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Safety

**SEVERE WEATHER (THUNDER STORM,
HIGH WINDS AND EXTREME COLD)**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction establishes safety procedures and ensures maximum safety for personnel and equipment during thunderstorms, extremely high wind, and cold weather on the flight line and munitions areas. It establishes a plan for recall of personnel and criteria for mooring all assigned aircraft. It implements AFPD 91-2, *Safety Programs*. It also references AFMAN 91-201, *Explosive Safety Standard*. Technical Order (T.O.) 1F-16C-2-OOGV-001, *General Vehicle Description*, and LGOI 91-202, *Severe Weather Fuel Systems*. It applies to 419th Logistics Group and 419th Operations Group personnel.

SUMMARY OF REVISIONS

This revision changes maintenance operations center (MOC) to maintenance operations function (MCF) and debrief/dispatch section (DDS). Adds additional policy on sequence of operations (paragraphs **2.3.1.3.**, **2.3.1.4.** and **2.3.1.5.**); expands on definition of wind conditions (paragraph **3.2.**); deleted (paragraphs **3.3.1.3.**, **4.3.**, and 4.4.4) renumbered following paragraphs; changed requirements (paragraph **4.4.**); changed chill factor and work restriction requirements (paragraph **4.5.**). An (I) indicates revisions from the previous editions.

1. Responsibilities. It is the responsibility of the flight chiefs, MCF and DDS, and munitions control to ensure that these instructions are complied with and adequate personnel are available to properly prepare for any storm warning. Any deviation from this instruction must be waived by the logistics group commander and operations group commander or their representative.

2. Thunder Storms:

2.1. Location of Operation. Munitions storage area, munitions build-up area, flightline, hot pad, fuel systems maintenance area, AIS, PMEL, ECM shop, avionics calibration facility, as well as any egress operation.

2.2. Thunderstorm Conditions and Respective Criteria:

2.2.1. Thunderstorm Condition I (Potential). Hail or potential lightning forecast for Hill AFB.

2.2.2. Thunderstorm Condition II (Hold). Hail or lightning within a 5-mile radius. **WARNING:** Personnel will be evacuated from locations containing explosives that could be initiated by lightning, unless minimum personnel must remain to carry out an urgent operational mission.

NOTE: The daily schedule is not considered an urgent operational mission. Normal refueling may continue during Thunderstorm Condition I unless lightning is observed.

2.3. Sequence of Operations:

2.3.1. Pre-requisites for evacuation of all outside areas during an electrical storm are as follows:

2.3.1.1. When 25 seconds elapsed time occurs between lightning flashes and thunder claps (storm is approximately 5 miles away).

2.3.1.2. Base weather facility notifies operations and debrief/dispatch section that an electrical storm is in the near vicinity, (when the time between the lightning flash and thunder report is 15 seconds or less), and the electrical potential is at the level where lightning discharge is possible. Debrief/dispatch section notifies munitions control, and all work centers of the existing condition.

2.3.1.3. When either of the above conditions exists, supervisory personnel will alert all individuals to immediately stop any outside aircraft maintenance and immediately proceed to shelter after securing their areas of responsibilities. Munitions control notifies munitions storage and munitions buildup areas operating to cease all outdoor explosive operations.

2.3.1.4. All explosive operations will stop that are outdoors or at an indoor location that has no lightning protection. The continuation of explosives operations within a lightning protected facility (Bldg 590) is not prohibited. When continuing operations in lightning protected equipped facilities, access the need and urgency for doing so. There are no guarantees that lightning protection will provide the same degree of safety as a lightning-free environment.

2.3.1.5. Munitions personnel are empowered to exercise operational risk management (ORM). Personnel will be evacuated from these locations:

2.3.1.5.1. Operating buildings, open storage sites or loading docks without approval lightning protection systems, which contain explosives.

2.3.1.5.2. Facilities containing exposed explosives, explosive dust or explosive vapor, or unpackaged electrically initiated explosive devices, even though equipped with approval lightning protection systems.

2.3.1.5.3. Packed, explosive-loaded vehicles.

3. Extremely High Winds:

3.1. Location of Operation. All outside areas.

3.2. Wind Conditions and Respective Criteria:

3.2.1. Wind Condition I: Weak thunderstorm advisory. Surface winds and gusts from 25 to 34 knots.

3.2.2. Wind Condition II: Strong thunderstorm advisory. Surface winds and gusts from 35 to 49 knots.

3.2.3. Wind Condition III: Severe thunderstorm advisory. Surface winds and gusts from 50 to 70 knots.

3.2.4. Wind Condition IV: Surface winds and gusts over 70 knots.

3.3. Sequence of Operation:

3.3.1. The prerequisites of all areas during extremely high winds are as follows:

3.3.1.1. Base weather facility notifies operations and DDS that wind velocity is near 50 knots, DDS notifies all work centers of existing condition.

3.3.1.2. When wind condition IV is eminent, supervisory personnel alerts all work crews of impending condition and paragraph 3.4. will go into effect.

3.3.1.3. After completion of above items, all personnel report to their work centers.

3.4. Procedures for Mooring Aircraft:

3.4.1. During duty hours. MCF or DDS notifies logistics group commander, operations group commander, fighter squadron maintenance officer, production superintendent, maintenance squadron commander, maintenance squadron superintendent, fabrication flight, aerospace equipment maintenance flight, propulsion flight, avionics flight and munitions flight of all wind or severe weather warnings.

3.4.2. During off-duty hours. Following listed supervisors will be called and informed of the storm warnings, at which time if deemed necessary, they will call the personnel required to secure all aircraft and equipment.

| | |
|---------------------------|------------------------------|
| Alerter | Command Post |
| Alternate Alerter | Supervisor (CP) |
| Alternate Alerter Officer | Fighter Squadron Maintenance |
| Alternate Alerter | Flight Chiefs |

3.4.3. All supervisory personnel must be aware that high winds or thunderstorms can occur without warning; all aircraft must be chocked, grounded and intake covers installed and checked for security after the last flight of the day.

3.4.4. Upon confirmation by base weather forecasters that the danger has passed. All aircraft that were subject to adverse weather or high winds (70 knots) require inspection of movable control surfaces. Fuselage and engine inlet and tail pipe areas for damage and foreign objects (FO).

3.4.5. The operations group commander, in coordination with operations selects a "safe haven" base and plans the evacuation of the wing aircraft in extreme weather and winds of 90 knots are expected. Hangering maximum number of aircraft should be accomplished if fly away is impossible.

3.4.6. Operations Group Commander in the Event of Aircraft Evacuation:

- 3.4.6.1. Identifies personnel for the evacuation enroute team.
- 3.4.6.2. Selects and marshals evacuation support equipment.
- 3.4.6.3. When possible, dispatches a maintenance representative to the safe haven base to coordinate for aircraft parking/maintenance space, billets for maintenance crews, transportation and messing.
- 3.4.6.4. Provides DDS or MCF with tail numbers of aircraft and recommended priority of evacuation.
- 3.4.6.5. Pre-flights the aircraft in priority for evacuation.

4. Extremely Cold Weather:

- 4.1. Location of Operation. All outside areas.
- 4.2. During conditions of suspected sub-zero chill factors, the flight chief and DDS or MCF controller determines the chill factor by means of the base weather station. Within the constraints of good judgement and the following basic guidelines are followed:
- 4.3. Sequence of Operation. The pre-requisites for evacuation of all outside areas during extremely cold weather are as follows:
 - 4.3.1. When the chill factor reaches -30 degrees.
 - 4.3.2. Base weather facility notifies operations and DDS or MCF that the chill factor is -30 degrees or lower. DDS or MCF notifies all work centers of the existing conditions.
 - 4.3.3. When this condition exists, DDS or MCF in conjunction with supervisory personnel, alerts all aircraft maintenance and munitions work crews to immediately stop all operations.
 - 4.3.4. After completion of above items, all personnel report their work centers.
- 4.4. Safety Precautions - Extremely Cold Weather. Munitions personnel will adhere to exposure time limits as prescribed in paragraph 4.6 in this instruction, exercise operational risk management (ORM).
- 4.5. Chill Factor and Work Restrictions:
 - 4.5.1. -1 to -10 Degrees Fahrenheit. No more than 30 minutes exposure before allowing individuals to return to a heated building for at least 10 minutes warm up time, more if good judgement dictates.
 - 4.5.2. -11 to -20 Degrees Fahrenheit. No more than 30 minutes exposure. At the end of each 30-minute period, personnel should be sent to a warm area until all body parts are warmed back to normal temperature.
 - 4.5.3. Below -21 Degrees Fahrenheit. Flightline operations cease.

NOTE:

No individual will enter any of the above environments improperly attired. If barriers, whether heated or not, are available to reduce the chill factor, they should be employed to reduce the possibility of cold injury.

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