

**BY ORDER OF THE COMMANDER  
482D FIGHTER WING**

**482D FIGHTER WING INSTRUCTION  
21-104**



**20 JUNE 2011**

**Maintenance**

**FLIGHTLINE AND AIRCRAFT  
MAINTENANCE SEVERE WEATHER  
PROCEDURES**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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This instruction establishes requirements and procedures of all actions to be taken in the event of severe weather at the 482d Aircraft Maintenance Squadron (482 AMXS) complex aircraft operations areas. This instruction implements Air Force Occupational Safety Health Standard (AFOSHSTD) 91-66, *General Industrial Operations*, AFOSHSTD 91-100, *Aircraft Flight Line – Ground Operations and Activities*, AFOSHSTD 91-501, *Air Force Consolidated Occupational Safety Standard*, Air Force Manual (AFMAN) 91-201, *Explosives Safety Standards*, Air Force Policy Directive (AFPD) 91-2, *Safety Programs*, Technical Order (TO) 1F-16C-2-00GV-00-1, *General Vehicle*, TO 00-25-172, *Ground Servicing of Aircraft and Static Grounding/Bonding*, TO 1-1-3, *Inspection and Repair of Aircraft Integral Tanks and Fuel Cells* and it references 482d Fighter Wing Instruction (482 FWI) 15-101, *Base Operational Weather Support*, and applicable checklists. Commanders and supervisors are responsible for ensuring all personnel comply with the provisions of this instruction. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using Air Force Form 847 (AF Form 847), *Recommendation for Change of Publication*; route AF Form 847 from the field through the appropriate functional's chain of command. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33-363, *Management of Records* and disposed of in accordance with (IAW) the Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at <https://www.my.af.mil/gcss-af61a/afirms/afirms/rims.cfm>.

**1. General Responsibilities. DEVIATIONS FROM THIS INSTRUCTION ARE AT THE DISCRETION OF THE WING COMMANDER OR HIS DELEGATED AUTHORITY**

**ONLY.** Maintenance supervisors at all levels should be constantly aware of changing weather conditions. They shall take appropriate actions in securing facilities and initiating notification procedures via the 482d Maintenance Operations Flight (482 MOF)/Maintenance Operations Center (MOC). The Base Weather Flight shall be the central point for information flow concerning severe weather. Supervision shall ensure all assigned on station personnel are briefed to minimize any unnecessary outdoor exposure during severe weather watch and warnings. The maintenance production supervisor of the applicable shift shall be responsible for ensuring all aircraft and flight line maintenance equipment is secured as required by this instruction.

### 1.1. Severe Weather Watch.

1.1.1. **Flight Line.** During severe weather watch, all personnel must be prepared to cease all outside operations and seek shelter without delay.

1.1.2. **Hail.** If greater than one-half inch hail is forecasted in a weather watch, aircraft shall be sheltered in accordance with locally developed procedures.

1.1.3. **Tornadoes.** If Homestead Air Reserve Base (HARB) is under a weather watch for tornadoes, aircraft shall be sheltered in accordance with locally developed procedures when directed by the Wing Commander or designated representative.

1.1.4. **Hurricanes.** The Wing CC shall determine whether to shelter or evacuate aircraft to a safe location based on weather predictions.

1.2. **Individual Severe Weather Detection.** All personnel that detect severe weather conditions (e.g., high winds, lightning, hail, thunderstorms, tornadoes, flooding) with no known Watch or Warning being issued should notify the MOC via the most expeditious means available and take shelter as applicable.

## 2. Procedures.

### 2.1. Notification.

2.1.1. **After notification of an *ADVISORY* for high winds/lightning** (within 5 NM):

2.1.2. MOC shall initiate Checklist (CL) # E04, *Severe Weather* and make a radio call advising all maintenance net users of the advisory.

2.1.3. Work centers shall initiate local developed procedures.

2.2. **After notification of a *WARNING* for high winds/lightning within 5 Nautical Miles (NM):**

2.2.1. MOC shall initiate a Radio Call advising all maintenance net users of the warning.

2.2.2. Personnel shall cease outside operations and seek shelter. If towing of an aircraft has been initiated, continue to destination, the nearest suitable alternate location (e.g., sun shade), or cease towing as directed by maintenance supervision. Seek shelter immediately after securing the tow vehicle and aircraft. Aircraft engine operation in the hush house, trim pad and aircraft parking area may continue during a lightning warning.

2.2.3. All fueling operations shall cease.

2.2.4. All liquid oxygen servicing shall cease.

2.2.5. Munitions/explosives movement: Refer to 482 Maintenance Group Operating Instruction (482 MXGOI) 21-106, *Munitions Electrical Storm Hazardous Weather Warnings* for guidance.

2.2.6. Aircraft shall not be armed or de-armed during a Lightning Weather Warning.

2.2.7. All fuel system maintenance shall cease.

2.2.8. All egress explosives maintenance shall cease.

2.2.9. Uninstalled engine operation at the hush house shall cease.

2.2.10. **Lightning warning during aircraft launch:** Aircraft engine start associated with aircraft launch shall be terminated and aircraft on the ground with engines running shall hold in place, taxi or shutdown in case of an emergency as directed by the Top Three. Airborne aircraft shall be advised to divert or land as directed by the supervisor of flying (SOF). If aircraft shutdown is required due to emergency, impending fuel starvation, or distressed pilot, minimum ground crew required shall respond and remain in enclosed vehicles until chocking is required.

2.2.10.1. **Impending fuel starvation during weather warning:** Aircraft on the ground under a Severe Weather Warning (e.g., Lightning Warning) shall be directed by the Top 3 when to shut down if the aircraft fuel totalizer will reach 600 pounds of fuel prior to the termination of the weather warning. (This is to prevent fuel pump damage from impending fuel starvation.) Top Three and maintenance supervision shall determine the best time to shut down based on the weather conditions. Maintenance supervision shall direct the flight line personnel via the MOC to chock the aircraft per procedure in paragraph [2.2.10.2](#) in this instruction.

2.2.10.2. **Aircraft chocking during weather warning:** No pins shall be installed at this time. Aircraft shall be secured and all personnel shall immediately seek shelter. Personnel shall minimize their exposure during this emergency response period. Personnel shall immediately evacuate to a vehicle or shelter. Supervision shall minimize their personnel to exposure during this emergency response period.

**3. Fuel System Repair Hanger and Alternate Repair Area:** Upon notification of lightning within 10 miles or less, Fuel Shop Supervisor shall suspend all fuel system maintenance to give ample time to secure aircraft and repair area as follows:

3.1. Tack all removed fuel panels, filler caps and cover seams with tape (if temporary panels are used, panels will be manufactured from non-conductive materials).

3.2. Close hanger doors.

3.3. Secure loose items (tools, boxes, TO's, and move work stands away from aircraft and lock wheels, etc.).

3.4. If high winds (above 30 knots) are expected, the procedures shall be the same as stated before, except that the stands and stanchions shall be brought inside until the high winds subside and work can be resumed.

3.4.1. Ensure aircraft on alternate repair area are tied down.

3.4.2. Ensure all external tanks are tied down.

- 3.4.3. Put waste storage containers inside the hanger.
- 3.4.4. If possible, put all vehicles and H-70 trailer in the hanger.
- 3.4.5. Any item that cannot be moved to a safe location shall be secured using a tie down strap.

**4. Fire Safety.** 482 MXG Maintenance Supervision shall ensure that portable fire extinguishers are in-place as required when aircraft are placed in hangars due to severe weather or if the automatic fire suppression system is inoperative. A two person fireguard team shall be in-place if assigned aircraft are hangared with any munitions loaded/installed.

**5. Vehicles:**

- 5.1. All vehicles shall be secured.
- 5.2. Mission essential vehicles shall be sheltered to the maximum extent possible, when time permits.

**6. Termination of Weather Watch/Warning.** Homestead Weather Flight shall notify the MOC of termination of Weather Watch/Warning.

DONALD R. LINDBERG, Colonel, USAFR  
Commander, 482d Fighter Wing

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

AFOSH STD 91-66, *General Industrial Operations*, 01 Oct 1997  
AFOSH STD 91-100, *Aircraft Flight Line – Ground Operations and Activities*, 01 May 1998  
AFOSH STD 91-501, *Air Force Consolidated Occupational Safety Standard*, 7 July 2004  
AFI 21-101, *Aircraft and Equipment Maintenance Management*, 26 July 2010  
482FWI 15-101, *Base Operational Weather Support*, 7 May 2002  
AFMAN 91-201, *Explosives Safety Standards*, 17 Nov 2008  
TO 1F-16C-2-00GV-00-1, *General Vehicle*, 1 Sep 2010  
TO 00-25-172, *Ground Servicing of Aircraft and Static Grounding/Bonding*, 10 Feb 2010  
TO 1-1-3, *Inspection and Repair of Aircraft Integral Tanks and Fuel Cells*, 22 Sep 2009  
<https://www.my.af.mil/gcss-af61a/afrims/afrims/rims.cfm>

***Adopted Forms***

AF Form 673, *Air Force Publication/Form Action Request*  
AF Form 847, *Recommendation for Change of Publication*

***Abbreviations and Acronyms***

**AF**—Air Force  
**AFI**—Air Force Instruction  
**AFOSH STD**—Air Force Occupational Safety Health Standards  
**AFRIMS**—Air Force Records Information Management System  
**AFMAN**—Air Force Manual  
**AGE**—Aerospace Ground Equipment  
**AMXS**—Aircraft Maintenance Squadron  
**CC**—Commander  
**CL**—Checklist  
**FWI**—Fighter Wing Instruction  
**HARB**—Homestead Air Reserve Base  
**IAW**—In Accordance With  
**LMR**—Land Mobile Radio  
**MOC**—Maintenance Operations Center  
**MOF**—Maintenance Operations Flight

**MXS**— Maintenance Squadron

**NM**—Nautical Mile

**OPR**—Office of Primary Responsibility

**RDS**—Records Disposition Schedule

**SOF**—Supervisor of Flying

**TO**—Technical Order

**USAFR**—United States Reserve Command