

**BY ORDER OF THE COMMANDER
35TH FIGHTER WING**

**35TH FIGHTER WING
INSTRUCTION 21-103**



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Maintenance*

**FOREIGN OBJECT DAMAGE, DROPPED
OBJECT PREVENTION AND TOOL
ACCOUNTABILITY AWARENESS**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AFD 21-1, Air and Space Maintenance, and AFI 21-101, Aircraft and Equipment Maintenance Management and is applicable to all units assigned or attached to the 35th Fighter Wing. This instruction establishes the responsibilities and procedures governing Foreign Object Damage, Dropped Objects and Tool Accountability at Misawa Air Base. 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 Form 847s 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 the Air Force Records Disposition Schedule (RDS) located at <https://www.my.af.mil/gcss-af61a/afirms/afirms/rims.cfm>.

SUMMARY OF CHANGES

This interim change implements new guidelines that redefine the use of devices used for ice traction authorized on the Misawa AB flight line. A margin bar (I) indicates newly revised material.

1. General Foreign Object Damage (FOD) prevention:

- 1.1. Attempt to remove all foreign objects (FO) from the flight line whenever you see it. For FO that cannot be removed (including damaged pavement and hazardous ground), contact

Airfield Operations on the ramp net or extension 226-3110 and advise them of the severity of the FO and the location. Airfield Operations will request an airfield sweeper to respond to the area as required.

1.2. Restricted area badges will be removed when performing intake/ inlet/ exhaust inspections if personnel physically enter these areas. Restricted area badges will be secured with a subdued nylon/cotton cord or plastic armband.

1.3. **(COMBATAIRFORCE)** Remove restricted area badge within 25 feet of an aircraft with engine(s) operating. Ensure line badge clips are secured to prevent loss. For those individuals using the cord/rope for security, pass the cord/rope through the clip eyelet.

1.4. Wear of headgear is prohibited on the flight line, except required safety items and the following:

1.4.1. Knit caps, B9B winter hat (chinstrap secured), helmet liner, and as authorized by the installation Commander during inclement/cold weather.

1.4.2. During special events such as ceremonies and festivals, hats may be worn provided there are no aircraft operating in the immediate area.

1.4.3. Security Forces while performing official duties may wear the beret with insignia attached; however, berets will be removed and secured within 50 feet of operating aircraft/engines.

1.4.4. BDU Gortex, ABU APECS, rain gear and cold weather parka jacket hoods will be stowed when within 25 feet of aircraft operations.

1.5. Ice cleats may be worn on the flight line. Ice cleats will not be worn when climbing on or in aircraft or while on maintenance stands. All personnel will perform pre and post use inspections on ice cleats. If any portion of the cleat is discovered missing, personnel will follow lost tool/item procedures IAW AFI21-101_COMBATAIRFORCESUP_I. See Table 1. below for approved ice cleats for use on Misawa AB flight line. All other models are not approved for use on Misawa AB flight line.

Table 1. Approved Ice Cleats List.

MANUFACTURE	MODEL	RESTRICTIONS
Stabilicers	Ice walkers Original/Lite	Prohibited for Munitions Operations
Yak Trax	Walker/Pro	Prohibited for Munitions Operations
Nora Contitech	Spiky/Spiky Plus	

1.6. All unidentifiable FO found on taxiways or the runway should be turned in to the wing FOD monitor for comparison with the dropped object and lost tool records.

1.7. The MOS/MXOT will provide initial and recurrent Foreign Object Damage/Dropped Object awareness training during initial and annual Block Training.

1.8. Glass bottles are not authorized on the flight line. Plastic beverage containers and cans are authorized, but must be secured prior to engine operation.

2. Composite Tool Kit (CTK) Procedures:

2.1. All personnel using tools in aircraft related maintenance areas both on and off the flight line will have a permanent identifier on all tools that can be traced back to the owning work center. While present in aircraft related maintenance areas, both on and off the flight line, all personnel will account for 100% of their tools upon entry and before exiting these areas.

2.1.1. Emergency vehicles responding to real world emergencies from a flight line location to an off flight line location can account for tools upon termination of the emergency incident.

2.2. Lost Tool Procedures:

2.2.1. Notify the section supervisor and flight OIC/NCOIC of a lost tool/item immediately. The section supervisor and/or flight OIC/NCOIC will initiate a CAF IMT 145 which can be located on <http://www.e-publishing.af.mil/> and will contact the Maintenance Operations Center (MOC) at 6-4833 to obtain a control number. MOC will run QRC #29, Lost Tool/Item checklist and notify all applicable members.

2.2.2. Complete the CAF IMT 145 IAW AFI 21-101_COMBATAIRFORCESUP_I.

2.2.3. Once initiated, the CAF IMT 145 must be completed regardless of the status of the item.

2.2.4. Conduct a search using the individual and supervisor. If the lost tool or object was in a shop and aircraft components were involved, the appropriate components will be inspected.

2.2.5. The search will be terminated upon request of the section supervisor with concurrence of the flight OIC/NCOIC.

2.2.6. The CAF IMT 145 will be kept for 12 months in the tool room/work center CTK continuity folder.

2.2.7. The original completed CAF IMT 145 will be delivered to the MXG/QA office in building 1387 (MXG/CC Bldg) within 5 duty days of initiation.

2.2.8. If a previously lost item is found, contact the Wing FOD Monitor to update the lost tool report.

2.2.9. Theft or suspected theft of a tool or CTK will be reported to the tool room or work center supervisor immediately, who in turn will report the loss to the flight OIC/NCOIC for investigation.

2.3. Personal Tools/Equipment:

2.3.1. Tools not controlled through CTK procedures are **NOT** authorized on the flight line, or in any maintenance area (e.g., mini-mag flashlights, leathermans, buck knives, etc.)

2.3.2. Ensure individual issued equipment (i.e. ear defenders, reflective belts, etc) are marked with the owner's first initial, last name, and employee number (i.e. J. Doe, 12345). If the individual does not have an employee number, use last 5-digits of SSN.

3. 35th Civil Engineer Squadron:

- 3.1. Develop a schedule for use of mechanical airfield sweepers in coordination with Airfield Operations (35 OSS/OSAM). Provide equipment and personnel to support this schedule and distribute the schedule to all agencies concerned.
- 3.2. Maintain the capability to clean paved flight line areas after mishaps or upon request (24-hour basis with 30-minute response).
- 3.3. Install or remove FOD prevention items as required, with a Base Civil Engineer Work Request, AF Form 332, Base Civil Engineer Work Request.

4. Maintenance Operation Center (MOC):

- 4.1. Issue ice FOD alerts when advised by the 35 OSS Weather Flight and as changes occur. Additionally, will rebroadcast current weather conditions every 4 hours.
- 4.2. If intake ice buildup is confirmed, notify the 35 MXS, 13 AMU and 14 AMU Production Superintendent.
- 4.3. Coordinate with Airfield Operations for an airfield sweeper upon request.
- 4.4. For Lost Tools/Items the MOC will initiate QRC #29, Lost Tool/Item checklist, issue a control number and notify all applicable personnel of reported lost tools/items.
- 4.5. For FOD incidents, the MOC will initiate QRC #20, Foreign Object Damage checklist and notify all applicable personnel.
- 4.6. For Dropped Objects:
 - 4.6.1. Accomplish the Dropped Object QRC #13 checklist for items reported lost during aircrew operations from assigned or transient aircraft.
 - 4.6.2. Request Airfield Operations to accomplish an immediate sweep of the runway if the location of the Dropped Object is unknown.
 - 4.6.3. Generate a Dropped Object control number (unit, year, and month, followed by sequence number—example 35FW-0801001) and forward to applicable units.

5. Flight Line Area Vehicle Operators:

- 5.1. Proper FOD checks and FOD awareness: Always clean vehicle floor and tires before entering the airfield area or leaving the construction site. Visually inspect vehicle and tires, and clean up as necessary before crossing the taxiway. If the contractor posts a FOD monitor at taxiway crossings, the monitor will check the taxiway after each vehicle crosses. If no monitor is posted, the driver of the vehicle must stop and visually inspect the taxiway after each crossing.
- 5.2. FOD Control and Prevention Responsibilities:
 - 5.2.1. All vehicles entering the flight line from a non-FOD free area must perform a thorough FOD check to ensure vehicle is free of FO. Vehicle operators will perform a vehicle (roll-over) check on all tires. Vehicle roll-over is defined as checking all areas of the vehicle's tires, to include the portion contacting the ground while parked. This is accomplished by moving the vehicle forward enough to expose the portion of tire that was in contact with the ground. Inspect tires, inside and outside of vehicle, and bumper

magnet (if installed). Failure to accomplish FO checks may result in temporary suspension of AF Form 483, Certificate of Competency, Flight Line Certification IAW 35FWI 13-202.

5.2.2. Emergency vehicles responding to emergencies are exempt from vehicle FOD checks unless time permits (i.e., if emergency aircraft will not land for more than 15 minutes).

5.2.3. A flashlight will be utilized to accomplish FO checks during hours of darkness.

5.2.4. For vehicles transporting equipment and other items, operators will inspect vehicles to ensure items are secured.

5.2.5. Metal valve stem caps will be removed (plastic caps required on GOV tires).

5.2.6. During winter operations, remove snow/ice build-up from vehicle wheel well, bumper and under carriage.

5.2.7. Flight line vehicle operators will only use authorized Entry Control Points (ECPs).

5.2.8. Pintle hook pins will be secured to the vehicle with chain and installed in the hook locking mechanism at all times.

5.2.9. Metal tire chains and/or studded traction devices are not authorized on the flight line road, ramp, taxiways, or runway. EXCEPTION: Aircraft tow, aircraft servicing vehicles, and snow removal chemical dispensing vehicles may use metal chains in extreme weather conditions, such as packed snow or ice, after coordination with Airfield Management, Safety and CES IAW AFI 113-213.

5.3. Support Equipment/Vehicles:

5.3.1. Inspect equipment for FO after any maintenance and prior to flight line entry.

6. FOD Check Points:

6.1. A roll-over FOD check will be accomplished on all vehicles prior to entering aircraft movement areas (e.g., runway, taxiway and parking aprons) from access roads, paved shoulders, and other non-paved surfaces.

7. FOD Prevention Councils:

7.1. All units associated with the airfield will appoint Junior FOD Prevention Council representatives.

7.2. Appointees will attend Junior FOD prevention meetings quarterly or when deemed by the wing FOD monitor.

7.3. Unit Junior FOD Prevention Council representatives will be E-1 to E-6. The Junior FOD Prevention Council works issues at their level for FOD abatement and resolution of problem areas.

7.4. The Wing FOD Prevention Council reviews the progress of the FOD Prevention Program and makes policy recommendations to the 35 FW/CV to ensure success of the program.

7.5. Group commanders, director(s), commanders of units with maintenance personnel, Safety, CE, Airfield Manager and Security Forces are identified as primary FOD Prevention Council members.

7.6. All unit commanders will actively support the FOD awards program.

8. FOD Prevention Recognition Program:

8.1. FOD Fighter of the Quarter:

8.1.1. FOD Fighter of the Quarter is awarded to the person whose actions contributed most to the FOD prevention program during the quarter.

8.1.2. The individual is selected from a written nomination provided to the Wing FOD monitor by the section/flight supervisors.

8.1.3. The Junior FOD Council selects, by popular vote, the individual with the most impact for FOD prevention. In case of a tie, the FOD monitor will cast the deciding vote.

8.1.4. The winner of the FOD Fighter Award receives a one day pass, letter of appreciation and other incentives upon availability.

8.2. FOD Poster of the Quarter:

8.2.1. FOD Poster of the Quarter is awarded to the person whose poster most contributes to FOD prevention awareness during the quarter.

8.2.2. Poster will be submitted to the Wing FOD Prevention NCO. Poster size will not exceed 8.5"x11", must be conservative, and of minimal cost.

8.2.3. The Junior FOD Council selects, by popular vote, the winning submission. In case of a tie, the FOD monitor will cast the deciding vote.

8.2.4. The winner of the FOD Poster Award receives a two day pass, letter of appreciation and other incentives upon availability.

8.3. Golden Bolt Program:

8.3.1. Awarded to the individual who discovers a golden bolt that was placed by the FOD Monitor or representative.

8.3.2. The golden bolt will remain under constant observation if it is placed or hidden in an area that, if not found, would create a FOD hazard.

8.3.3. The winner of the Golden Bolt Award receives a one day pass, letter of appreciation and other incentives upon availability.

9. Dropped Object Program (DOP):

9.1. A dropped object is any aircraft part, component, surface, or other item lost during aircrew operations, from engine start to engine shutdown, unless intentionally jettisoned. Inadvertently released munitions or munitions released in excess of the quantity selected by the aircrew, or a multiple release, are not considered dropped objects and will be reported IAW AFI 91-204.

9.2. When a Dropped Object is discovered on assigned or transient aircraft:

9.2.1. The identifying squadron will notify the MOC immediately.

9.2.2. Use ACC Dropped Object Investigation EXCEL Worksheet to document findings.

9.2.3. The squadron Operations Officer/Maintenance Superintendant will ensure the Dropped Object investigation worksheets are completed and forwarded to the Wing DOP monitor/QA within 24 hours.

9.2.4. Supervisors will ensure unit maintenance personnel are briefed weekly on dropped object trends/investigation results. This briefing should include a brief summary of the week's incidents and preventive measures.

10. Adopted Forms:

AF Form 332, Base Civil Engineer Work Request

AF Form 483, Certificate of Competency

AF Form 847, Recommendation for Change of Publication

CAF IMT 145, Lost Tool/Object Report

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