

**BY ORDER OF THE COMMANDER
42D AIR BASE WING (AETC)**



AF INSTRUCTION 21-101

MAXWELL AFB SUPPLEMENT 1

24 APRIL 2003

Maintenance

AEROSPACE EQUIPMENT MAINTENANCE MANAGEMENT

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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AFI 21-101, 1 Oct 2002, is supplemented as follows.

This supplement implements AFI 21-101, *Aerospace Equipment Maintenance Management*. It applies to all flying and maintenance activities, transportation, civil engineering, security forces, and the fire department (any entity that has access to the flight line and poses a FOD potential.) Requests for changes to this supplement shall be addressed to MSD/AO and approved by the Vice Wing Commander.

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

18.23. (Added) Airfield Operations (MSD/AO) is the installation FOD Prevention Program Manager and OPR for maintaining the FOD Prevention Program instruction and associated supplement. Airfield Operations also manages the base-wide FOD Prevention Committee comprised of the following members: 42 ABW/CV (Chairperson), 42 ABW/SE, 42 CONS/LGCM, 42 OSF, MSD/CE, MSD/AOT, MSD/QPI, 42 MSG/CEF, 42 SFS/SFO, 54 ALF/SE, 908 AW/SE, 908 AW/LGM, HQ CAP-USAF/SE, and Aero Club. Contract aircraft maintenance Shop Chief/Site-Supervisor from C-21 Maintenance is invited to attend.

18.23.2.20. (Added) FOD prevention is the responsibility of all maintenance, operations, and base support personnel who work in, around, or drive through flightline operational areas. MSD/AO, MSD/QPI and C-21 (54 ALF/QAR) are responsible for ensuring contract maintenance personnel comply with individual company FOD prevention policies and contract statement of work or performance requirement document. All personnel performing maintenance

activities must practice good housekeeping at all times and perform maintenance tasks according to their respective directives, contract statements of work or performance requirement document, and base operating procedures.

18.23.2.21. (Added) Initial FOD prevention training is given to all newly assigned operations, maintenance, and base support personnel who work in and around operational areas before they are granted flightline driving privileges. Supervisors and personnel conducting training emphasize areas covered in "FOD Prevention Topics". Transient Alert, C-21 Maintenance, and all contracted aircraft maintenance personnel receive FOD prevention indoctrination and training in accordance with company FOD prevention programs. Training accomplished is maintained and made available for QAR/QAE review.

18.23.2.22. (Added) Because vehicles are a major source of foreign objects, operators must ensure all equipment carried on their vehicle is properly stowed and secured, and the vehicle is inspected for FOD potential immediately before entering the flightline. When vehicles are operated on unpaved surfaces, operators must stop and remove foreign material from their tires before returning to the airfield pavement. **EXCEPTION:** Emergency vehicles responding to any in-flight or ground emergencies on the flightline are not required to perform a FOD inspection.

18.23.9.1. (Added) All FOD incidents are jointly investigated by the respective maintenance leadman, QAR/QAE and unit FOD monitor. Contract maintenance follows company reporting procedures. Units notify MSD/AO of FOD mishaps involving transient or locally-stationed aircraft. Report FOD incidents on the AETC Form 199, **Foreign Object Damage (FOD) Incident Investigation**. (908 AW comply with AFR directives.)

18.23.9.8. (Added) The responsible unit sends the completed AETC Form 199 to the Maxwell FOD Prevention Program Manager (MSD/AO). The form is then reviewed with 42 ABW/SEF and forwarded to the Director of Maintenance Engineering (HQ AETC/LGMTP).

18.23.9.9. (Added) The appropriate commander or QAR/QAE is notified immediately of all foreign object conditions that could affect safety or contribute to the loss or damage of Air Force property. In addition, the FOD Prevention Program Manager encourages and reviews suggestions relating to FOD prevention for possible adoption.

18.23.10.1. (Added) FOD Prevention Committee Meetings. Conducted quarterly, or as required. Meeting minutes are completed by MSD/AO and then distributed within 10 duty days. The following topics are standard briefing items at each meeting:

18.23.10.1.14 (Added) Significant Air Force/AETC/42 ABW Trends

18.23.10.1.15 (Added) Crossflow Review (MSD/QPI, Airfield Management)

18.23.10.1.16 (Added) Maxwell AFB Potential Hazard Areas (All)

18.23.10.1.17 (Added) Airfield Sweeper Status (MSD/CE)

18.23.10.1.18 (Added) Show-and-Tell FOD items brought to the meeting (All)

18.23.10.1.19 (Added) Dropped Objects

18.23.10.2. (Added) Squadron/Unit Program Management. All members maintain an indexed continuity binder containing the following items:

18.23.10.2.1. (Added) Current Letter of Appointment

18.23.10.2.2. (Added) Copy of AFI 21-101, para 18.23, and Maxwell AFB Supplement 1

18.23.10.2.3. (Added) Current list of all committee members

18.23.10.2.4. (Added) Current applicable operating instructions and checklists

18.23.10.2.5. (Added) FOD Prevention Training topics: (Attachment 10)

18.23.10.2.6. (Added) FOD meeting minutes (retain 1 year)

18.23.10.2.7. (Added) Documentation of inspections, findings, and follow-up actions through completion

18.23.10.2.8. (Added) Cross-tell information

18.23.10.2.9. (Added) Miscellaneous correspondence

18.23.10.3. (Added) Airfield FOD Inspections. Airfield Management conducts daily airfield inspections with particular awareness for foreign objects on ramps, taxiways, runways and access roads.

18.23.10.4. (Added) FOD Sweeper Operations. MSD/CE provides regular sweeping operations of these areas and at other times deemed necessary by Airfield Management.

18.23.10.5. (Added) Aircraft Maintenance Responsibilities. All aircraft maintenance organizations are responsible for keeping their respective parking locations clean, picking up all foreign objects, properly securing or disposing of them, and reporting all observed potential FOD conditions to the appropriate maintenance supervisor. Additionally, 908 AW, Aero Club, CAP and C-21 maintenance and other contracted agencies are responsible for the housekeeping of their respective hangars and areas in the immediate vicinity of the hangars.

18.23.10.2.6. (Added) Flight Crew Responsibilities. Flight crews must account for all equipment and personal items after each flight, and ensure that any items that become loose, damaged, or lost during aircraft operation are documented in the AFTO Form 781. Maintenance personnel practice proper control of personal tools and account for hardware. If any item becomes lost and cannot be located after search, the AFTO Form 781 is annotated and the QAR/QAE notified.

18.23.10.7. (Added) Airfield Management Responsibilities. Airfield Management is responsible for tracking adverse trends and making sure FOD awareness information is distributed to all committee members.

JAMES R. SCHUMACHER
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**Attachment 10 (Added) (MAFB)
FOD PREVENTION TRAINING TOPICS**

A10.1. FOD hazards peculiar to the type of aircraft assigned

A10.1.1. Close proximity taxiing

A10.1.2. Aircraft inlet and exhaust blast hazards

A10.1.3. Use of engine run-up areas

A10.1.4. Operation of engines overhanging unimproved areas

A10.2. Types and classes of foreign objects: (Metal, Stone, Miscellaneous)

A10.3. Discuss how a moment of carelessness can result in an unnecessary expenditure of material and man-hours. If available, cite specific instances of engine compressor and turbine damage, aircraft surface damage, gear damage, tire cuts, etc. Also, discuss man-hours spent attempting to locate lost items in enclosed areas.

A10.4. Control of individual articles of clothing and personal equipment such as hats, pens, pencils, coins, identification badges, metal fasteners, aircraft safety pins, forms, manuals, and safety lock and pins.

A10.5. FOD prevention controls for intakes, movable control surfaces, landing gears, tires and air inlet ducts.

A10.6. Proper protection of aircraft during hazardous periods such as high winds.

A10.7. Proper use of receptacles to dispose of foreign objects.

A10.8. Reporting procedures for FOD occurrences.

A10.9. How to inspect for foreign objects on vehicles such as refueling trucks, supply trucks, contract vehicles, and any other assigned vehicles authorized to operate within the flightline and hangar areas.

A10.10. Policies for contract maintenance FOD prevention in hangars, flightline, and work areas (contained in company FOD prevention programs.) In general:

A10.10.1. Maintenance engine runs

A10.10.2. Control of debris and good housekeeping

A10.10.3. Tool control and hardware accountability

A10.10.4. FOD walks, disposal, and documentation

A10.10.5. Control of personal items

A10.10.6. FOD reporting

A10.10.7. Proper use of intake and inlet covers, plugs, etc.

A10.10.8. Procedures for requesting CE sweeping equipment