and height above the surface. The FMQ-19 and/or the forecaster determines types, heights and amounts. Sky condition is based upon the amount of sky coverage. "SKC" or "CLR" represents a sky free of clouds and/or obscuring phenomena. "FEW" indicates coverage of 1/8 to 2/8 coverage of the sky. "SCT" represents coverage of 3/8 to 4/8 of the sky. "BKN" means 5/8 to 7/8 coverage and "OVC" means 8/8 coverage. The FMQ-19 and/or the forecaster determines cloud heights, including vertical visibility (VV), by using a laser beam ceilometer, known heights of objects in the area, weather radar, or estimation based on cloud type and observer experience. The laser beam ceilometer is located near both approach ends of the runway and is accurate for cloud heights at or below 25,000 feet.

3.5.1.6. Temperature and Dew Point: The FMQ-19 Temperature and Relative Humidity sensors provide current temperature and dew point readings. Readings are reported to the nearest degree centigrade and are disseminated on observations.

3.5.1.7. Altimeter Setting (ALSTG) and Pressure Altitude (PA): The FMQ-19 is the primary pressure-measuring instrument. The secondary measuring instruments are the Kestrel and the TMQ-53. ALSTG will be included on all observations, but PA will only be included on locally disseminated observations.

3.5.1.8. Remarks: Disseminated on all observations, as appropriate, to present a more precise picture of the existing weather conditions. Refer to AFMAN 15-111 Attachment 3 for a detailed list of observation remarks.

3.6. Types of Surface Weather Observations.

3.6.1. Record Observations (METAR): These observations are transmitted between 55 and 59 minutes past each hour. The observation contains the following elements:

3.6.1.1. Time (UTC).

3.6.1.2. Wind direction, speed

3.6.1.3. Prevailing visibility (SM).

3.6.1.4. RVR

3.6.1.5. Present weather and obstructions to vision including precipitation.

3.6.1.6. Sky condition

3.6.1.7. Temperature

3.6.1.8. Dew point

3.6.1.9. Altimeter setting (inches of mercury (inHg))

3.6.1.10. Remarks

3.6.1.11. PA and DA (feet) (only reported locally).

3.6.2. Sample METAR Observation: KDYS METAR 1255Z AUTO 14003KT 10SM CLR 24/17 ALSTG 30.02 RMK AO2 CIG 150 RWY34 SLP139 T02430174 PA +1698 DA +3379

3.6.3. Special Observations (SPECI): Special observations have the same format as record observations. When special observation criteria are met, a SPECI observation is taken and disseminated. Standard SPECI criteria is listed in AFMAN 15-111. Additional SPECI criteria is taken from DoD FLIPs, aircraft-specific AFI 11-2 Series Volume 3, MAJCOM supplements, governing directives, support agreements and Service publications applicable to aircraft assigned to Dyess AFB. The following are the Dyess AFB special observation criteria:

3.6.3.1. Visibility: Prevailing visibility (rounded to reportable values) decreases to less than, or if below, increases to equal or exceed:

Table 3.2. Visibility Special Observation Criteria.

3 miles
2 1/2 miles (DoD FLIP)
2 1/4 miles (DoD FLIP)
2 miles
1 3/4 miles (DoD FLIP)
1 1/2 miles
1 3/8 miles (DoD FLIP; only applies when Approach Light System ALS is INOP)
1 1/4 miles (DoD FLIP)
1 mile
7/8 mile (DoD FLIP)
3/4 mile
1/2 mile
1/4 mile
NOTE: Only criteria not listed in AFMAN 15-111 will contain a source.

3.6.3.2. Ceiling: The ceiling (rounded to reportable values) forms or dissipates below, decreases to less than, or if below, increases to equal or exceed:

Table 3.3. Ceiling Special Observation Criteria.

3000 feet
2200 feet (DAFBI 11-250)
2000 feet
1700 feet (DAFBI 11-250)
1500 feet
1000 feet
800 feet
700 feet
600 feet (DoD FLIPS)
500 feet
300 feet
200 feet
100 feet
NOTE: Only criteria not listed in AFMAN 15-111 will contain a source.

3.6.3.3. Sky Condition: A layer of clouds or obscuring phenomena aloft is observed below 700 feet and no layer reported below 700 feet in the preceding observation.

3.6.3.4. Wind Shift: Any wind direction change of 45 degrees or more in less than 15 minutes and wind speed after the shift is greater than or equal to 10 knots.

3.6.3.5. Squall: When occurring, a strong wind characterized by 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. Although a wind event, SQ is reported as a present weather event.

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

3.6.3.7. Thunderstorm (occurring at the station) begins or ends (15 minutes after thunder is last heard). NOTE: A SPECI is not required to report the beginning of a new thunderstorm if one is currently reported.

3.6.3.8. Precipitation:

3.6.3.8.1. Hail begins or ends.

3.6.3.8.2. Freezing precipitation and/or ice pellets begin, end or change intensity.

3.6.3.8.3. Any other type of precipitation begins or ends. NOTE: Except for freezing rain, freezing drizzle, hail and ice pellets, a special observation is not required for change in type (i.e., drizzle changing to snow) or the beginning/ending of one type while another is in progress (i.e., snow changing to rain and snow).

3.6.3.9. Tornado or funnel cloud is observed, disappears from sight, or ends. If a tornado occurred within the past hour according to outside sources and was not observed or recorded from the weather station as a remark, it will be included on the locally derived observation form, AF Form 3813.

3.6.3.10. RVR: Determined when prevailing visibility is 1 SM or less and/or RVR is 6000 feet (1500 meters) or less. If the RVR equipment is inoperative and visibility is equal to or less than 1 SM, RVR is reported in the remarks section of the observations as RVRNO. RVR is reported on an observations if the active runway decreases to less than or, if below, increases to equal or exceed:

Table 3.4. RVR Special Observation Criteria.

6000 feet
5500 feet (DoD FLIP; only applies when Approach Light System ALS is INOP)
5000 feet
4000 feet
2400 feet
2000 feet
1800 feet (AFI11-202V3 AFGSC Sup)
1600 feet
1200 feet
1000 feet
600 feet
NOTE: Only criteria not listed in AFMAN 15-111 will contain a source.

3.6.3.11. Tower Visibility: When notified by the control tower that tower visibility has decreased to less than or, if below, increased to equal or exceed 1, 2, or 3 SM, and the control tower visibility differs from the prevailing visibility. The tower visibility will be in the Remarks section of the observation when the surface and/or tower visibility are less than 4 statute miles and the control tower's reported visibility differs from the surface prevailing visibility by a reportable value. Refer to AFMAN 15-111, Chapter 6 for reportable values.

3.6.3.11.1. Example: KDYS SPECI 0223Z 02011KT 2SM BR FEW010 SCT015 OVC030 22/21 ALSTG 29.75 RMK TWR VIS 1 1/4 VIS N 1 PA+616 DA +1751

3.6.3.12. Upon Resumption of Observing Function: Within 15-minutes after the weather technician returns to duty following a break in observing coverage or augmentation at the observing location unless a record observation is filed during that 15-minute period.

3.6.3.13. Alert Observations: Upon hearing the klaxon sound, when notified of an aircraft alert, or when requested to by the Dyess Command Post the forecaster immediately disseminates a SPECI observation. This observation is transmitted within 30 seconds; "ALERT WX OBS" is appended to the local remarks.

3.6.3.14. Aircraft Mishap (when in supplement or back-up mode only): Taken immediately following notification or sighting of an aircraft mishap at or near the observing location unless there has been an intervening observation. This remark is not disseminated locally or longline but included on the AF FORM 3813 in the column 13 remark section.

3.6.3.15. Any other meteorological situation that, in the forecaster's opinion, is critical.

3.7. Local Observations. An unscheduled observation, reported to the nearest minute, not meeting SPECI criteria. Take a full element LOCAL for altimeter setting changes during back-up of FMQ-19 pressure sensor. A full element LOCAL is required because it will replace the previous METAR in Dyess tower AFAS System.

3.7.1. LOCAL altimeter setting observations are taken during back-up of AMOS pressure sensors at an interval not to exceed 35 minutes when there has been a change of 0.01 inch Hg (0.3 hPa) or more since the last ALSTG value. A METAR or SPECI taken within the established time interval will meet this requirement.

3.8. TAF Support

3.8.1. A TAF is a 30-hour aviation weather forecast for a specific terminal. TAFs for Dyess AFB will be created anytime the airfield is expected to be open.

3.8.1.1. During 24-hour operations, TAFs are issued every 8-hours, at 0100L, 0900L, and 1700L.

3.8.1.2. During limited-duty operations, TAFs will be issued 3-hours prior to the airfield opening.

3.8.1.3. TAFs are encoded IAW AFMAN 15-124, Meteorological Codes.

3.8.1.4. TAFs are amended anytime criteria listed in **Table 3.5** is observed or expected to decrease to less than, or if below, increase to equal or exceed:

Table 3.5. TAF Amendment Criteria.

Ceiling	Visibility	Category	Reference
> 2000 feet	> 3SM (4800M)	G	AFMAN 15-129V1, AFI 11-202V3, FLIP
< 2000 feet but ≥ 1000 feet	<3SM (4800M) ≥ 2SM (3200M)	F	AFMAN 15-129V1, AFI 11-202V3, FLIP
< 1000 feet but ≥ 700 feet	< 3SM (4800M) but ≥ 2SM (3200M)	E	AFMAN 15-129V1, AFI 11-202V3, FLIP
< 700 feet but ≥ 500 feet	< 2SM (3200M) but ≥ 1 1/2SM (2400M)	D	AFMAN 15-129V1, AFI 11-202V3, FLIP
< 500 feet but ≥ 300 feet	< 1 1/2SM (2400M) but ≥ 1SM (1600M)	C	AFMAN 15-129V1, AFI 11-202V3, FLIP
< 300 feet but ≥ 200 feet	< 1SM (1600M) but ≥ 1/2SM (800M)	B	AFMAN 15-129V1, AFI 11-202V3, FLIP
< 200 feet	<1/2SM (800M)	A	AFMAN 15-129V1, AFI 11-202V3, FLIP

Chapter 4

TROPICAL CYCLONE AND VOLCANIC ERUPTION SUPPORT

4.1. Tropical Cyclone.

4.1.1. General. The National Hurricane Center (NHC) is the governing authority for all hurricane advisories, watches, and warnings in the continental United States. While Dyess AFB is not located in a hurricane threat zone, many Dyess AFB assets travel to hurricane prone regions. Dyess AFB may also receive aircraft for bed-down from hurricane-prone installations. Hurricane season lasts from June through November; however, hurricanes have occurred at other times throughout the year. The 26 OWS will produce a Tropical Cyclone Threat Assessment Product (TC-TAP) whenever Dyess AFB is expected to receive sustained winds of GTE 35 knots during the next 96 hours as a result of a tropical cyclone. The TC-TAP uses the National Hurricane Center or Joint Typhoon Warning Centers forecast for the tropical cyclones track and intensity and does not deviate from this forecast.

4.1.2. The 7 OSS/OSW Commander.

4.1.2.1. Will use the OWS TC-TAP. The OWSs produce a TC-CAP for locations within their area of responsibility (AOR) that are expected to receive sustained winds > 35-kts during the next 96 hours as a result of a tropical cyclone. This product will be used to provide installation commander(s) with forecasts of the expected onset, intensity, end times of significant winds, and closest point of approach for the associated storm.

4.1.2.2. Ensures customers understand that 48-hour and 72-hour outlooks (or longer if issued) contain a high degree of uncertainty, are used for planning purposes only, and are subject to change. This notification must include the forecast error probability statements included in discussion bulletins or on the forecast products.

4.1.3. The Duty Forecaster.

4.1.3.1. Will use the MEFP to tailor the official tropical cyclone forecasts into a specific mission forecast product for their supported agencies. Tailoring may include factors such as specific local effects such as terrain or relative position to the storm.

4.1.3.2. Provides tropical cyclone information in flight weather MWPs for aircraft leaving Dyess AFB, if the flight path is close to the tropical cyclone.

4.1.3.3. Provides or arranges for weather support for all transient aircrew evacuated to Dyess. The transient aircrew’s home station weather flight should have contacted Dyess 7 OSS/OSW prior to the evacuation of the aircraft. If not, the forecaster contacts the aircrew’s home station weather flight before providing support.

4.2. Volcanic Eruption.

4.2.1. General. The civil Volcanic Ash Advisory Centers (VAAC) are the governing authority for all volcanic eruption ash cloud forecasts. While Dyess AFB is not located in a volcanic eruption threat zone, many Dyess AFB assets travel through volcanic eruption prone regions. The 7 OSS/OSW will utilize appropriate theater-specific volcanic ash products from the VAAC and supplement with 2 WS products and services. All VAAC and 2 WS products are available on Air Force Weather Web Service (AFW-WEBS).

4.2.2. The 7 OSS/OSW Commander.

4.2.2.1. Provides installation commander(s) with forecasts of the expected onset, intensity, end times of volcanic ash clouds using VACC theater-specific volcanic ash products, combined with 2 WS products and services.

4.2.3. The Duty Forecaster.

4.2.3.1. Provides volcanic ash cloud information in MWPs for aircraft leaving Dyess AFB, if the flight path is close to a volcanic ash cloud.

Chapter 5

WEATHER WATCHES, WARNINGS AND ADVISORIES

5.1. General.

5.1.1. Weather watches and warnings are special notices provided to supported agencies for potential or established weather conditions that pose a threat to life and/or property. Weather advisories are special notices provided to a supported agency when an established weather condition affecting its operations is occurring or forecast. All WWAs are issued within a 5 NM radius of Dyess AFB unless otherwise noted.

5.1.2. The 7 OSS/OSW is the primary source for issuing all Dyess AFB warnings and advisories, as well as the forecasted lightning potential weather watch.

5.1.3. The 26 OWS is responsible for issuing all additional forecast weather watches. During hours when the airfield is not controlled, the 26 OWS will notify the 7 OSS/OSW Standby Forecaster in the event that a forecast warning, advisory, or lightning watch needs to be issued.

5.1.3.1. The 26 OWS will issue any required WWAs in situations where there is an imminent weather event and if the following occur: the Standby Forecaster cannot report to the weather station in time to gain situational awareness, immediate conditions are too dangerous for weather flight travel, or there is an unforeseen emergency at the weather flight. An imminent event is one that is forecast to occur and must be issued to meet the desired lead-time. The 26 OWS will issue the WWA and immediately notify the Standby Forecaster.

5.1.4. All WWAs will be issued, amended, extended, and canceled IAW AFMAN 15-129V1. See **Table 5.1, 5.2 and 5.3** for a full list of Dyess AFB WWAs. Customer response and mission impacts are listed in **Attachment 5**.

Table 5.1. Dyess AFB Weather Watches.

Weather Watches		
Watch Type	**Criteria**	**Desired Lead Time**
Tornado	Tornado or Funnel Cloud within 5nm	As potential warrants
Severe Thunderstorm	Damaging Winds ≥ 50 kts associated with thunderstorms and/or Damaging Hail ≥ 3/4 inch at Dyess AFB	As potential warrants
Moderate Thunderstorm	High winds ≥ 35 kts but < 50 kts associated with thunderstorms and/or Large Hail ≥ 1/4 inch but < 3/4 inch at Dyess AFB	As potential warrants
Damaging Winds	Surface winds not associated with thunderstorms ≥ 50 kts	As potential warrants
Strong Wind	Surface winds not associated with Thunderstorms ≥ 35 kts but < 50 kts	As potential warrants
Freezing Precipitation	Any Freezing Precipitation	As potential warrants
Heavy Rain	≥ to 2 inches in 12 hours	As potential warrants
Heavy Snow	≥ to 2 inches in 12 hours	As potential warrants
Blizzard Conditions	Blizzard Conditions (All of the following must occur: 1. Surface visibility ≤ 1/4SM 2. Considerable falling and/or blowing snow 3. Sustained wind speeds or gusts ≥ 30kts 4. Duration ≥ 3 hours)	As potential warrants
Sandstorm	Sandstorm (prevailing vis ≤ 5/8sm)	As potential warrants
Lightning	Lightning potential within 5NM of the Airfield	30 Minutes

Table 5.2. Dyess AFB Weather Warnings.

Weather Warnings		
Warning Type	**Criteria**	**Desired Lead Time**
Tornado	Tornado or Funnel Cloud within 5nm	15 minutes
Severe Thunderstorm	Damaging Winds ≥ 50 kts associated with thunderstorms and/or Damaging Hail ≥ 3/4 inch at Dyess AFB	60 minutes
Moderate Thunderstorm	High winds ≥ 35 kts but < 50 kts associated with thunderstorms and/or Large Hail ≥ 1/4 inch but < 3/4 inch at Dyess AFB	60 minutes
Damaging Winds	Surface winds not associated with thunderstorms ≥ 50 kts	60 minutes
Strong Winds	Surface winds not associated with Thunderstorms ≥ 35 kts but < 50 kts	60 minutes
Freezing Precipitation	Any Freezing Precipitation	60 minutes
Heavy Rain	≥ to 2 inches in 12 hours	60 minutes
Heavy Snow	≥ to 2 inches in 12 hours	60 minutes
Blizzard Conditions	Blizzard Conditions (All of the following must occur: 1. Surface visibility < 1/4SM 2. Considerable falling and/or blowing snow 3. Sustained wind speeds or gusts > 30kts 4. Duration > 3 hours)	60 minutes
Sandstorm	Sandstorm (prevailing vis ≤ 5/8sm)	60 minutes
Lightning	Observed Lightning within 5NM of the Airfield	Observed

Table 5.3. Dyess AFB Weather Advisories.

Weather Advisories		
Criteria	**Forecast/Observed**	**Desired Lead Time**
Winds 25-34kts	Observed	Observed
Snow and/or sleet accumulation of < 2 inches in 12hrs	Forecast	120 minutes
Frost is expected to occur	Forecast	720 minutes
Thunderstorms and/or lightning within 25 NM of Dyess AFB	Observed	Observed
Thunderstorms and/or lightning within 10 NM of Dyess AFB	Observed	Observed
B1 Induction Icing Potential (Temp ≤ 47°F, and RH ≥ 50%, and/or Visible Moisture Present (rain, snow, fog)	Observed	Observed
Visibility ≤ 1/8 mile (Security Forces)	Observed	Observed
Moderate or Greater Turbulence SFC-10,000 for CAT III Aircraft (C-130), and CAT IV Aircraft (B-1B) (	Observed	Observed
Moderate or Greater Icing SFC-10,000	Observed	Observed
Low-Level Wind Shear below 2,000 Feet	Observed	Observed
Crosswind ≥ 26 Knots	Observed	Observed
(NAOC) Thunderstorms within 50 NM of Dyess AFB	Observed	Observed
(NAOC) Visibility ≤ 1 Mile	Observed	Observed
(NAOC) Moderate or Greater Turbulence Below 10K within 50 NM of KDYS	Observed	Observed
(NAOC) Moderate or Greater Icing Below 10K within 50 NM of KDYS	Observed	Observed
(NAOC) Thunderstorms with Hail < 1/2 inch	Forecast	30 minutes
(NAOC) Crosswind ≥ 12 Knots (Wet Runway)	Observed	Observed
(NAOC) Crosswind ≥ 20-25 Knots (Dry Runway)	Observed	Observed
(NAOC) Winds 25-34kts	Forecast	30 minutes

5.2. Dissemination of Watches, Warnings, and Advisories.

5.2.1. JET is the primary method of dissemination for all WWAs. The 7 OSS/OSW ensures 7 OSS/OSAT, SOF, 7 BW/CP, 7 OSS/OSAA, and NAOC (if applicable) have received all WWAs issued. Each agency is responsible for disseminating the information to the appropriate units IAW the Dyess Weather Notification Chain, **Figure 5.1** For an example of a disseminated WWA see **Figure 5.2,** through **Figure 5.4** Any agency having problems with their JET software will contact the JET System Manager at 696-2524.

5.2.2. Back-up dissemination of all WWAs will be made via telephone to 7 OSS/OSAT, SOF, 7 BW/CP, 7 OSS/OSAA, and NAOC (if applicable).

Figure 5.1. Dyess Weather Notification Chain.

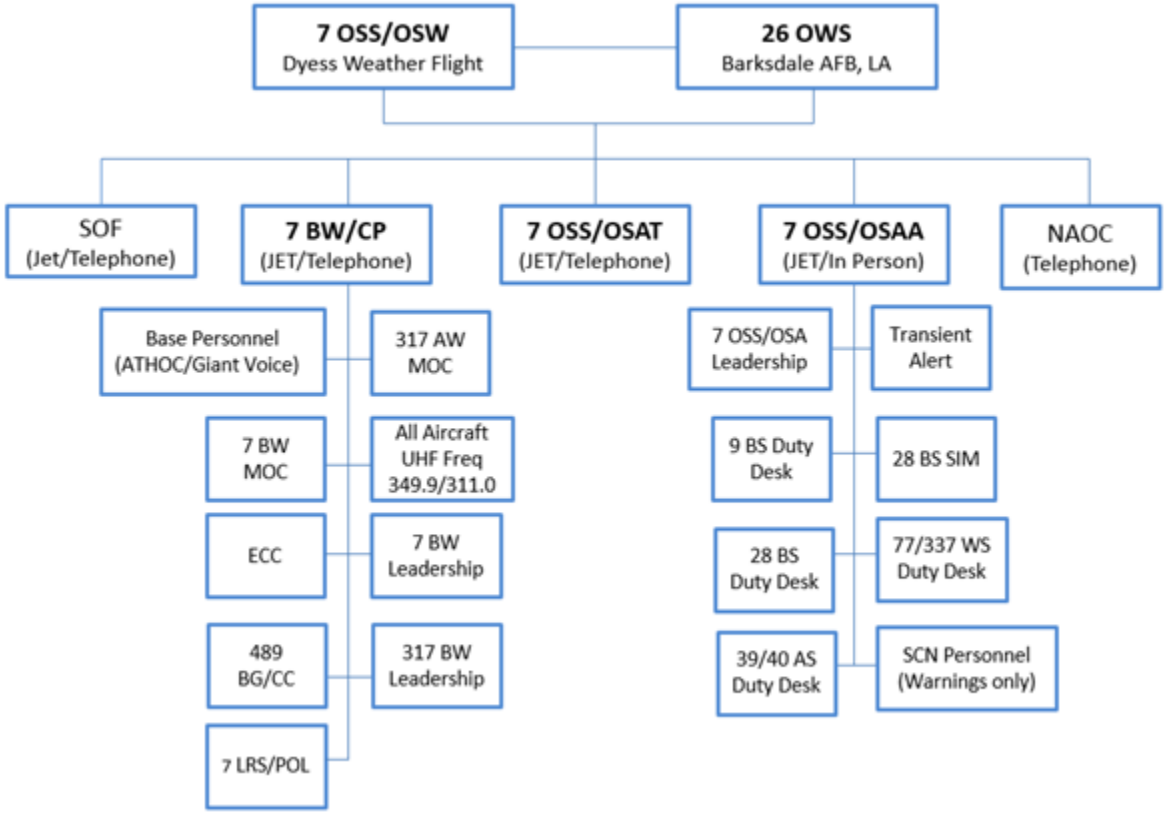


Figure 5.2. Disseminated Weather Watch Example.

DYESS AFB WEATHER WATCH 08-001

VALID 12/1000Z (12/0500L) TO 12/1300Z (12/0800L)

THE POTENTIAL EXIST FOR LIGHTNING TO OCCUR WITHIN 5 NM OF DYESS AFB. IF LIGHTNING IS OBSERVED WITHIN 5 NM A WARNING WILL BE ISSUED.

Figure 5.3. Disseminated Weather Warning Example.

DYESS AFB WEATHER WARNING 08-003

VALID 12/1000Z (12/0500L) TO UFN (UFN)

LIGHTNING IS OCCURING WITHIN 5NM OF DYESS AFB. THIS WARNING UPGRADES WEATHER ADVISORY 08-002.

Figure 5.4. Disseminated Weather Advisory Example.

DYESS AFB WEATHER ADVISORY 08-002

VALID 12/0930Z (12/0430L) TO UFN (UFN)

OBSERVED THUNDERSTORMS AND OR LIGHTNING EXISTS WITHIN 10NM OF DYESS AFB.

5.2.3. The 7 OSS/OSAA will relay all weather warnings via the Secondary Crash Net (SCN). The following agencies will be notified via SCN:

5.2.3.1. Fire Department

5.2.3.2. Security Forces

5.2.3.3. Hospital

5.2.3.4. Command Post

5.2.3.5. The 7 BW MOC

5.2.3.6. The 317 AW MOC

5.2.3.7. The 7 BW Safety

5.2.3.8. The 317 AW Safety

5.2.3.9. CE Customer Service Desk

5.2.3.10. CE Readiness

5.2.3.11. The 7 MSG

5.2.3.12. EOD

5.3. Weather Warning Support for Snyder Electronic Scoring Site.

5.3.1. The 26 OWS issues Point Weather Watches and Warnings (PWW) for the Snyder Electronic Scoring Site Manager using criteria in **Tables 5.4 and 5.5**, IAW the Dyess AFB IDP. The 26 OWS disseminates to DSN 461-8915 and (325) 696-8915, Monday-Thursday 0800-0230 and Friday 0730-1600, excluding federal holidays.

5.3.2. During a 26 OWS outage, the 7 OSS/OSW will assume PWW support for Snyder Range and issue PWWs IAW the above paragraph.

Table 5.4. Snyder, TX Weather Watches.

Watch Type	Criteria	Desired Lead Time
Tornado	Tornado or Funnel Cloud within 5nm	As potential warrants
Severe Thunderstorm	Severe Thunderstorm: Damaging Winds greater than or equal to 50 kts associated with thunderstorms and/or Damaging Hail greater than or equal to 3/4 inch	As potential warrants
Moderate Thunderstorm	High winds greater than or equal to 35 kts but less than 50 kts associated with thunderstorms and/or Large Hail greater than or equal to 1/4 inch but less than 3/4 inch	As potential warrants
Damaging Winds	Surface winds not associated with thunderstorms greater than or equal to 50 kts	As potential warrants
Strong Winds	Surface winds not associated with thunderstorms greater than or equal to 35 kts but less than 50 kts	As potential warrants
Freezing Precipitation	Any Freezing Precipitation	As potential warrants
Heavy Snow	Heavy snow accumulation greater than or equal to 2 inches in 12 hours	As potential warrants
Blizzard Conditions	All of the following must occur: a) Surface visibility less than or equal to ¼ mile/400 meters b) Considerable falling and/or blowing snow c) Sustained wind speeds or gusts >30 knots d) Duration > 3 hours	As potential warrants
Heavy Rain	Heavy rain accumulation greater than or equal to 2 inches in 12 hours	As potential warrants
Sandstorm	Sandstorm (prevailing vis < 5/8sm)	As potential warrants
Lightning	Lightning potential within 5NM	30 minutes

Table 5.5. Snyder, TX Weather Warnings.

Type	Criteria	Desired Lead Time
Tornado	Tornado or Funnel Cloud within 5nm	15 minutes
Severe Thunderstorm	Severe Thunderstorm: Damaging Winds greater than or equal to 50 kts associated with thunderstorms and/or Damaging Hail greater than or equal to 3/4 inch	60 minutes
Moderate Thunderstorm	High winds greater than or equal to 35 kts but less than 50 kts associated with thunderstorms and/or Large Hail greater than or equal to 1/4 inch but less than 3/4 inch	60 minutes
Damaging Winds	Surface winds not associated with thunderstorms greater than or equal to 50 kts	60 minutes
Strong Winds	Surface winds not associated with thunderstorms greater than or equal to 35 kts but less than 50 kts	60 minutes
Freezing Precipitation	Any Freezing Precipitation	60 minutes
Heavy Snow	Heavy snow accumulation greater than or equal to 2 inches in 12 hours	60 minutes
Blizzard Conditions	All of the following must occur: a) Surface visibility less than or equal to ¼ mile/400 meters b) Considerable falling and/or blowing snow c) Sustained wind speeds or gusts >30 knots d) Duration > 3 hours	60 minutes
Heavy Rain	Heavy rain accumulation greater than or equal to 2 inches in 12 hours	60 minutes
Sandstorm	Sandstorm (prevailing vis < 5/8sm)	60 minutes
Lightning	Lightning is occurring within 5NM	Observed

Chapter 6

SEVERE WEATHER ACTION PLAN

6.1. General.

6.1.1. Severe Weather Action Plan (SWAP) outlines procedures to recall 7 OSS/OSW Standby Forecaster and Severe Weather Action Team (SWAT) personnel in the event of equipment outages, inclement weather where augmentation of the observing equipment is required, or any other emergency requiring weather support.

6.1.2. These procedures are in effect 24 hours per day and are required to help mitigate the threat of severe and/or mission limiting weather. The procedures document a two-tier system with the 7 OSS/OSW and the 26 OWS sharing RM responsibilities for SWAP and resource protection. The 26 OWS is the primary forecasting and weather watch agency and has personnel on duty 24 hours per day.

6.1.3. During scheduled airfield openings personnel will report in uniform.

6.2. SWAP Guidelines. The 7 OSS/OSW performs SWAP responsibilities as defined in AFMAN 15-129V1/V2, AFMAN 10-206, the Dyess AFB IDP, and local weather procedures.

6.2.1. The 7 OSS/OSW will conduct and document annual exercises of the SWAP and ensure validity of plans to respond to severe weather. Real world events meet this requirement if properly evaluated and documented, to include lessons learned. This will be done on at least a semi-annual basis.

6.2.2. SWAP Activation. The on-duty/standby weather forecaster will notify the Flight Chief and/or Flight Commander and the SWAT Leader when one or more of the conditions in **Table 6.1** are expected, are occurring, or if the ops tempo hinders them from performing all required duties. The SWAT Leader is identified on the current duty schedule.

6.2.2.1. Once notified, the SWAT Leader will discuss the meteorological situation, manning requirements, and initiate the recall (or placement on standby) of additional personnel. If deemed necessary, the Standby Forecaster will start the SWAP Events Log and the SWAT Leader will report to the weather station NLT 30 mins after notification.

6.2.2.2. The SWAT Leader will effectively use the risk management process to prioritize what tasks need to be accomplished immediately. This will ensure the most effective decision has been made in helping provide resource protection to Dyess AFB and its assets.

6.3. Standby Forecaster Duties. The forecaster will have the standby cell phone (325-370-7481) with them at all times. The forecaster will also ensure the standby laptop is operational prior to their standby shift. Should issues with the laptop arise, the Standby Forecaster will be required to report to the weather station to issue all WWAs.

6.3.1. The Standby Forecaster will use **Figure 6.1** and **Table 6.1** to determine when to report to the weather station. If it is determined the Standby Forecaster is to report the weather station, they must report NLT 30 mins after notification of a WWA being issued. Once at the weather station, they will maintain normal operations. The 7 OSS/OSW will remain open and SWAP will remain in effect until the expiration or cancellation of WAAs listed in **Table 6.1**

6.3.2. The forecaster will supplement the FMQ-19 for mandatory elements IAW AFMAN 15-111.

6.3.3. The 7 BW/CP will contact the Standby Forecaster at 325-370-7481 in the event the airfield opens and it was not previously scheduled.

6.3.3.1. Inbound Aircraft: Forecasters will arrive one hour prior to aircraft arrival time or when the airfield is open, whichever is earlier.

6.3.3.2. Outbound Aircraft: Forecasters will arrive three hours prior to any briefing required and stay until the airfield closes.

6.3.4. The Standby Forecaster will ensure a TAF is issued at least three hours prior to the airfield opening.

Figure 6.1. Airfield Closure Reporting Flow Chart.

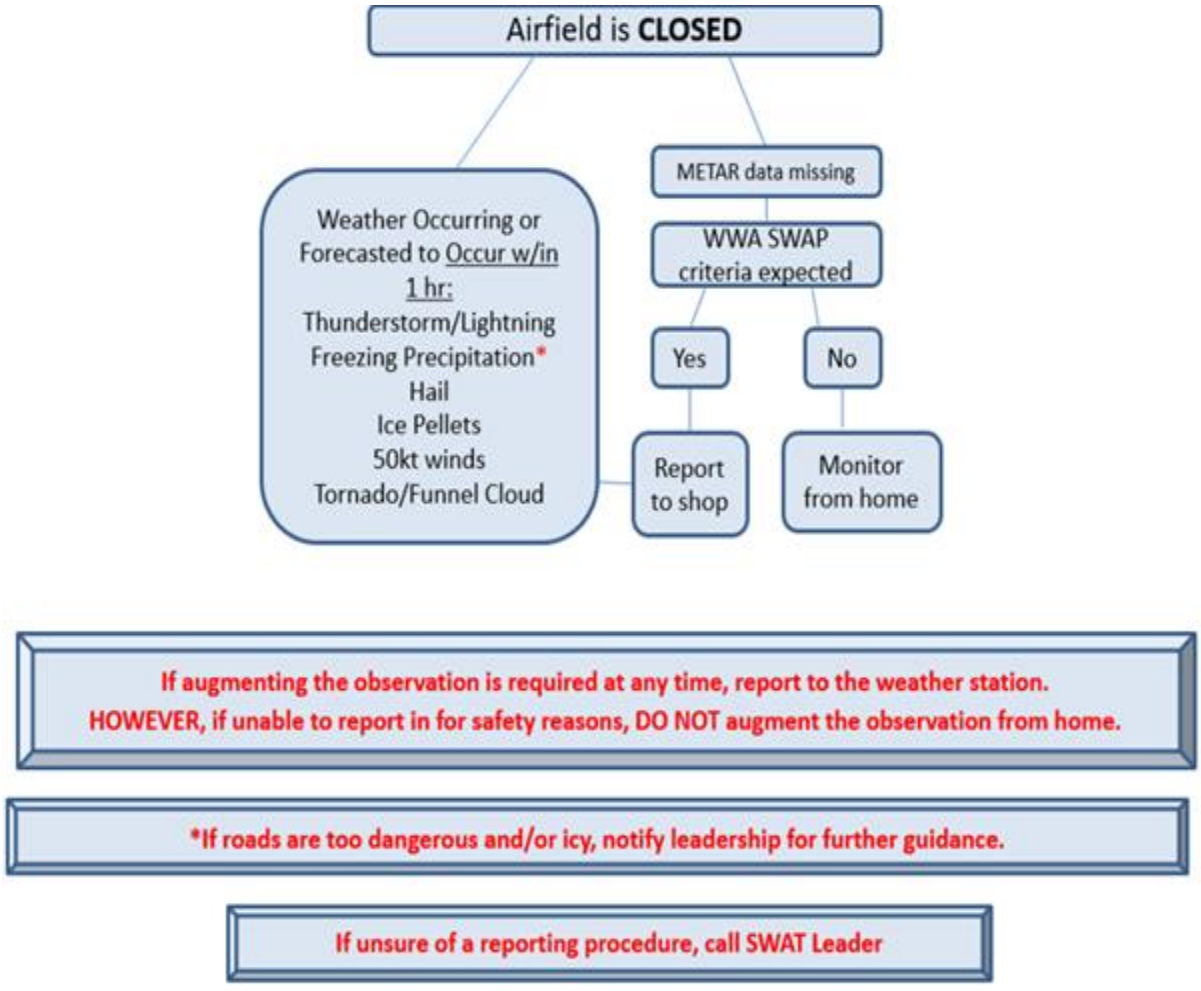


Table 6.1. Airfield Closure Standby and SWAP Criteria.

Issued by: Weather Flight Standby Forecaster	Standby Action: Stay home / Monitor situation with standby Laptop	
Criteria	**Forecast/Observed**	**Desired Lead Time**
Advisory: Winds 25-34kts	Observed	Observed
Advisory: Thunderstorms and/or lightning within 25 NM of Dyess AFB **(Report to weather station if thunderstorms are heading towards KDYS)**	Observed	Observed
Advisory: Thunderstorms and/or lightning within 10 NM of Dyess AFB **(Report to weather station if thunderstorms are heading straight for KDYS)**	Observed	Observed
Advisory: B-1 Induction Icing Potential (Temp ≤ 47°F, and RH ≥ 50%, and/or Visible Moisture Present (rain, snow, fog)	Observed	Observed
Advisory: Visibility ≤ 1/8 mile (Security Forces)	Observed	Observed
Advisory: Snow and/or sleet accumulation of < 2 inches in 12hrs (**Report to weather station if expecting sleet)**	Forecast	2 hours
Advisory: Frost is expected to occur	Forecast	12 hours
Warning: Surface winds not associated with Thunderstorms ≥ 35 kts but < 50 kts	Forecast	60 minutes
Warning: Heavy Rain (≥ to 2 inches in 12 hours)	Forecast	60 minutes
Warning: Heavy Snow (≥ to 2 inches in 12 hours)	Forecast	60 minutes
Warning: Sandstorm (prevailing vis ≤ 5/8sm)	Forecast	60 minutes
Warning: Blizzard Conditions (>3hrs of sustained > 30kt and < 1/4sm)	Forecast	60 minutes
Advisories in red text require the 26 OWS to notify the Standby Forecaster.		

Issued by: 26 OWS		Standby Action: Stay home / Monitor situation with standby Laptop
Watch Type	**Criteria**	**Desired Lead Time**
Severe Thunderstorm	Damaging Winds ≥ 50 kts associated with thunderstorms and/or Damaging Hail ≥ 3/4 inch at Dyess AFB	As potential warrants
Moderate Thunderstorm	High winds ≥ 35 kts but < 50 kts associated with thunderstorms and/or Large Hail ≥ 1/4 inch but < 3/4 inch at Dyess AFB	As potential warrants
Damaging Winds	Surface winds not associated with thunderstorms ≥ 50 kts	As potential warrants
Strong Wind	Surface winds not associated with Thunderstorms ≥ 35 kts but < 50 kts	As potential warrants
Freezing Precipitation	Any Freezing Precipitation	As potential warrants
Heavy Rain	≥ to 2 inches in 12 hours	As potential warrants
Heavy Snow	≥ to 2 inches in 12 hours	As potential warrants
Blizzard Conditions	Blizzard Conditions (≥3hrs of sustained ≥ 30kt and ≤ 1/4sm)	As potential warrants
Sandstorm	Sandstorm (prevailing vis ≤ 5/8sm)	As potential warrants
Issued by: 26 OWS		**Standby Action: Report to weather station**
Watch Type	**Criteria**	**Desired Lead Time**
Tornado	Tornado or Funnel Cloud within 5nm	As potential warrants
Watches listed above in red text denote a weather watch, which, if issued by the 26 OWS, will require the Standby Forecaster to be notified.		
Issued by: Weather Flight Standby Forecaster		**Standby Action: Report to weather station**
Warning Type	**Criteria**	**Desired Lead Time**
Tornado	Tornado or Funnel Cloud within 5nm	15 minutes
Severe Thunderstorm	Damaging Winds ≥ 50 kts associated with thunderstorms and/or Damaging Hail ≥ 3/4 inch at Dyess AFB	60 minutes
Moderate Thunderstorm	High winds ≥ 35 kts but < 50 kts associated with thunderstorms and/or Large Hail ≥ 1/4 inch but < 3/4 inch at Dyess AFB	60 minutes
Damaging	Surface winds not associated with thunderstorms ≥	60 minutes

Winds	50 kts	
Freezing Precipitation	Any Freezing Precipitation	60 minutes
Lightning	Observed Lightning within 5NM of the Airfield (Includes all thunderstorm types: general, moderate, and severe)	Observed
Lightning Watch	Lightning potential within 5NM of the airfield (Includes all thunderstorm types: general, moderate, and severe)	30 minutes
Criteria listed in red text require the 26 OWS to notify the Standby Forecaster.		
(NAOC) Thunderstorms within 50 NM of Dyess AFB	Observed	Observed
(NAOC) Visibility ≤ 1 Mile	Observed	Observed
(NAOC) Moderate or Greater Turbulence Below 10K within 50 NM of KDYS	Observed	Observed
(NAOC) Moderate or Greater Icing Below 10K within 50 NM of KDYS	Observed	Observed
(NAOC) Thunderstorms with Hail < 1/2 inch	Forecast	30 minutes
(NAOC) Crosswind ≥ 12 Knots (Wet Runway)	Observed	Observed
(NAOC) Crosswind ≥ 20-25 Knots (Dry Runway)	Observed	Observed
(NAOC) Winds 25-34kts	Forecast	30 minutes
If NAOC comes unexpectedly on a weekend, the Standby Forecaster will issue any of the above NAOC criteria from home and then immediately report to the weather station. SWAP will also be notified of NAOC's arrival and the Weather Flight will assume 24 hours operations until NAOC departure.		

Dyess AFB SWAP Activation Criteria		
Type	**Criteria**	**Notify SWAT Leader**
Watch / Warning	Tornado or Funnel Cloud within 5nm	When Issued
Watch / Warning	Severe Thunderstorm: Damaging Winds ≥ 50 kts associated with thunderstorms and/or Damaging Hail ≥ 3/4 inch at Dyess AFB	When Issued
Watch / Warning	Moderate Thunderstorm: High winds ≥ 35 kts but < 50 kts associated with thunderstorms and/or Large Hail ≥ 1/4 inch but < 3/4 inch at Dyess AFB	When Issued
Watch / Warning	Damaging Winds: Surface winds not associated with thunderstorms ≥ 50 kts	When Issued
Watch / Warning	Any Freezing Precipitation	When Issued
Watch / Warning	Heavy Rain ≥ to 2 inches in 12 hours	When Issued

Watch / Warning	Heavy Snow ≥ to 2 inches in 12 hours	When Issued
Watch / Warning	Blizzard Conditions (>3hrs of sustained > 30kt and < 1/4sm)	When Issued
Advisory	Thunderstorms Observed within 25NM	When Issued
Advisory	Moderate or greater thunderstorms observed with 10NM	When Issued
Advisory	Snow and/or sleet with accumulation < 2 inches in 12 hours	When Issued
In the event of unforeseen circumstances, such as a communications line failure, a critical equipment outage at either the 26 OWS or the 7 OSS/OSW. Note: At a minimum open a ticket and log out the equipment.		As Required
Any other event or situation the duty forecaster or 26 OWS deems necessary		As Required

6.4. OPREP-3 BEELINE Reporting. When the following weather occurs and results in damage, the 7 OSS/OSW will provide an OPREP-3 to 7 BW/CP by e–mail, or runner using the format in **Table 6.2** **NOTE:** 7 BW/CP has 15 minutes to send a first response. Be prepared to pass observed weather conditions at time of event.

6.4.1. Weather-related aircraft mishaps.

6.4.2. Tornadoes.

6.4.3. Winds 50 knots or greater (to include gusts).

6.4.4. Hail ¾ inch or larger.

6.4.5. Lightning strikes.

6.4.6. Snow storms.

6.4.7. Aircraft evacuations to one or more bases/posts due to tropical cyclones, hurricanes, or flooding.

6.4.8. Natural disasters such as earthquakes, floods, and volcanic eruptions that result in casualties and/or property damage.

6.4.9. Weather-related airborne incidents (i.e., lightning strikes or hail damage).

Table 6.2. OPREP-3 BEELINE.

TYPE OF REPORT: *(i.e., OPREP-3/BEELINE)*
7 OSS/OSW DYESS AFB, TX
TYPE OF WEATHER OR WEATHER-RELATED EVENT OR INCIDENT: *(i.e., 75 knot gust, hail damage to inflight aircraft)*
DATE, TIME, AND LOCATION OF EVENT OR INCIDENT: *(i.e., 24 Nov 2010, 2115Z, IR 178 or 15 miles south Dyess)*
REPORT(S) OF ACTUAL OBSERVED WEATHER OR WEATHER-RELATED EVENT(S) OR INCIDENT(S): *(i.e., Aircrew reported IFE due to hail damage or ABI reported 1in hail)*
PRELIMINARY ESTIMATES OF CASUALTIES AND/OR PROPERTY DAMAGE (IF AVAILABLE): *(i.e., Security Forces reported roof missing on commissary)*
SUMMARY OF RELEVANT FORECAST PRODUCTS:
TEXT OF MWP AND TAF IN EFFECT AT THE TIME OF THE EVENT:
KDYS MWP 151500….
KDYS AMD 151817 AMD, etc….
WEATHER WATCHES AND WARNINGS ISSUED:
DYESS AFB WEATHER LIGHTING WATCH #06-002
VALID 20/2000Z (20/1600L) to 20/2300Z (20/1900L)
Issued at: (time)
Lead time: (time)
Desired lead time: (time)
DYESS AFB WEATHER 50 KNOT WIND WARNING #06-003
VALID 20/2000Z (20/1600L) to 20/2300Z (20/1900L)
Issued at: (time)
Lead time: (time)
Desired lead time: (time)
OPERATIONAL STATUS OF METEOROLOGICAL AND COMMUNICATIONS NETWORKS: *(i.e., Base wide power outage, UPS in use, or all observing equipment 100% operational. NEXRAD was operating at full capacity. JET/PMSV/LAN was 100% operational)*
MISCELLANEOUS REMARKS (IF NECESSARY):
CONTACT INFOMRATION FOR 7 OSS/OSW DYESS AFB, TX:
7 OSS/OSW
674 Alert Ave
Dyess AFB, TX 79607
DSN: 312-461-2501/2524
Comm: 325-696-2501/2524
7OSSA3W@us.af.mil

Chapter 7

STAFF WEATHER/CLIMATOLOGY SUPPORT

7.1. General. The Staff Weather Element provides services from 0800L-1600L, Monday through Friday, except for federal holidays and when closed due to airfield closure.

7.2. Crisis Action Team/Emergency Operations Center. The 7 OSS/OSW presents Crisis Action Team and Emergency Operations Center briefings to the 7 BW/CC and 317 AW/CC or staff agencies on an "as-needed" basis. The 7 OSS/OSW will ensure personnel preparing and presenting these briefings have an appropriate line badge to enter the Dyess command post. The briefings contain a minimum of the following information, presented in a power-point format:

7.2.1. Current Satellite Picture (IR/VIS) of the entire CONUS

7.2.2. Current Radar Imagery

7.2.3. Current and next day weather

7.2.4. Weather Effects on Operations Slide

7.2.5. Dyess 5-Day Forecast

7.3. Mobility Concept Briefing. The 7 OSS/OSW provides a briefing at all Mobility Concept Briefings as necessary. At a minimum, the briefings will include:

7.3.1. Dyess AFB Departure Forecast

7.3.2. Deployed Area Climatology

7.3.3. Destination Arrival Forecast

7.4. Instrument Refresher Course (IRC). A 7 OSS/OSW representative provides a local weather effects briefing to all IRC classes as requested.

7.5. Climatology Support.

7.5.1. Monthly climatic data for Dyess AFB is available to base agencies upon request.

7.5.2. The 7 OSS/OSW coordinates with the 14 WS for climatology studies as well as access to and assistance with raw climatology data.

7.6. Air Traffic Control Training/Orientation. The 7 OSS/OSW provides training and certification for 7 OSS/OSAT personnel on METAR code, TAF code, and visibility determination.

Chapter 8

RECIPROCAL SUPPORT

8.1. General. The 7 OSS/OSW provides weather support to and receives support from various agencies on Dyess AFB.

8.2. Support to/from 7 BW/317 AW Staff.

8.2.1. The 7 OSS/OSW:

8.2.1.1. Advises the 7 BW/CC and 317 AW/CC and staffs on all matters pertaining to weather.

8.2.1.2. Presents weather briefings at requested meetings and/or briefings.

8.2.1.3. Keeps the 7 BW/CC and 317 AW/CC informed of the status of weather phenomena, particularly tropical cyclones, severe weather, winter storms, threatening 7 BW and 317 AW resources.

8.2.1.4. Provides informational e-mails to the 7 BW/CC, 317 AW/CC, GP/CCs and SQ/CCs prior to significant weather events that will impact the base; to include winter weather and severe weather.

8.2.2. 7 BW/CCA and 317 AW/CCE ensures the 7 OSS/OSW is notified of all scheduled meetings where a weather briefing is requested.

8.2.3. Should a scheduling conflict arise where 7 OSS/OSW has limited manpower to support concurrent 7 BW and 317 AW staff support requirements, 7 OSS/OSW will utilize **Table 1.1**, Duty Priority List, to determine which support takes precedence. If neither type of support takes priority, the 7 BW support will take precedence.

8.3. Support to/from 7 OSS/OSA.

8.3.1. Coordinates with 7 OSS/OSW on all changes to DYESSAFBI 11-250, Base Flying Procedures.

8.3.2. Provides information emails to supervisors prior to significant weather events that will impact the base; to include winter weather (snowfall or ice events) and severe weather.

8.4. Support to/from Airfield Management (7 OSS/OSAA).

8.4.1. The 7 OSS/OSW:

8.4.1.1. Notifies 7 OSS/OSAA when changes in weather station operations require an update to the FLIP manuals, IFR Supplement, or other Federal Aviation Administration (FAA) publications.

8.4.1.2. Notifies 7 OSS/OSAA when a building evacuation is required.

8.4.1.3. Provides information regarding any outages on the PMSV.

8.4.1.4. Provides notification of required WWAs via the JET system, in person or by back-up methods.

8.4.2. The 7 OSS/OSAA:

8.4.2.1. Notifies the forecaster of changes in the Runway Surface Condition/Runway Condition Reading (RCS/RCR).

8.4.2.2. Notifies the forecaster via SCN of all notifications over the primary crash alarm system (PCAS).

8.4.2.3. Provides back-up support for transmission of WWAs, via the SCN.

8.4.2.3.1. Relays all tornado weather warnings/watches via the SCN.

8.4.2.4. Notifies the 7 OSS/OSW of locally initiated changes to the FLIP affecting landing minimums and coordinates weather updates for the FLIP, IFR supplement, with Air Force Flight Standards Agency (AFFSA).

8.4.2.5. Notifies the 7 OSS/OSW when evacuation of the operations section is required.

8.4.2.6. Assists with the 7 OSS/OSW in executing building FPCON procedures and preparation for major exercises, and contingencies.

8.4.2.7. Issues a NOTAM for any PMSV outage lasting longer than 1 hour.

8.4.2.8. Provides up-to-date FLIP and FAA publications.

8.5. Support to/from Air Traffic Control (7 OSS/OSAT). NOTE: This section serves as the Cooperative Weather Watch (CWW) agreement that is required by AFMAN 15-111.

8.5.1. The 7 OSS/OSW:

8.5.1.1. Provides Dyess AFB surface weather observations, TAF, and notification of required WWAs via the JET system or back-up methods.

8.5.1.2. Notifies 7 OSS/OSAT when the PMSV radio is inoperative so they can include an outage announcement on the Automatic Terminal Information Services (ATIS) recording.

8.5.1.3. When augmenting observations, use the Dyess tower values of prevailing or sector visibility as a guide in determining the surface visibility when the view of portions of the horizon are obstructed by buildings, aircraft, etc. and re-evaluate surface prevailing visibility upon initial receipt of a differing tower value and subsequent reportable changes at the Dyess Tower level.

8.5.1.4. Provides initial training and certification to 7 OSS/OSAT controllers to take limited weather and visibility observations. Documents Initial Limited Weather Observation training on AF Form 3622, Air Traffic Control/Weather Certification and Rating Record (LRA), IAW AFI13-204V3. In addition, provides refresher training, as necessary, ISO the limited observation program.

8.5.1.5. Assists 7 OSS/OSAT in visibility marker identification updates.

8.5.1.6. Notifies 7 OSS/OSAT, as soon as possible, when conditions warrant the evacuation of the 7 OSS/OSW to the tower facility.

8.5.1.7. Weather forecasters reevaluate the weather conditions whenever a reliable source (i.e., the 7 OSS/OSAT, pilots, local law enforcement, etc.,) reports weather conditions different from the last disseminated observation (i.e., different ceiling height, visibility, present weather). Based on the reevaluation of the different weather conditions reported and local policy, weather personnel will:

8.5.1.7.1. Generate a SPECI observation IAW AFMAN 15-111.

8.5.1.7.2. Include the differing conditions in the next required METAR, if the conditions alone do not warrant immediate dissemination.

8.5.1.8. Send a representative, typically the flight commander or NCOIC, to each Airfield Operations Board (AOB) meeting.

8.5.1.9. Provides an updated Entry Access Letter (EAL) to the Dyess Tower Facility Chief each quarter, or as changes in flight personnel occur.

8.5.1.10. Coordinates at least 24 hours in advance with the 7 OSS/OSA Commander prior to conducting practice evacuation exercises in the Dyess Tower facility.

8.5.1.11. Participates in an evacuation exercise to the Dyess Tower facility at least once a year.

8.5.2. The 7 OSS/OSAT:

8.5.2.1. Performs a CWW with the 7 OSS/OSW IAW with AFMAN 15-111 and AFI13-204V3.

8.5.2.1.1. Schedules all 7 OSS/OSAT personnel for weather familiarization and visibility observation training with the 7 OSS/OSW NCOIC or Training Manager.

8.5.2.1.2. Requires certified Dyess tower personnel to make tower prevailing and sector visibility observations when the reported surface prevailing visibility is less than 4 miles.

8.5.2.1.3. Reports changes in Dyess tower prevailing visibility to the local weather unit when tower visibility is less than 4 SM (6000 meters) and is different from the surface prevailing visibility.

8.5.2.1.4. Notifies the 7 OSS/OSW immediately if they see lightning, funnel clouds, or spot a tornado.

8.5.2.1.5. Relays all pertinent information to the 7 OSS/OSW passed on from aircrew to include Pilot Reports (PIREPS) and any occurrence of previously unreported weather conditions that could affect flight safety or be critical to the safety or efficiency of other local operations and resources. ATC/supervisors of flying will relay pilot report information to weather not later than 5 minutes after receipt.

8.5.2.1.6. Notifies the 7 OSS/OSW when it is necessary to use inactive runway sensors when authorizing aircraft to land using inactive runway.

8.5.2.1.7. Notifies 7 OSS/OSW of any AFAS outages or problems and informs 7 OSS/OSW of back-up procedures for obtaining weather information.

8.5.2.1.8. Notifies 7 OSS/OSW if they need to change the settings on the runway or airfield lighting.

8.5.2.1.9. Provides weather personnel an air traffic indoctrination briefing.

8.5.2.1.10. Conducts a daily PMSV radio check with the 7 OSS/OSW.

8.5.2.1.11. Relays all Dyess watch/warning/advisories to all arriving and departing aircraft via the ATIS.

8.5.2.1.12. Provides a workspace to include a desk, phone, and LAN drop on the 4th floor, Bldg. 4300, Rm 401, for 7 OSS/OSW evacuation operations.

8.5.2.1.13. Allows unescorted access to all personnel listed on the most current EAL.

8.5.2.1.14. Provide the 7 OSS/OSW with the current Dyess tower facility access codes and notify the 7 OSS/OSW of any changes to the access codes.

8.5.2.1.15. Allows the 7 OSS/OSW to practice evacuation exercises at least once a year.

8.6. Support to/from Supervisor of Flying (SOF)/Fox 3.

8.6.1. The 7 OSS/OSW:

8.6.1.1. Briefs the SOF/Fox 3, IAW local procedures, approximately one hour prior to the first scheduled B-1 takeoff, or two hours prior to first B-1 takeoff during periods of inclement weather (IAW AFI 11-418_DYESSAFBSUP, Paragraph 9.3.1.1.1.). The Subsequent SOF/Fox 3 will receive a briefing as they come on duty.

8.6.1.2. Provides the SOF/Fox 3 a copy of the MWP.

8.6.1.3. Notifies the SOF/Fox 3 of weather that will impact low-level routes.

8.6.1.4. Requests PIREPS and asks for updated reports from aircraft with which they have contact.

8.6.1.5. Notify the SOF/Fox 3 on the issuance of any WWAs.

8.6.1.6. Notify the SOF/Fox 3 of any changing weather conditions deemed to be significant to flying operations.

8.6.1.7. Provides METWATCH for the identified primary and alternate airfield.

8.6.1.8. Presents upcoming seasonal weather challenges at quarterly SOF/Fox 3 meetings.

8.6.2. The SOF/Fox 3:

8.6.2.1. Makes the determination to close or open a low-level routes based on weather information provided by the 7 OSS/OSW.

8.6.2.2. Identifies a primary and alternate airfield to 7 OSS/OSW.

8.7. Support to/from 7 OSS Current Operations (7 OSS/OSO).

8.7.1. The 7 OSS/OSW:

8.7.1.1. Submits inputs to 7 OSS/OSO on all 7 BW plans as required.

8.7.1.2. Provides climatological information and long range forecasts as coordinated.

8.7.2. The 7 OSS/OSO:

8.7.2.1. Coordinates environmental inputs to all applicable plans with the 7 OSS/OSW.

8.7.2.2. Provides information on software updates to EPEX and assist with EPEX problems.

8.8. Support to/from Dyess Command Post (7 BW/CP).

8.8.1. The 7 OSS/OSW:

8.8.1.1. Provides required WWAs via the JET system or back-up methods.

8.8.1.2. Provides additional information as requested, to include more detailed information on severe weather forecasts to include the speed and direction of movement of forecast tornadic activity that may impact Dyess AFB.

8.8.1.3. Provides local weather operations orientation to 7 BW/CP controllers.

8.8.1.4. Provides information pertaining to severe weather events for use in OPREP-3 reports.

8.8.1.5. Provides the 7 BW/CP with a current Standby Forecaster cell phone number.

8.8.1.6. Informs the 7 BW/CP when a low level route has been closed/opened by the SOF/Fox 3 due to weather.

8.8.1.7. Notifies The 7 BW/CP of any potential snowfall or ice event.

8.8.2. The 7 BW/CP:

8.8.2.1. Coordinates notification of WWA information with base agencies not notified by the 26 OWS, 7 OSS/OSW, or another source.

8.8.2.2. Once notified by 7 OSS/OSW or 26 OWS, further disseminates WWAs to base agencies and personnel via the AtHoc notification system.

8.8.2.3. Relays any PIREPs or reports of hazardous weather to the 7 OSS/OSW over the hotline.

8.8.2.4. Immediately notifies the 7 OSS/OSW Standby Forecaster (325-370-7481) then the airfield is closed and needs reopening for an unscheduled aircraft departure or landing. NOTE: The forecaster will need to open NLT 60 minutes prior to a scheduled departure or landing, or two hours in case inclement weather for the SOF and/or Top 3 (IAW AFI 11-418_DYESSAFBSUP, Paragraph 9.3.1.1.1.

8.8.2.5. When the 7 OSS/OSW is closed, notifies the Standby Forecaster at 325-370-7841 when any WWA is issued by the 26 OWS for Dyess AFB.

8.8.2.6. Notifies the 7 OSS/OSW of CAT activation and/or changes in assembly times.

8.8.2.7. Notifies the 7 OSS/OSW of all low-level route reports sent in by aircrew.

8.8.2.8. Contacts aircrews to relay weather information and updates, as provided by the 26 OWS and the 7 OSS/OSW.

8.8.2.9. Activates the siren over the Giant Voice in the event of a tornado warning for Dyess AFB.

8.8.2.10. Transmits all OPREP-3 reports IAW AFMAN 10-206.

8.9. Support to/from Wing Safety (7 BW/SE, 317 AW/SE).

8.9.1. The 7 OSS/OSW:

8.9.1.1. Upon notification of an aircraft mishap or incident, collects all weather data necessary to investigate the mishap, even if weather is not considered a factor in the incident.

8.9.1.2. Provides weather information to the 7 BW/SE and/or 317 AW/SE as required for aircraft and ground mishap investigations.

8.9.1.3. Provides weather briefings at quarterly flying safety meetings as coordinated. These briefings are typically in PowerPoint format and include upcoming seasonal hazards and updates on weather station operations.

8.9.2. The 7 BW/SE and the 317 AW/SE:

8.9.2.1. Notifies the 7 OSS/OSW of any aircraft mishaps or incidents when weather assistance is required.

8.9.2.2. Notifies the 7 OSS/OSW of any ground mishaps or damage on Dyess AFB caused by weather.

8.9.2.3. Requests and coordinates weather briefings at quarterly flying safety meetings at least one week in advance.

8.10. Support to/from Public Affairs (7 BW/PA).

8.10.1. The 7 OSS/OSW:

8.10.1.1. Provides 7 BW/PA seasonal articles regarding weather affecting hazards here at Dyess. The 7 OSS/OSW Flight Commander, WWO or Flight Chief provides this information.

8.10.2. The 7 BW/PA:

8.10.2.1. Provides 7 OSS/OSW a list of the 7 BW/PA 24-hour points of contact, updated monthly.

8.10.2.2. Coordinates with the 7 OSS/OSW on weather related stories for the base paper.

8.11. Support to Operations Group Commander (7 OG/CC, 317 OG/CC).

8.11.1. The 7 OSS/OSW:

8.11.1.1. Is responsible for all matters pertaining to weather support to the 7 OG and for keeping the 7 OG/CC and 317 OG/CC (or designated representative) informed of all weather related conditions which pose a threat to Dyess AFB and/or to 7 BW resources deployed to other locations.

8.12. Support to/from 9 BS, 28 BS, 337 TES, 77 WPS, and 489 BG.

8.12.1. The 7 OSS/OSW:

8.12.1.1. Provides support IAW **Chapter 1-7** of this instruction.

8.12.1.2. Provides a formal briefer for specific missions, when advanced coordination has been made and if requested by the mission commander.

8.12.1.3. Provides climate data to mission commanders for mission planning.

8.12.1.4. When requested, or as manning allows, provides a briefer for planning/step briefings.

8.12.1.4.1. If not requested, or due to manning constraints, step briefings will be conducted via telephone.

8.12.1.5. Will develop internal processes focused on the continuous improvement of the MWP based on customer feedback (i.e. MWP Debrief Form).

8.12.1.5.1. The 7 OSS/OSW continuously refines its MWP and 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 officers.

8.12.1.6. Provides TAWS data for specific targets, as requested.

8.12.2. The 9 BS, 28 BS, 337 TES, 77 WPS and 489 BG:

8.12.2.1. Ensures the mission commander or designated representative receives a weather briefing via telephone, in-person, or online from 7 OSS/OSW prior to departing on a mission.

8.12.2.2. Ensures 7 OSS/OSW has at least 2 hours of advanced notice to provide weather support for local missions. Unjustified late requests will be completed with the same priority as transient aircrews (see **Table 1.1**).

8.12.2.3. Ensures mission commander or designated representative contacts the 7 OSS/OSW when there are mission changes and cancellations.

8.13. Support to/from 39 AS, 40 AS.

8.13.1. The 39 AS and 40 AS will:

8.13.1.1. Contact the 618 AOC (TACC) for weather support on all 618 AOC (TACC) tasked missions unless otherwise directed by 618 AOC (TACC) staff due to outages or exercises.

8.13.1.2. Ensure the mission commander or designated representative contacts the 7 OSS/OSW prior to departing on all non-618 AOC (TACC) tasked missions.

8.13.1.3. Ensure the mission commander or designated representative contacts the 7 OSS/OSW when there are mission changes/cancellations.

8.13.1.4. Coordinate off-station weather requests IAW section 8.14 of this instruction.

8.13.2. The 618 AOC (TACC)/XOW will notify the 7 OSS/OSW of any AMC controlled missions that cannot be supported by them and that require support from the 7 OSS/OSW.

8.13.3. The 7 OSS/OSW:

8.13.3.1. Provides support outlined in 8.12.1 of this instruction for all non-618 AOC (TACC) tasked missions.

8.13.3.2. Provides weather support, on a case-by-case basis, if the 618 AOC (TACC) is unable to accommodate their missions. This includes backup support for any planned or unplanned COOPs or other exercises.

8.14. Support for Missions Originating Off-Station (39 AS, 40 AS, 9 BS, 28 BS, 337 TES, 77 WPS, and 489 BG).

8.14.1. 7 OSS/OSW is the primary provider of weather information for missions departing from Dyess AFB. For all missions, whether they originate from Dyess AFB or off-station, it is the responsibility of the mission commander to coordinate the weather support request with sufficient advance notice (>2 hrs) before departing Dyess AFB. The aircraft commander coordinates with the 7 OSS/OSW in advance for the appropriate weather support and climate data for mission planning purposes. The 7 OSS/OSW provides direct support or arranges for support from another source based on the circumstances of the mission. The 39/40 AS missions, flight planned/tracked by 618 AOC (TACC), will receive weather support through 618 AOC (TACC) for missions originating both on and off-station.

8.14.2. Providing/Arranging Off-Station Support:

8.14.2.1. The 7 OSS/OSW will make every effort to directly provide mission weather products for Dyess flying units staging from another location by either:

8.14.2.1.1. Deploying with the unit.

8.14.2.1.2. Arranging for the unit to reach back to our main operating location.

8.14.2.2. If direct support is not possible, the 7 OSS/OSW will either:

8.14.2.2.1. Request assistance from the OWS servicing the transient or staged operating location by entering mission data into the servicing OWS' JET Mission Management. Contact information and briefing number assigned by the JET Mission Management will be relayed to the aircrew by logging it on the execution forecast forms.

8.14.2.2.2. Request the assistance of the weather flight at the staged location

8.14.2.3. If follow-on mission data is not known at execution from home station, provide the appropriate OWS web site or telephone contact information to the departing aircrew to receive further support as required.

8.15. PIREP and Debriefing Support from 7 BW and 317 AW Aircrews. Time and mission permitting, aircrews provide PIREPs of any encounters with flight hazards or significant weather elements relaying them through PMSV, the 7 OSS/OSAT, 7 BW/CP, or HF phone patch.

8.15.1. Aircrews relay the message type, location, distance, time, flight level, type of aircraft and one other element (i.e. in-flight visibility, sky condition, weather at flight level) as mandatory items for a PIREP to be transmitted.

8.15.2. The 7 OSS/OSW provides an electronic MWP Debrief Form via the 7 OSS/OSW weather webpage.

8.15.3. The 7 OSS/OSW provides a paper debrief form for all in-person step briefs.

8.16. Support to/from Radar, Airfield Weather Systems (7 OSS/RAWS).

8.16.1. The 7 OSS/OSW:

8.16.1.1. Reports weather equipment outages immediately to 7 OSS/RAWS and determines mission impact.

8.16.1.2. Provides an impact statement for all SIGNIFICANT outages.

8.16.1.3. Reports equipment and/or circuits as "in service" once fully operational.

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

8.16.1.5. Provides orientation to 7 OSS/RAWS on 7 OSS/OSW operations and capabilities if requested

8.16.2. The 7 OSS/RAWS:

8.16.2.1. Repairs and maintains meteorological equipment at Dyess AFB. The 7 OSS/OSW reports all equipment outages as either Mission Impact "MINIMAL" or "SIGNIFICANT." Mission impact determination is the responsibility of the 7 OSS/OSW and is outlined in **Attachment 2**.

8.16.2.1.1. Significant: An outage, impairment, or disruption of equipment imposes an operational limitation on the units supported and/or no back-up capability exists. 7 OSS/RAWS will immediately respond to a significant outage. If after hours, they can be reached via their standby cell phone at 325-668-2360.

8.16.2.1.2. Minimal: An outage impairment or disruption of equipment, although important, imposes little operational limitation and/or a back-up capability exists. 7OSS/RAWS will respond to a minimal outages during duty hours only.

8.16.2.2. Coordinates with 7 OSS/OSW prior to taking equipment or circuits off-line for maintenance or training.

8.16.2.3. Provides job control numbers when opening and closing tickets with the 7 OSS/OSW. Coordination will be done prior to “closing” a ticket.

8.16.2.4. Provides a summary of fix actions or estimated completion date for outages.

8.17. Support to 7 CES.

8.17.1. The 7 OSS/OSW:

8.17.1.1. Notifies the 7 CES Customer Service at (325) 696-4154/3638 and the 7 CE/SDO at (325) 696-5241 when snow and or ice conditions are expected; or there are significant changes to a previously forecasted snow and or ice event. The following information will be included in the notification:

8.17.1.1.1. The current and forecasted wind direction and speed.

8.17.1.1.2. The forecast temperature and wind chill during the period of precipitation.
8.17.1.1.3. The forecast accumulation and duration of snowfall and or ice event.

8.17.1.2. If requested, provide seasonal outlook/climatology for winter weather. This will include snowfall climatology for Dyess AFB and information on storm tracks that produce the worst winter conditions for Dyess AFB.

8.18. Support to/from National Airborne Operations Center (NAOC).

8.18.1. The 7 OSS/OSW:

8.18.1.1. Provides or arranges for environmental data for the aircrew, as requested, (i.e., general weather briefings, flight planning information and flight weather briefings).

8.18.1.2. Disseminates information to the NAOC watch officer when any WWA is issued, extended, upgraded, downgraded, or canceled.

8.18.1.3. Whenever the klaxon alarm sounds, or when an alert notification is received from the 7 BW/CP, the forecaster disseminates an alert weather observation over JET within 30 seconds.

8.19. Support to/from 26 OWS.

8.19.1. In addition to the support referenced throughout this publication, the 7 OSS/OSW will document their contact information and weather criteria in the Dyess AFB IDP. The IDP will be reviewed annually by 7 OSS/OSW for accuracy and changes will be sent to the 26 OWS for approval/publication on their website.

8.19.2. The 26 OWS will initiate a phone call to the 7 OSS/OSW Standby Forecaster (325-370-7481) and the 7 BW/CP (DSN 461-1921) when the 7 OSS/OSW is closed and the 26 OWS issued WWA has not been successfully confirmed in the IWWC System.

8.19.3. If requested, the 26 OWS will provide data to the 7 BW/CP (DSN 461-1921) for OPREP-3 reporting purposes IAW AFI 10-206 AFGSC SUP.

8.19.4. The Dyess 7 OSS/OSW will assume control of all weather watches and standby METWATCH responsibility during significant OWS communication outages, Continuity of Operations Exercises (COOP), evacuations or catastrophic events.

DANIEL C. DIEHL, Colonel, USAF
Commander

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

DoD *Flight Information Publication (FLIP)*

AFMAN 10-206, *Operational Reporting*, 18 Jun 2018

AFI 10-206 AFGSC SUP, *Operational Reporting*, 10 Jan 2017

AFMAN 10-2504, *Air Force Incident Management Guidance for Major Accidents and Natural Disasters*, 13 Mar 2013

AFI 11-2C-130V3, C-130 *Operations Procedures*, 23 Apr 2012

AFI 11-2C-130JV3, C-130J *Operations Procedures*, 08 Dec 2009

AMCI 15-101, *Weather Operations and Support*, 03 Feb 2015

AFI 11-2B-1V3, B-1 *Operations Procedures*, 20 Mar 2015

AFI 11-2B-1V3 DYESS AFB SUP ADDENDUM-A, B-1 *Operations Procedures*, 26 Sep 2017

AFI 11-2E-4V3, E-4 *Operations Procedures*, 17 Dec 2015

AFI 11-202V3, *General Flight Rules*, 02 Sep 2017

AFI 11-202V3 AFGSC SUP, *General Flight Rules*, 31 Jan 2013

AFI 11-231, *Computed Air Release Point Procedures*, 31 Aug 2005

AFI 11-418, *Operations Supervision*, 14 Oct 2015

AFI 11-418 DYESS AFB SUP, *Operations Supervision*, 27 Jan 2016

AFI 13-204V3, *Airfield Operations Procedures and Programs*, 20 Apr 2017

AFI 13-204V3 AFGSC SUP, *Airfield Operations Procedures and Programs*, 20 May 2016

AFMAN 15-111, *Surface Weather Observations*, 12 Mar 2019

AFI 15-114, *Weather Technical Readiness Evaluation*, 16 Mar 2017

AFMAN 15-124, *Meteorological Codes*, 26 Jul 2016

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

AFMAN 15-129V1, *Air and Space Weather Operations – Characterization*, 21 Mar 2017

AFMAN 15-129V2, *Air and Space Weather Operations – Exploitation*, 24 Mar 2017

AFVA 15-137, *Operational Weather Squadron Areas of Responsibility*, 27 Oct 2015

DAFBI 11-250, *Airfield Operations and Dyess Flying Procedures*, 17 Apr 2017

Prescribed Forms

AF Form 9, *Local Dissemination Log*.

AF IMT 3622, *Air Traffic Control/Weather Certification and Rating Record*

AF IMT 3803, *Surface Weather Observations (METAR/SPECI)*

Adopted Forms

AF Form 847, *Recommendation for Change of Publication*

DD 175-1, *Flight Weather Briefing*

Attachment 2

EQUIPMENT OUTAGE IMPACTS

Table A2.1. Base Weather Equipment Outage Impact Chart.

Outage	Scenario	Impact Severity	Mission Impact	Maintainer
JET	Critical path terminals are down Other terminals are down	Significant Minimal	Relay of mission-essential weather information is delayed Weather data is not relayed to customers, back-up procedures used	557th Weather Wing Fielded Systems (271-2586) / 26th Operational Weather Squadron (331-2600)
Base Local Area Network (LAN)	Any Outage	Significant	The 7 OSS/OSW relies heavily on the base LAN for obtaining weather products. LAN outages severely degrade the weather support capabilities of the flight.	7th Communications Squadron (461-2666)
Telephone (VOIP)	Any Outage	Significant	The 7 OSS/OSW relies heavily on transmitting forecast products via telephone lines.	7th Communications Squadron (461-1500/1530/2666)
PMSV	Any outage	Significant	Unable to support airborne aircraft directly. Currently Dyess does not have any back-up capability.	Radar Airfield Weather Systems (461-2528) Standby: 325-668-2360
FMQ-19 (AMOS) Temp/RH Sensor	Kestrel 5000 inoperative Kestrel 5000 operational	Significant Minimal	Information obtained from this equipment is essential for flight safety Equipment will need to adjust to outside air temperatures prior to recording the data	Radar Airfield Weather Systems (461-2528) Standby: 325-668-2360

FMQ-19 (AMOS) Runway Visual Range / Visibility Sensor	Any Outage	Significant	Information from this sensor provides visibility and runway visual range during poor visibility periods. There is no back-up at this time	Radar Airfield Weather Systems (461-2528) Standby: 325-668-2360
FMQ-19 (AMOS) Ceilometer / Cloud Height Sensor	Any Outage	Minimal	Information from this sensor provides the heights of cloud layers and ceilings. This assists the observer in providing information to aircrew.	Radar Airfield Weather Systems (461-2528) Standby: 325-668-2360
FMQ-19 (AMOS) Wind Sensor	Kestrel 5000 inoperative Kestrel 5000 operational	Significant Minimal	Information obtained from this sensor is essential for flight safety Wind observations not truly representative of what is occurring on the airfield	Radar Airfield Weather Systems (461-2528) Standby: 325-668-2360
FMQ-19 (AMOS) Pressure Sensors	Kestrel 5000 inoperative Kestrel 5000 operational	Significant Minimal	Information obtained from this sensor is essential for safe flight operations Time is needed to allow the equipment to initialize	Radar Airfield Weather Systems (461-2528) Standby: 325-668-2360
FMQ-19 (AMOS) Precip ID Sensor	Any Outage	Minimal	Weather observations will require manual backup when precip observed	Radar Airfield Weather Systems (461-2528) Standby: 325-668-2360
FMQ-19 (AMOS) Freezing Precip Sensor	Any Outage	Minimal	Weather observations will require manual backup when freezing precip observed	Radar Airfield Weather Systems (461-2528) Standby: 325-668-2360

FMQ-19 (AMOS) Lightning Sensor	Internet connectivity No internet connectivity	Minimal Significant	Information obtained from internet sources. Severely degrades ability; unable to detect and track lightning strikes	Radar Airfield Weather Systems (461-2528) Standby: 325-668-2360
FMQ-19 (AMOS) Rain Gauge	Any Outage	Minimal	Weather observations will require manual backup for precip accumulation	Radar Airfield Weather Systems (461-2528) Standby: 325-668-
NEXRAD RDA	Products are unavailable or seriously degraded	Significant	Resource protection support is severely degraded. Personnel have to rely on RDAs at farther distances which are not as detailed at far ranges and precipitation below 7000 feet over Dyess AFB is undetectable.	Radar Airfield Weather Systems (461-2528) Standby: 325-668-2360

Attachment 3

DYESS MISSION WEATHER PRODUCT EXAMPLE

Figure A3.1. Dyess Airfield Launch/Recovery Weather.

MISSION WEATHER PRODUCT

DYESS AFB WEATHER FLIGHT (X-2524) NOTE: ALL TIMES ARE IN ZULU, ALL ELEVATIONS ARE IN MSL UNLESS OTHERWISE NOTED

MWP #	28-01	DATE:	28-Sep-2017	FORECASTER:	SSgt Huff
AMD FOR:		AMD @:		Contact Dyess WX for current Watch, Warning, Advisory information	

DYESS AIRFIELD LAUNCH/RECOVERY WEATHER

** This product is not a valid brief unless a brief time and intials are obtained from the duty forecaster @ 696-2524/4164 prior to stepping to the aircraft. **

VALID TIME	VIS	WEATHER	DIR	SPEED	GUSTS	X-WIND	MIN ALSTG	PA	TEMP	DEWPOINT	RH
13 to 16 Z	1/2 SM	FG	020	6 G	KT	4	30.09	29927 FT	17 C 63 F	17 C 63 F	100 %
SKY (AGL):	VV002				REMARKS:	AFT 15Z: 02006KT 3SM BR OVC004					

VALID TIME	VIS	WEATHER	DIR	SPEED	GUSTS	X-WIND	MIN ALSTG	PA	TEMP	DEWPOINT	RH
16 to 19 Z	6 SM	RA	030	9 G	KT	7	30.13	29927 FT	18 C 64 F	18 C 64 F	100 %
SKY (AGL):	OVC006				REMARKS:	NONE					

VALID TIME	VIS	WEATHER	DIR	SPEED	GUSTS	X-WIND	MIN ALSTG	PA	TEMP	DEWPOINT	RH
19 to 22 Z	6 SM	RA	030	9 G	KT	7	30.11	29927 FT	19 C 67 F	19 C 67 F	100 %
SKY (AGL):	OVC006				REMARKS:	NONE					

TEMP DEV	11	Divert Weather Forecasts (Valid until last scheduled land time)			
CONTRAILS	410-600	Abilene (ABI 04/22)	CIGS < 500FT	Little Rock (LRF 07/25)	
-30 C	300	Amarillo (AMA 04/22 13/31)	CIGS >= 500FT < 1,500FT	Sheppard (SPS 15/33 17/35)	CIGS >= 500FT < 1,500FT
FZ LVL	120	Midland (MAF 04/22 10/28)	CIGS < 500FT	Cannon (CVS 04/22)	CIGS < 500FT
CLIMB WINDS		Barksdale (BAD 15/33)		Ellsworth (RCA 13/31)	
Flight LVL	WIND (KT)	San Angelo (SJT 03/21 18/36)	CIGS < 500FT	Nellis (LSV 03/21)	
010 (AGL)	03010	Kelly (SKF 16/34)	CIGS >= 500FT < 1,500FT	McConnell (IAB 01/19)	
020 (AGL)	04015	Ft Worth (NFW 18/36)	T-STORMS	Edwards (EDW 04/22 06/24)	
030 (AGL)	07015	Tinker (TIK 13/31 18/36)		Divert Forecasts	
040 (AGL)	08010	DIVERT LEGEND			
050 (AGL)	12005	GOOD: CIGS/VIS >= 1,500FT / 3SM, NEG HAZARDS, X-WNDS <20KTS			
050-100	14005	MARGINAL: CIGS/VIS >=500FT / 1SM < 1,500FT/3SM, LGT ICG, MDT TURB(CAT 2), VICINITY TS (VCTS), CROSS-WINDS >=20KT<=25KT			
100-150	25005				
150-200	25005	POOR: CIGS/VIS < 500FT / 1SM, SVR+ TURB(CAT 2), MDT/SVR ICG (CAT 2), T-STORMS, CROSSWINDS >=26KTS			
FL 050 thru 200 in MSL					

SOLAR/LUNAR DATA

28-Sep-17

SUNRISE	12:32	SUNSET	0:29	MOONRISE	19:58	ILLUMINATION	49%
BMNT	11:39	EENT	1:22	MOONSET	5:46		

SPACE WEATHER		GPS LEGEND		HF/UHF LEGEND	
No Impact	UHF / SATCOM	No Impact	00-15M ERROR	No Impact	No effect on communications
No Impact	HF	Marginal	15-50M ERROR	Marginal	Intermittent weak/loss of signal
No Impact	GPS	Significant	50-75M ERROR	Significant	Frequent very weak/loss of signal

Figure A3.2. Airspace Forecast

AIRSPACE FORECAST - ALL ELEVATIONS IN MSL

Contact Dyess WX (696-2524) for updated PIREP/WWA/Hazard Information

CALL SIGN																			
PUMA 11 12	RANGE E 023	LANCER/SNYDER						ROUTE IR-109P	VALID TIME 1700 to 1930										
	VALID TIME 1400 to 1700							AP/1B POINTS	A	AP	P								
	SKY (MSL)	FEW100/150						SFC ELEVATION	7200	10300	4600								
								MAX ALSTG	30.10	30.19	29.97								
	HAZARDS	NEG HAZARDS						SFC WINDS (KT)	20005	18005	32005								
								D-VALUE	314	412	147								
	FL	050	100	180	240	300	MAX ALSTG	ALT VARIATION	148	164	101								
	WND (KT)	26020	25015	26010	30015	33015	29.90	SFC VIS & WX	7 NSW										
	DVAL	159	536	949	1341	1667	ENROUTE FL WINDS (KTS)	SKY (MSL)	SKC										
	AV	177	554	967	1359	1685													
	ENROUTE HAZARDS							HAZARDS	MDT TURB 050/180										
	NEG HAZARDS						180 240		AFT 18Z: NEG HAZARDS										
							27010 28010	FZ LVL 150											
	AR: LANCER	VALID TIME 1500 to 1800																	
	SKY (MSL)	FEW100/140																	
	HAZARDS	NEG HAZARDS																	
	FL 210	WND (KT)/TEMP (°C): 28010KT / -08C																	
CALL SIGN	RANGE	PECOS						ROUTE IR-109AQ	VALID TIME 1500 to 1730										
	E 044	VALID TIME 1530 to 1845						AP/1B POINTS	A	AP	P	AQ							
DARK 31 32	SKY (MSL)	SKC						SFC ELEVATION	7200	10300	4600	4800							
								MAX ALSTG	30.10	30.19	29.97	29.97							
	HAZARDS	NEG HAZARDS						SFC WINDS (KT)	20005	18005	32005	32005							
								D-VALUE	314	412	147	147							
	FL	050	100	180	240	300	MAX ALSTG	ALT VARIATION	148	164	101	101							
	WND (KT)	27010	28015	25020	26025	26020	30.02	SFC VIS & WX	7 NSW										
	DVAL	132	452	902	1211	1625	ENROUTE FL WINDS (KTS)	SKY (MSL)	SKC										
	AV	40	360	810	1119	1533													
	ENROUTE HAZARDS							HAZARDS	MDT TURB 050/180										
	NEG HAZARDS						180 240												
							27020 27025	FZ LVL 150											
	AR:	VALID TIME to																	
	SKY (MSL)																		
	HAZARDS																		
	FL	WND (KT)/TEMP (°C):																	
CALL SIGN	RANGE	LANCER/SNYDER						ROUTE	VALID TIME to										
	E 023	VALID TIME 1515 to 1900						AP/1B POINTS											
DARK 33	SKY (MSL)	FEW100/150						SFC ELEVATION											
								MAX ALSTG											
	HAZARDS	NEG HAZARDS						SFC WINDS (KT)											
								D-VALUE											
	FL	050	100	180	240	300	MAX ALSTG	ALT VARIATION											
	WND (KT)	26020	25015	26010	30015	33015	29.90	SFC VIS & WX											
	DVAL	159	536	949	1341	1667	ENROUTE FL WINDS (KTS)	SKY (MSL)											
	AV	177	554	967	1359	1685													
	ENROUTE HAZARDS							HAZARDS											
	NEG HAZARDS						180 240												
							27010 28010	FZ LVL											
	AR:	VALID TIME to																	
	SKY (MSL)																		
	HAZARDS																		
	FL	WND (KT)/TEMP (°C):																	

Figure A3.3. Alternate Airspace Forecast

ALTERNATE AIRSPACE FORECAST- ALL ELEVATIONS MSL

Call DYESS Wx Flight (X-2524) for Updated Forecast Information

RANGE	LANCER					
E 023	VALID TIME	2300	to	0430		
SKY (MSL)	FEW160/210					
HAZARDS	NEG HAZARDS					
FL	050	100	180	240	300	MAX ALSTG
WND (KT)	14015	01005	01015	36015	01020	30.10
DVAL	301	598	1094	1442	1837	ENROUTE FL WINDS (KTS)
AV	135	432	928	1276	1671	
ENROUTE HAZARDS						180 / 240
NEG HAZARDS						36010 / 35015

RANGE	PECOS					
E 044	VALID TIME	2300	to	0430		
SKY (MSL)	BKN110/150 BKN160/210 BKN070CB/560					
HAZARDS	ISOLD TS MT560 LGT RIME ICING 170/210					
FL	050	100	180	240	300	MAX ALSTG
WND (KT)	16025	20010	34010	34040	34010	30.12
DVAL	186	616	1125	1472	1880	ENROUTE FL WINDS (KTS)
AV	2	432	941	1288	1696	
ENROUTE HAZARDS						180 / 240
ISOLD TS MT560 LGT RIME ICING 170/230						36010 / 35015

ROUTE IR-128	VALID TIME	2300	to	0430			
AP/1B POINTS	A	I	P	Z			
SFC ELEVATION	2400	3000	4300	2800			
MAX ALSTG	30.07	30.10	30.10	30.05			
SFC WINDS (KT)	13010	15010	16010	13010			
D-VALUE	177	239	246	181			
ALT VARIATION	39	73	80	61			
SFC VIS & WX	7 NSW						
SKY (MSL)	FEW160/210						
HAZARDS	NEG HAZARDS						
FZ LVL 158							

ROUTE IR-178	VALID TIME	2300	to	0430			
AP/1B POINTS	C	M	W				
SFC ELEVATION	4110	2900	3000				
MAX ALSTG	30.14	30.00	30.05				
SFC WINDS (KT)	14010	12010	12010				
D-VALUE	210	182	182				
ALT VARIATION	8	108	62				
SFC VIS & WX	7 NSW						
SKY (MSL)	FEW160/210						
HAZARDS	NEG HAZARDS						
FZ LVL 169							

Figure A3.4. MOA / Drop zone Forecasts.

MOA / DROPZONE FORECASTS

Call DYESS Wx for Updated PIREP/WWA/Hazard Information

RANGE:	BRONTE	VALID TIME	1600	to	2100
SKY (AGL)	SCT V BKN 080/140				
VIS/WX	7 NSW				
HAZARDS	NEG HAZARDS				
FL (AGL):	SFC	005	010	015	020	MIN ALSTG
WND (KT):	20015	20020	20020	22020	22020	29.85
TEMP (C):	31	27	26	25	24	

RANGE:		VALID TIME		to	
SKY (AGL)					
VIS/WX					
HAZARDS					
FL (AGL):	SFC	005	010	015	020	MIN ALSTG
WND (KT):						
TEMP (C):						

RANGE:		VALID TIME		to	
SKY (AGL)					
VIS/WX					
HAZARDS					
FL (AGL):	SFC	005	010	015	020	MIN ALSTG
WND (KT):						
TEMP (C):						

RANGE:		VALID TIME		to	
SKY (AGL)					
VIS/WX					
HAZARDS					
FL (AGL):	SFC	005	010	015	020	MIN ALSTG
WND (KT):						
TEMP (C):						

RANGE:		VALID TIME		to	
SKY (AGL)					
VIS/WX					
HAZARDS					
FL (AGL):	SFC	005	010	015	020	MIN ALSTG
WND (KT):						
TEMP (C):						

RANGE:		VALID TIME		to	
SKY (AGL)					
VIS/WX					
HAZARDS					
FL (AGL):	SFC	005	010	015	020	MIN ALSTG
WND (KT):						
TEMP (C):						

RANGE:		VALID TIME		to	
SKY (AGL)					
VIS/WX					
HAZARDS					
FL (AGL):	SFC	005	010	015	020	MIN ALSTG
WND (KT):						
TEMP (C):						

RANGE:		VALID TIME		to	
SKY (AGL)					
VIS/WX					
HAZARDS					
FL (AGL):	SFC	005	010	015	020	MIN ALSTG
WND (KT):						
TEMP (C):						

Attachment 4

AIRCRAFT WEATHER SENSITIVITIES AND THRESHOLDS

Table A4.1. B-1B Weather Sensitivities/MISSIONWATCH Thresholds.

Mission Profile	Flight Level	Weather Parameter	Threshold / Impact To Mission
Take-off / Landing			
		Lightning	Warning within 5NM cancels all departures or recoveries at Dyess AFB.
		Crosswinds	> 26 Knots: Takeoff & landings require OG/CC approval. > 20 Knots: No Touch & Goes.
		Surface Winds	> 35 Knots, Not able to conduct normal flying operations without OG/CC approval, and only one approach to a full stop
		B-1 Induction	Surface Temperatures less than 47F with visible moisture present (i.e. fog, mist, precipitation, standing water, slush) or the relative humidity is greater than 50%, B-1B engines potentially impacted by inductive icing.
		Ceiling/Visibility	< 200/0.5 B-1B Minimum Departures.
		Ceiling/Visibility	≤ 1500/3, the B-1B is not able to file VFR.
		Ceiling/Visibility	≤ 2000/3 Aircrew need to file for an alternate airfield.
		RVR (Takeoff)	<600ft Take-off not authorized
		RVR (Takeoff)	<2400ft Aircrew need to designate an alternate.
		RVR (Recovery)	≤ 2400ft B-1B minimum to fly and approach.
Alternate Requirements			
		Ceiling/Visibility	< 600/2 B-1B Alternate requirement for an airfield with an operational published precision approach procedure.
		Ceiling/Visibility	< 800/2 B-1B Alternate requirement for an airfield with a non-precision approach.
Route Weather Limiters			
		Turbulence	Moderate or Greater (CAT IV.) In addition, the B-1B will avoid moderate or greater Mountain Wave Turbulence.
		Icing	Moderate or Greater (B-1B aircraft cannot cruise in Light or Greater Icing).
		Thunderstorms	B-1B crews avoid thunderstorms by 10 NM below FL 230, and 20 NM above FL

		VFR Cloud Clearances & Visibility Minimums Below FL 10K	500 ft. below, 1,000 ft. above, and 2,000 ft. horizontal. 3 Miles Visibility.
		Surface Winds	≥ 35 Knots (over land) ≥25 Knots (over water)
			Aircrew not able to conduct air refueling, DACT, or weapons employment training without OG/CC approval
		Sea State	> 10 foot wave height: Aircrew not able to conduct air refueling, DACT, or weapons employment training without OG/CC approval
		Altitude Variations	< - 400 during the night & in IFR conditions.
		Volcanic Ash	B-1B aircrews avoid volcanic ash clouds. This may cause engines to shut down completely on the aircraft.
		Space Weather	Both UHF and GPS degradation has an effect on B-1 operations, especially for missions over water.
		Surface Temperature	<15° F (-9° C), B1-B aircrews required to carry special equipment and clothing items.
		Sea Surface Temperature	≤ 60° F (15.5° C), B1-B aircrews required to wear anti-exposure suit.
Air Refueling			
B-1B Only		Turbulence	Moderate or Greater. In addition, the B-1B aircraft avoid moderate or greater Mountain Wave Turbulence.
B-1B Only		Icing	Moderate or Greater.
B-1B Only		Visibility	< 0.5 Mile.
Medium / High Altitude B-1B Day and Night Visual Operations	≥ 5,000 FT	Ceiling/Visibility	Clear Skies/2.
Low Altitude B-1B Day Visual Operations	< 5,000 FT	Ceiling/Visibility	1500/5.
Low-Level Instrument Route MISSIONWATCH			
IR 178/187 IR 28/180 IR126/266	Observed moderate or greater icing Route Closed		Route Closed
	Observed/forecasted moderate or greater Mountain Wave turbulence. Observed or forecast severe turbulence reported by military CAT II aircraft.		
	Altitude variation of < -400 feet during the night & in IFR conditions.		
	Thunderstorms in the route		

	Surface winds ≥ 35 knots sustained	
	When firefighting efforts have been coordinated and verified with the 7 BW Airspace Manager.	

Table A4.2. C-130J Weather Sensitivities/MISSIONWATCH Thresholds.

Mission Profile	Flight Level	Weather Parameter	Threshold / Impact To Mission
Departure / Recovery			
		Lightning	Warning within 5 NM cancel all departures or recoveries at Dyess AFB
		Crosswinds	≥ 35 Knots, Unable to depart
		Ceiling/Visibility	≤ 1500/3, C-130 aircrews not able to file VFR
		Ceiling/Visibility	≤ 2000/3 Designate an alternate airfield
		RVR (Takeoff)	≤ 1600ft Unable to depart (200ft/1SM visibility for formation)
Alternate Requirements			
		Ceiling/Visibility	< 600/2 Alternate requirement for an airfield with an operational published precision approach procedure
		Ceiling/Visibility	< 800/2 Alternate requirement for an airfield with a non-precision approach
Route Weather Limiters			
		Turbulence	Severe (CAT III Aircraft.) In addition, C-130 aircraft avoid moderate or greater Mountain Wave Turbulence
		Icing	Moderate (avoided) Severe (flight prohibited)
		Thunderstorms	C-130 maintains a 2,000 ft vertical separation above Cumulonimbus Clouds (Thunderstorms). C-130 aircrews avoid thunderstorms by 10 NM below FL 230, and 20 NM above FL 230, 5 NMs for tactical low-level operations below FL230 provided the outside air temperature is at or above 0 degrees Celsius at flight altitude. C- 130's avoid gust fronts and winds preceding a rapidly moving thunderstorm
		Heavy Rain Showers	C-130 aircrews need to maintain a 5 NM separation from Heavy Rain Showers.
		Lightning Potential	C-130 aircrews avoid areas of high lightning potential, i.e., clouds within plus or minus 5,000 feet or plus/minus 8° C of the freezing level.
		VFR Cloud Clearances & Visibility Minimums Below FL 10K	500 ft. below, 1,000 ft. above, and 2,000 ft. horizontal 3 Miles Visibility (Clear of Clouds/3 Miles Visibility in Class B airspace)

		VFR Cloud Clearances & Visibility Minimums Above FL 10K	1,000 ft. below, 1,000 ft. above, and 1 SM horizontal 5 Miles Visibility
		Ceiling/Visibility	≥ 1700/3 (AGL) Minimum Requirements for Rectangular Pattern at Dyess Airfield (Main & 16B/34B) ≥ 1500/3 (AGL) for 16A/34A
		Ceiling/Visibility	≥ 2200/3 (AGL) Minimum Requirements for Overhead Pattern at Dyess AFB
Marion Drop Zone		Ceiling/Visibility	≥ 1700/3 Minimum Requirements for Drop Zone Operations
SKE Formation Routes		Ceiling/Visibility	≤ 2500/5 Minimum Requirements for C-130 SKE Formation Orbit Areas
		Volcanic Ash	C-130 aircrews avoid volcanic ash clouds. This may cause engines to shut down completely on the aircraft.
		Space Weather	C-130 missions are impacted primarily by UHF SATCOM degradation. In addition, GPS errors are important when related to airdrop operations for crews.
Personnel Airdrops		Winds	13 knots is the limit. ≥ 14 Knots is a NO GO
Equipment Airdrops		Winds	17 knots is the limit. ≥ 18 Knots is a NO GO
Training Bundle Airdrops		Winds	25 knots is the limit. ≥ 26 Knots is a NO GO
NVG Operations		Ceiling/Visibility	Any cloud coverage will impact operations

Attachment 5

WEATHER NOTIFICATION RESPONSE

Table A5.1. Customer Response Matrix.

Weather Criteria	Agency	Action	Mission Impact
Watch: **Lightning within 5 NM**	7 BW / CP 7 OG (B-1s) 317 AW (C-130s) SOF/Fox 3 Maintenance CE All other units	Increase situational awareness on lightning potential. Suspend or delay outside maintenance activity that will take more than 1-hour to complete. Asses remaining fuel in airborne aircraft and determine alternate airfield options. Designate alternate airfield for returning aircraft if necessary. Make preparations to evacuate the flight line if needed.	Lost maintenance time.
Warning: **Lightning within 5 NM**	7 BW / CP 7 OG (B-1s) 317 AW (C-130s) SOF/Fox 3 Maintenance Security Forces Force Support CE All other units	Suspend all flight operations. Restrict crews to inside buildings or aircraft on ramp. Power down all non-essential computer systems. Asses remaining fuel in airborne aircraft and determine alternate airfield options. Designate alternate airfield for returning aircraft Cease all outdoor activities; seek shelter. Cease aircraft refueling. Restrict outdoor patrols and limit activities to insides buildings and vehicles. Close golf course and recall golfers. Close base pools and evacuate swimmers to inside buildings.	Lost training. Delayed launch and recovery of aircraft. Increased fuel usage. Increased workload. Lost maintenance time. Installation security decreased. Heavy reliance on remote sensors. Remote sensors compromised with electric discharges. Lost MWR funds.

Warning: **Tornado**	7 BW / CP 7 OG (B-1s) 317 AW (C-130s) SOF/Fox 3 Maintenance Security Forces Force Support CE All other units	Activate base tornado siren. If time permits, secure equipment as required. Emergency shutdown of all aircraft on the ramp and immediate EGRESS to shelter. Initiate Battle staff and EOC recall Suspend all activity and take shelter. Divert airborne aircraft as needed Account for all personnel	Increased workload. Lost training. Delayed launch and recovery of aircraft. Lost training. Loss of SA on flying operations. Lost maintenance time. Installation security decreased.
Warning: **Tornado**			Heavy reliance on remote sensors. Lost MWR funds. Total work stoppage and lost productivity.
Weather Criteria	**Agency**	**Action**	**Mission Impact**
Warning: **Freezing Precipitation**	7 BW / CP 7 OG (B-1s) 317 AW (C-130s) SOF/Fox 3 Maintenance Security Forces Force Support CE All other units	Determine need for non-essential personnel late reporting to work centers and/or early release. Deice aircraft prior to take-off. Suspend all flying activity during observed freezing precipitation. Determine take-off and landing alternates. Stop open egress hatch maintenance on the flight line. Monitor engine performance runs in test cell. Ensure equipment around facilities is secure. Brief all drivers on hazards Recall power pro technicians. Recall road crew to deploy sand spreaders at all intersection and the ECPs. Account for all personnel.	Potential total work stoppage and lost productivity. Lost training. Delayed launch and recovery of aircraft. Increased workload. Delayed maintenance. Delayed security response times. Lost MWR funds. Increased commute times

Warning: **Heavy Rain ≥ to 2 inches in 12 hours**	7 BW / CP 7 OG (B-1s) 317 AW (C-130s) SOF/Fox 3 Maintenance Security Forces Force Support CE All other units	Determine need for non-essential personnel late reporting to work centers and/or early release. Activate EOC and unit control centers as required. Determine the need for shelters and activate as necessary. Determine take-off and landing alternates. Secure equipment as required. Take steps to reduce damage to facilities and equipment. Prepare to provide safeguarding/security of essential resources and personal property and assist in any evacuation process. Recall SF augmentees if needed. Brief all drivers on hazards Prepare to provide emergency housing as needed.	Potential total work stoppage and lost productivity. Delayed launch and recovery of aircraft. Increased workload Delayed security response times. Increase workload Lost MWR funds. Delayed or suspended routine maintenance activities. Increased commute times
Warning: **Heavy Rain ≥ to 2 inches in 12 hours**		Coordinate with Base Exchange for opening during pre-disaster and recovery phases to support the base populace. Monitor flood prone areas. Close off streets as needed. Prepare to protect utilities by an orderly phase-down of non-essential facilities. Cancel or delay all non-essential MWF functions. Implement Contingency Response Plan as necessary. Account for all personnel.	

Weather Criteria	Agency	Action	Mission Impact
Warning: **Heavy Snow ≥ to 2 inches in 12 hours**	7 BW / CP 7 OG (B-1s) 317 AW (C-130s) SOF/Fox 3 Maintenance Security Forces Force Support CE All other units	Determine need for non-essential personnel late reporting to work centers and/or early release. Deice aircraft prior to take-off. Determine take-off and landing alternates. Stop open egress hatch maintenance on the flight line. Monitor engine performance runs in test cell. Ensure equipment around facilities is secure. Brief all drivers on hazards Suspend or delay outside activities. Recall power pro technicians. Recall road crew to deploy sand spreaders at all intersection and the ECPs. Activate snow removal plan. Account for all personnel	Potential total work stoppage and lost productivity. Lost training. Delayed launch and recovery of aircraft. Increased workload. Delayed security response times. Lost MWR funds. Delayed or suspended routine maintenance activities. Increased commute times.
Weather Criteria	**Agency**	**Action**	**Mission Impact**
Warning: **High Winds ≥ 35kts but**	7 OG (B-1s) 317 AW (C-130s) SOF Maintenance All other units	Restrict low level flight operations. Monitor for potential crosswind component. If greater than 26kts restrict take-off and landing. Restrict personnel and equipment drops. Determine take-off and landing alternates. Complete all steps for winds 25-34kts. Lower aircraft fire bottles to two pintles. At 40kts cease aircraft launcher, module, and single bomb/missile loading/unloading. Close aircraft MLG doors. Remove all non-powered AGE from the flight line. Down jack all hangered aircraft. Remove -21 trailers from flight line. Raise all aircraft flaps and slats. Hangar aircraft is possible. Take steps to reduce damage to facilities and equipment. Ensure equipment around facilities is secure.	Lost training. Delayed launch and recovery of aircraft. Delayed or cancelled maintenance actions. Increased workload.

Warning: **Hail ≥ 1/2 inch to < 3/4 inch diameter**	7 BW / CP 7 OG (B-1s) 317 AW (C-130s) SOF/Fox 3 Maintenance Security Forces Force Support CE All other units	Activate EOC and unit control centers as required. Suspend all activity and seek shelter. Divert airborne aircraft as needed. Suspend take-off, landing, and taxing of aircraft. Asses remaining fuel in airborne aircraft and determine alternate airfield options. Designate alternate airfield for returning aircraft. Hanger as many aircraft as possible. Suspend all flight line maintenance actions. Shut down any engine running in the test cell. Clear flight line of equipment and loose articles. Suspend any refueling activities at test cell. Prepare avionics test stations to be put in standby mode. Restrict outdoor patrols and limit activities to insides buildings and vehicles. Suspend or delay outside activities. Take steps to reduce damage to facilities and equipment	Increased workload. Lost training. Delayed launch and recovery of aircraft. Increased workload Suspended or delayed maintenance actions. Installation security decreased. Heavy reliance on remote sensors. Lost MWR funds.

Weather Criteria	Agency	Action	Mission Impact
Warning: **Hail ≥ 3/4 inch diameter**	7 BW / CP 7 OG (B-1s) 317 AW (C-130s) SOF/Fox 3 Maintenance Security Forces Force Support CE All other units	Activate EOC and unit control centers as required. Consider evacuation of assigned and transient aircraft. Direct base organization to only conduct mission essential operations. Suspend all activity and seek shelter. Divert airborne aircraft as needed. Suspend take-off, landing, and taxing of aircraft. Asses remaining fuel in airborne aircraft and determine alternate airfield options. Designate alternate airfield for returning aircraft. Hanger as many aircraft as possible. Consider protecting aircraft canopies/engine intakes. Suspend all flight line maintenance actions. Shut down any engine running in the test cell. Clear flight line of equipment and loose articles. Suspend any refueling activities at test cell. Prepare avionics test stations to be put in standby mode. Restrict outdoor patrols and limit activities to insides buildings and vehicles. If time permits, secure equipment as required. Take steps to reduce damage to facilities and equipment. Ensure equipment around facilities is secure. Account for all personnel.	Increased workload. Potential total work stoppage and lost productivity. Lost training. Delayed launch and recovery of aircraft. Suspended or delayed maintenance actions. Installation security decreased. Heavy reliance on remote sensors. Lost MWR funds.

Weather Criteria	Agency	Action	Mission Impact
Warning: **Damaging Winds ≥ 50kts**	7 BW / CP 7 OG (B-1s) 317 AW (C-130s) SOF/Fox 3 Maintenance Security Forces Force Support CE All other units	Activate EOC and unit control centers as required. Consider evacuation of assigned and transient aircraft. Direct only mission essential operations. Suspend all activity and seek shelter. Divert airborne aircraft as needed. Suspend take-off, landing, and taxing of aircraft. Asses remaining fuel in airborne aircraft and determine alternate airfield options. Designate alternate airfield for returning aircraft. Hanger as many aircraft as possible. Suspend all flight line maintenance actions. Complete all steps for winds 25-34kts. Lower aircraft fire bottles to two pintles. Close aircraft MLG doors. Remove all non-powered AGE from the flight line. Down jack all hangered aircraft. Remove - 21 trailers from flight line. Raise all aircraft flaps and slats. Restrict outdoor patrols and limit activities to insides buildings and vehicles. Limit access to flight line. If time permits, secure equipment as required. Verify potable water supplies are available and protected. Fill all water tanks to capacity. Take steps to reduce damage to facilities and equipment. Ensure equipment around facilities is secure. Account for all personnel.	Increased workload. Potential total work stoppage and lost productivity. Lost training. Delayed launch and recovery of aircraft. Suspended or delayed maintenance actions. Installation security decreased. Heavy reliance on remote sensors. Lost MWR funds.