BY ORDER OF THE COMMANDER
TINKER AIR FORCE BASE

TINKER AIR FORCE BASE
INSTRUCTION 21-100

21 FEBRUARY 2023

Maintenance

FOREIGN OBJECT DAMAGE (FOD) AND DROPPED OBJECT PREVENTION (DOP) PROGRAM

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This publication implements Air Force Materiel Command Instruction (AFMCI) 21-100, *Depot Maintenance Management*. It establishes guidance and procedures for the 72d Air Base Wing (72 ABW) Foreign Object Damage (FOD) and Dropped Object Prevention (DOP) Programs. This instruction is applicable to all units assigned, associated, tenant, temporary duty (TDY), transient, civilian, and contractors to Tinker Air Force Base (AFB). Refer recommended changes and questions concerning this publication to the Office of Primary Responsibility (OPR) listed above using a Department of the Air Force (DAF) Form 847, *Recommendation for Change of Publication*; route DAF Form 847 from the field through the appropriate function's chain of command. Ensure all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Instruction (AFI) 33-322, *Records Management and Information Governance Program*, and disposed of IAW Air Force Records Information Management System (AFRIMS) records disposition schedule.

SUMMARY OF CHANGES

This instruction has been revised with minimal changes, mostly administrative. The most significant change is the areas of responsibility, which should be reviewed.

1. Program Objective.

1.1. To establish FOD/DOP program procedures, outline responsibilities, reporting requirements, inspection standards, aircraft ramp area requirements, training, and awareness to eliminate potential sources of FOD. In addition to saving lives, a good FOD prevention program will improve readiness and save manpower, money, and material.

2. Installation FOD Prevention/DOP Program Monitor Responsibilities.

2.1. Coordinate and conduct quarterly FOD/DOP Prevention and Awareness Committee Meetings, ensure required attendees are invited and minutes are published.

2.1.1. FOD/DOP Committee participating organizations:

2.1.1.1. The 72 ABW Vice Commander (72 ABW/CV) – Chair

2.1.1.2. Installation FOD/DOP Program Monitor

2.1.1.3. The 72 ABW Civil Engineering (72 ABW/CE), if applicable

2.1.1.4. The 72 ABW/Safety (72 ABW/SE)

2.1.1.5. Air Force Sustainment Center Contracting (AFSC/PK), if applicable

2.1.1.6. United States Navy Strategic Communications Wing One (SCW-1)

2.1.1.7. The 72d Operation Support Squadron Operations SupportAirfield Management (72 OSS/OSAM) Tinker Airfield Manager

2.1.1.8. The 552d Air Control Wing Vice Commander (552 ACW/CV)

2.1.1.9. The 507th Air Refueling Wing Vice Commander (507 ARW/CV)

2.1.1.10. Oklahoma City Air Logistics Complex Commander (OC-ALC/CC)

2.1.1.11. The 10th Flight Test Squadron (10 FLTS)

2.1.1.12. American Federation of Government Employees (AFGE) 916 Union

2.1.1.13. OC-ALC Group Production Commanders

2.1.1.14. OC-ALC Quality Assurance (QA)

2.1.1.15. OC-ALC Training

2.1.1.16. OC-ALC Tool Manager

2.1.1.17. The 507 ARW FOD/DOP Point of Contact

2.1.1.18. OC-ALC Group FOD/DOP Focal Points

2.1.2. Installation FOD/DOP Monitor will ensure the 72 ABW Safety Office is notified of all FOD and DOP incidents within 24 hours of occurrence. If a DOP incident involves causalities, property damage, or if adverse publicity is likely, then the safety office shall be notified immediately.

3. All Units Assigned, Associated, Tenant, TDY, Transient, Civilian, and Contractor Responsibilities.

3.1. Reporting.

3.1.1. Cut Tire Reporting Process. Report all aircraft cut tires to airfield management immediately so they may inspect the aircraft taxi route from the parking ramp up to the taxiway for possible foreign objects (FO). After a cut tire report has been received, airfield management should inspect taxiways and runways for possible FO.

3.1.2. Tenant Units will provide an informational copy of initial FOD/DOP reports within 24 hours of incident occurrence to the Installation FOD/DOP Monitor.

3.1.3. Tenant Units will provide an informational copy of the final FOD/DOP reports on a monthly basis, until closure, to the Installation FOD/DOP Monitor at **OC-ALC.FOD.DOP@us.af.mil**

3.2. Training.

3.2.1. All personnel who, in the performance of their assigned duties, work in, or travel through maintenance areas, flight line areas, etc., will receive initial and refresher formal MAJCOM FOD/DOP awareness and prevention training. Contractors will consult the statement of work or contract management office for previously established FOD/DOP training requirements. Tenant units follow applicable MAJCOM requirements.

3.2.2. Contracting organizations may request the training video through **OC-ALC.FOD.DOP@us.af.mil** .

3.2.3. Training Criteria. The responsible unit will ensure that, at minimum, personnel complete the Air Force Materiel Command (AFMC) Initial FOD/DOP Awareness Training. Personnel will receive initial FOD awareness and prevention training within 30 days of assignment to a work center. Refresher training is required every 36 months.

3.2.4. Escort personnel shall brief all visiting personnel on local area FOD policy, procedures, and known area FO hazards.

3.3. Prevention.

3.3.1. Designated areas of responsibilities are outlined in **Figure A2.1**, *Areas of Responsibility*.

3.3.2. Aircraft cockpits and flight decks will be inspected for FO prior to flight.

3.3.3. FOD Checkpoint Inspections.

3.3.3.1. FOD inspections (including tire-rollover inspections) will be conducted before entering the runway, taxiway, flight line, and aircraft parking ramps and at all designated FOD checkpoints. FOD inspections will include inspection and removal of FO from magnetic bars (if applicable). All vehicles transiting the flight line will be cleaned of all debris daily before operation.

3.3.4. Caps, Plugs, and Covers.

3.3.4.1. Caps, plugs, and covers will be used to properly plug or cap all openings, ports, lines, hoses, electrical connections, and ducts on aircraft, uninstalled/installed engines, line replacement units, missiles, munitions, drones, space systems, support equipment, components, trainers, and aerospace ground equipment (AGE). Caps, plugs, and covers that are fitted to the component or equipment are the item of choice. Aircraft engine and pitot static covers shall remain on aircraft at all times other than during operation of the aircraft or when performing maintenance or inspection of the areas or IAW the applicable technical order (TO).

3.3.4.1.1. Unless otherwise stated in a maintenance group local guidance or a specific TO, covers and plugs (e.g., engine, pitot tubes(s) to include ejection seat) required by the applicable TO will remain installed up to one hour prior to aircrew arrival; unless there are personnel safety issues or cover installation impedes maintenance task being performed, as applicable.

3.3.4.1.2. Tear-down processes (those processes that will completely tear down the item prior to return to service) are not required to have components capped or plugged during the following operations: blast, cleaning, coordinate measuring machine processes, disassembly, heat treat, induction inspection, machining, non-destructive inspection processes, plasma spray, plating, and welding. Components that cannot be inspected 100 percent to ensure FO free will still require open cavities to be capped, covered (if required), plugged, taped off, etc. All components will be inspected for FO prior to reassembly. Any assembly that requires minor repair will be capped and plugged at all times.

3.3.4.1.3. All stored assets and unmated connectors on units that contain circuitry susceptible to electro-static discharge (ESD) damage shall be protected. ESD caps are conductive, which poses a safety concern to personnel and equipment. Do not use any other type of cap or plug which may restrict cooling air flow and may cause equipment to overheat and result in damage to equipment and/or personnel.

3.3.5. Controlling.

3.3.5.1. FOD containers shall have “FOD” stenciled in contrasting letters no smaller than two inches. FOD containers will be emptied daily.

3.3.5.2. All vehicles driven on the flight line must be equipped with a FOD container with lid, flap, or cover, secured to the container. The FOD container shall be secured from tipping over.

3.3.6. Clothing and Jewelry.

3.3.6.1. Hats, berets, badges, wigs, hairpieces, etc. will not be worn within 50 feet of an operating jet engine or inside an engine test cell.

3.3.6.2. The flight line is designated as a no-hat area. ***EXCEPTION****: Headgear/clothing authorized for cold weather and sun protection may be worn; however, every effort should be made to prevent such headgear from coming loose during duty performance. Wear of cold weather hats (i.e., watch caps) and boonie (floppy) hats must not interfere with proper wear of hearing protection. All head gear (hats and hoods) must be removed and stowed when approaching within 25 feet of running aircraft engines.*

3.3.6.3. Badges will be secured with any of the following type devices: plastic armband; nylon neck cord, or button with nylon macramé that can be securely affixed to the outer garment. The use of metal on these items should be kept at a minimum, (i.e., clip or spiral key ring) and if used; ensure that it cannot be separated from the cord. These items will also be removed when required by any Air Force Instruction (AFI)/TO or hazardous situation is identified.

3.3.6.4. Metal insignias/badges (i.e., service year pins, name badges) will not be worn on the flight line.

3.3.6.5. For all maintenance areas designated as FOD critical areas; watches, rings, necklaces, chains, and other jewelry shall not be worn while performing maintenance. Wigs, hairpieces, etc. shall be securely attached to the individual so that it cannot be separated from the individual. Climate and safety will be considered.

3.3.6.6. All personnel shall follow guidelines for the proper wear of finger rings and other jewelry as outlined in DAFMAN 91-203, *Air Force Occupational Safety, Fire, and Health Standards*, and the work center job safety analysis IAW AFI 91-202, *The United States Air Force Mishap Prevention Program*, which apply to personnel entering a designated maintenance area (usually indicated by yellow lines or other required markings). This includes administrative/support personnel visiting the work areas for any length of time.

3.3.7. FOD Walks.

3.3.7.1. FOD walks/sweeps of FO critical areas located within designated areas of responsibility will be conducted at a minimum for the following tenants in **Figure 1**

Figure 1. Tenant FOD Walk/Sweep Responsibility.

507 ARW: Once monthly and event driven.
552 ACW: Twice weekly and event driven.
SCW-1: Once weekly and event driven.
76 AMXG: Once weekly and event driven.

3.3.7.1.1. FOD walks may be postponed due to inclement weather, but not cancelled.

3.3.7.1.2. Scheduled FOD walks that land on holidays will be accomplished the following workday. Additional FOD walks will be scheduled as needed.

3.3.7.2. Personnel will take the following actions prior to any aircraft taxi operation:

3.3.7.2.1. Personnel will inspect for and remove ALL FO from engine inlet areas and within a 50-foot radius of engines prior to operation (or greater if required by mission, design, series specific TO) and any engine intake/inlet maintenance.

3.3.7.2.2. Aircraft parking ramps, taxi ways, and adjacent areas should remain FO free at all times. It is the responsibility of all maintenance personnel working in these areas to pick up and dispose of all FO on a daily basis.

G. HALL SEBREN JR., Colonel, USAF
Commander

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFMCI 21-100, *Depot Maintenance Management*, 06 June 2022

AFI 33-322, *Records Management and Information Governance Program*, 28 July 2021

DAFMAN 91-203, *Air Force Occupational Safety, Fire, and Health Standards*, 25 March 2022

AFI 91-202, *The United States Air Force Mishap Prevention Program*, 11 Mar 2020

Adopted Forms

DAF Form 847, *Recommendation for Change of Publication*

AFMC Form 343, *Quality Assurance Assessment*

Abbreviations and Acronyms

ABW—Air Base Wing

ACW—Air Control Wing

AF—Air Force

AFB—Air Force Base

AFGE—American Federation of Government Employees

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFMC—Air Force Materiel Command

AFRIMS—Air Force Records Information Management System

AFSC—Air Force Sustainment Center

AFSCMAN—Air Force Sustainment Center Manual

AGE—Aerospace Ground Equipment

AMXG—Aircraft Maintenance Group

ARW—Air Refueling Wing

CC—Commander

CE—Civil Engineering

CV—Vice Commander

DOP—Dropped Object Prevention

FLTS—Flight Test Squadron

FOD—Foreign Object Damage

FO—Foreign Object

IAW—In Accordance With

MAJCOM—Major Command

MOC—Maintenance Operation Center

OC-ALC—Oklahoma City Air Logistics Complex

OPR—Office of Primary Responsibility

OSAM—Operations Support Airfield Management

OSS—Operation Support Squadron

PK—Contracting

QA—Quality Assurance

SCW-1—Strategic Communication Wing One, United States Navy

SE—Safety

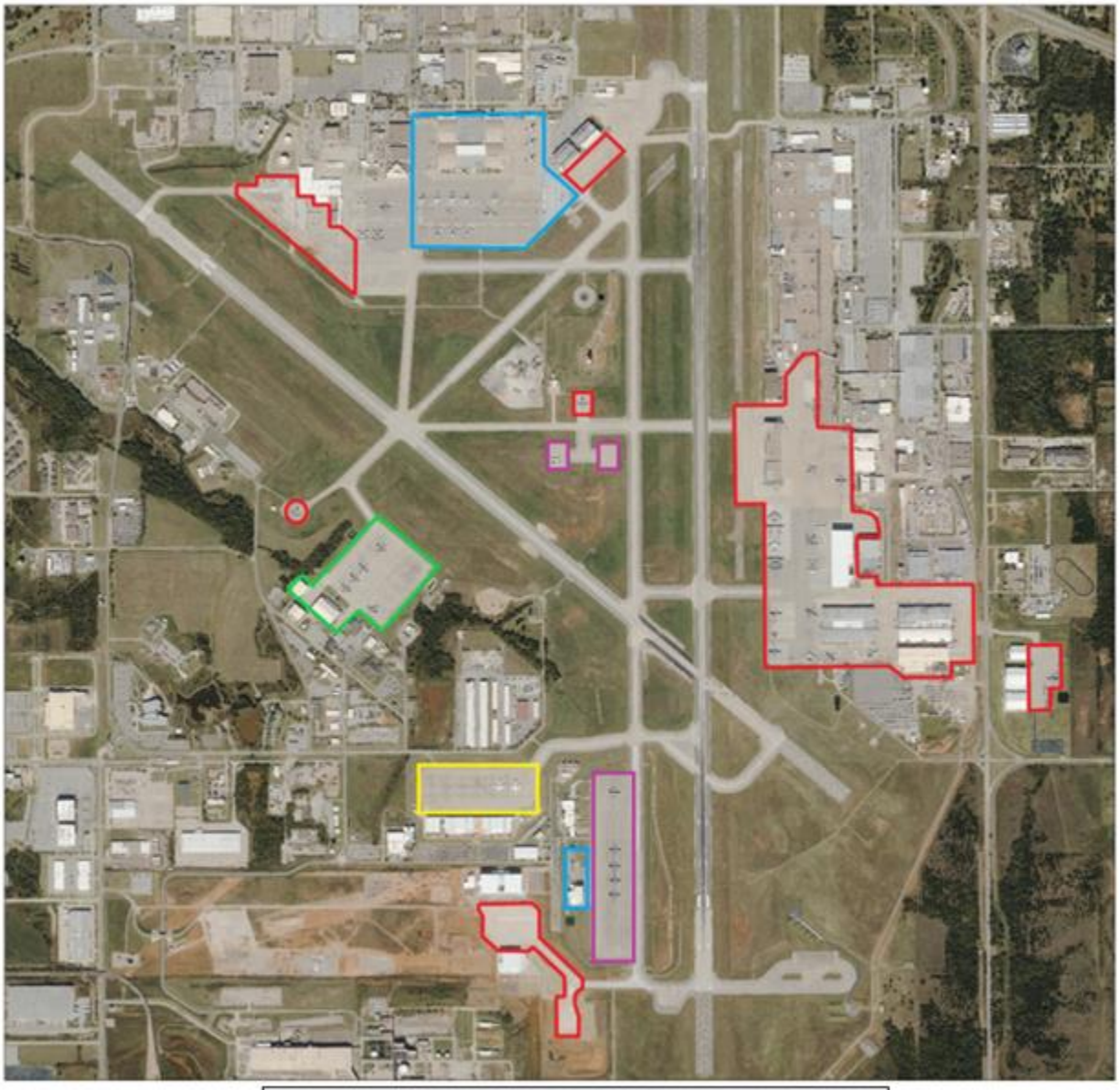
TO—Technical Order

TDY—Temporary Duty

Attachment 2

AREAS OF RESPONSIBILITY

Figure A2.1. Areas of Responsibility.



RED: 76 AMXG
BLUE: 552d ACW
GREEN: 507th ARW
YELLOW: SCW-1
PURPLE: Respective Aircraft Assigned
ALL OTHER AREAS: 72d ABW Responsibility