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MOUNTAIN HOME AIR FORCE BASE

MOUNTAIN HOME AIR FORCE BASE
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Maintenance

366 FW FOREIGN OBJECT DAMAGE, DROPPED OBJECT PREVENTION, AND LOST TOOL

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This publication establishes policies and procedures governing Foreign Object Damage (FOD), Dropped Object, and Lost Tool Prevention Program in the 366th Fighter Wing. It applies to all Mountain Home Air Force Base organizations and its geographically separated squadrons that have personnel (military, civilian, and contractors) working in, on, around, or traveling through areas near aircraft, munitions, AGE, engines, or components regardless of Air Force Specialty Code. The FOD/DOP Monitor of each work center will ensure compliance. Ensure all records (e.g., ACC FOD/DOP incident report Excel; AF IMT 2519; etc.) created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Manual (AFMAN) 33-363, Management of Records, and disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at **https://www.my.af.mil/gcss-af61a/afrims/afrims/**. Contact supporting records managers as required. Refer recommended changes and questions regarding this publication to the office of primary responsibility (OPR) using DAF Form 847, Recommendation for Change of Publication, route DAF Forms 847 through the base publications and forms manager.

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Chapter 1

GENERAL

1.1. General Information.

1.1.1. The 366 FW FOD/DOP Monitor will be the focal point for this instruction. Any additions, changes, or deletions to this publication will be coordinated through the 366 FW FOD/DOP Monitor.

1.1.2. FOD/DOP Prevention Program representatives: The primary and alternate FOD/DOP representatives from all squadrons will be appointed by their squadron commander and designated in writing.

1.1.3. During QVIs & FOD walk follow-ups, any hard FO (screws, washers, safety wire, dust caps, wood, plastic, etc.) found will be rated a category 1 major discrepancy. Any soft FO (string, paper, etc.) will be rated as a category 1 minor discrepancy as per the 366 MXG MSEP.

1.1.4. Squadrons will follow home station guidance unless there is a local FOD program at the off-station location.

1.1.5. The 366th Fighter Wing FOD/DOP Prevention Program is based upon training, awareness, and total involvement of all personnel through all levels of management. Experience has revealed that problems are solved quickly with proper communication and coordination with base agencies.

1.1.6. The 366 FW FOD/DOP Monitor is the direct representative of the FW/CV for all FOD Prevention Program matters. Through dedicated effort and with the support of leaders of personnel performing activities on the airfield Mountain Home has established a FOD prevention program to ensure ZERO Preventable FOD occurrences.

1.2. Responsibilities.

1.2.1. Deputy Wing Commander (FW/CD) Responsibilities.

1.2.1.1. Manage the Foreign Object Damage (FOD) and Dropped Object Prevention (DOP) Programs. The FW/CD is the FOD/DOP Prevention Program Manager and will appoint, in writing, a qualified maintenance AFSC, civilian equivalent, or contractor, if designated by performance work statement, as the 366 FW FOD/DOP Prevention Monitor(s) IAW Chapter 11 of DAFI 21-101.

1.2.1.2. The FW/CD is the approving authority for FOD/DOP Monitor additional duties.

1.2.1.3. Budget for and allocate funds to support the wing's FOD/DOP Prevention Program.

1.2.1.4. Ensure a FOD/DOP Monitor is appointed at the wing level to ensure 366 FW FOD/DOP Prevention Program policies are in place and utilized.

1.2.2. MXG/CC Responsibilities.

1.2.2.1. The MXG/CC (or equivalent) will:

1.2.2.2. Ensure a FOD/DOP Monitor is appointed in writing within the QA section (if practical) to ensure 366 FW FOD/DOP Prevention Program policies are in-place and utilized.

1.2.3. Squadron Commander Responsibilities.

1.2.3.1. All squadron commanders with personnel (military, civilian, and contractors) working in, on, around, or traveling through areas near aircraft, munitions, AGE, engines, or components will:

1.2.3.1.1. Appoint in writing, a Squadron FOD/DOP Monitor(s) for coordination of FOD awareness information from the 366 FW FOD/DOP Monitor within their squadrons who will provide feedback to squadron commanders on FOD issues regarding their squadron.

1.2.3.1.2. Ensure all personnel within their squadron (military, civilian, and contractors) working in, on, around, or traveling through areas near aircraft, munitions, AGE, engines, or components will attend initial and recurring annual FOD prevention training. All members must comply with FOD and Lost Tool/Object procedures.

1.2.4. Maintenance Training Flight Chief Responsibilities.

1.2.4.1. Ensures newly assigned maintenance personnel receive initial training on the wing's FOD/DOP programs during Maintenance Orientation. The 366 FW FOD/DOP Monitor or designated squadron monitor will brief newly assigned personnel on the Wing's FOD/DOP Prevention Program during Maintenance Orientation (initial). Recurring FOD/DOP training will be conducted annually during the Maintenance Refresher course.

1.2.4.2. The MTF will include initial fastener awareness training in Maintenance Orientation and annual recurring training in Maintenance Refresher. Training developed by the 366 FW FOD/DOP Monitor and Maintenance Training Flight will emphasize control, proper selection, and installation of hardware, aircraft panel fasteners, and critical panels forward of the intakes.

1.2.5. The 366th Fighter Wing FOD/DOP Monitor Responsibilities.

1.2.5.1. The 366 FW FOD/DOP Monitor will conduct spot checks weekly of all FOD checkpoints for cleanliness. Spot checks will be documented on AF IMT 2519 and tracked in LEAP as a non-rated management inspection.

1.2.5.2. All changes to the 366 FW FOD/DOP Prevention Program will be made available to applicable Squadron FOD/DOP Monitors via e-mail from the 366 FW FOD/DOP Monitor.

1.2.5.3. The 366 FW FOD/DOP Monitor will ensure newly assigned maintenance individuals receive a comprehensive FOD/DOP briefing as part of Maintenance Orientation and will assist the MTF in developing curriculum for use during initial and refresher training.

1.2.5.3.1. Special attention shall be given to:

1.2.5.3.2. Intake inspections.

1.2.5.3.3. Intake maintenance.

1.2.5.3.4. Classes of foreign object damage.

1.2.5.3.5. Lost tools and dropped objects.

1.2.5.3.6. Hardware control.

1.2.5.3.7. Purpose of the CTK program, and importance of conducting thorough CTK inventories and timely lost tool reporting.

1.2.5.4. The 366 FW FOD/DOP Monitor shall review QA assessments to detect adverse FO trends.

1.2.5.5. The 366 FW FOD/DOP Monitor shall conduct weekly airfield, hangar, and maintenance backshop area housekeeping inspections and document in LEAP. Inspections shall be documented as non-rated management inspections (i.e., end of the runway, parking apron, AGE yard, LOLA, maintenance backshop floor, etc.).

1.2.5.6. The 366 FW FOD/DOP monitor and QA shall evaluate FOD-related Air Force suggestions for applicability and incorporation into local policies as required. The QA Product Improvement Manager shall notify the FOD/DOP Monitor of any FOD-related product quality deficiency reports and Mountain Home AFB TO Change Requests (AFTO 22s) addressing FOD concerns.

1.2.5.7. The 366 FW FOD/DOP Monitor will coordinate with Squadron FOD/DOP Monitors on all matters on FOD/DOP prevention improvements to ensure program continuity and any related FOD/DOP reporting is received in a timely, complete, and accurate manner.

1.2.5.8. The 366 FW FOD/DOP Monitor will make bi-monthly checks of the airfield and taxiway areas outside the controlled movement area in addition to normal inspections.

1.2.6. Squadron FOD/DOP Monitor Responsibilities.

1.2.6.1. The Squadron FOD/DOP Monitor(s) will perform an initial FOD/DOP brief for all newcomers to their squadrons to address high-interest items that pertain to their work centers.

1.2.6.2. The Squadron FOD/DOP Monitor(s) will develop and implement a weekly inspection checklist specific to their work centers to include but not limited to FOD boss, sweeper, vacuum, magnetic pickup, and parts on order for those items listed. Issues that are identified during these inspections will immediately be brought to the 366 FW FOD/DOP Monitor’s attention.

1.2.6.3. All FOD/DOP Monitors are responsible to ensure the most current version of FOD walk areas of responsibility are being followed and is posted on the FOD bulletin board.

1.2.6.4. Affected agencies must keep the 366 FW FOD/DOP Monitor updated with personnel changes to ensure the most effective dissemination of information.

1.2.6.5. The sections assigned to ECP/FOD checkpoints will monitor checkpoint(s) weekly and will ensure checkpoint area is kept clean of FO, and when installed, will ensure FOD cans are emptied.

1.2.6.6. Squadron FOD/DOP Monitors will report issues with the signs or cans and fading paint on checkpoints to the 366 FW FOD/DOP Monitor for repair or replacement.

ECP/FOD checkpoints will be designated on the FOD AOR map located on the 366 FW FOD SharePoint site.

1.2.6.7. MXS will develop and standardize procedures for engine intake structural maintenance. Use these procedures to train assigned structural repair technicians. Annotate training in an individual's training record.

1.2.6.8. Account for replaced rivets by saving stems of those removed. The number of stems saved should be equal to those removed. Indicate the number of rivets replaced in the corrective action" block of aircraft forms. Save removed stems in a plastic bag and attach an AFTO Form 350 indicating JCN, aircraft tail number, and date performed. Retain the AFTO Form 350 with the attached bag at the shop/flight for at least 90 days. Document repair or replacement of rivets on local Intake Maintenance worksheet.

1.2.7. Maintenance Operations Center (MOC) Responsibilities.

1.2.7.1. Notify the Wing Safety office, QA, Airfield Management, and 366 FW FOD/DOP Monitor of mishaps involving engine/aircraft FOD and dropped objects.

1.2.7.2. Inform the 366 FW FOD/DOP Monitor and QA when lost tools or items are discovered missing and when lost tools or items are found.

1.2.8. All 366 FW Personnel Dispatchable to the Flightline.

1.2.8.1. All personnel accessing the flightline will adhere to FOD prevention/tool accountability and abide by this instruction when working on or around the airfield. Additionally, all squadrons performing duties on the airfield will have tool control procedures in place; outside agencies are required to have an identifying mark on tools/items for accountability purposes. Note: all tools/items found from outside agencies will be brought to 366 FW FOD/DOP Monitor or QA for investigation/return to respective squadrons. All loss/failure to follow procedures outlined will require respective Sq/CC notification. All tool accountability infractions will be documented and briefed to the FW/CD.

1.2.8.2. Ensure all military, civilian, and contractor personnel working in, on, around, or traveling through areas near aircraft, munitions, AGE, engines, or components attend initial FOD/DOP prevention training and comply with FOD, DOP, and Lost Tool/Object procedures. Training will be tracked by squadron POCs and names will be forwarded to the 366 FW FOD/DOP Monitor. The 366 FW FOD/DOP Monitor will keep a master list for each squadron.

Chapter 2

FOD PREVENTION COMMITTEE MEETING

2.1. FOD Prevention Committee.

2.1.1. A FOD Prevention Committee Meeting will be convened quarterly. Associate squadrons will be part of the host base program and will not establish an independent FOD program. The FOD meeting may be combined with other meetings.

2.1.2. The FW/CD will chair the meeting. The purpose of this meeting is to identify negative trends and develop and execute action plans to resolve them.

2.1.3. The MXG/CC (or equivalent) will chair the meeting in the absence of the FW/CV.

2.2. Minimum Attendee Representation. Minimum attendee representation will include a representative from each affected squadron.

2.2.1. 428th Fighter Squadron (428 FS) Maintenance Operation Officer or Superintendent and Squadron FOD/DOP Monitor. The Squadron Assistant OIC and Squadron Assistant Superintendent are approved, alternative representatives.

2.2.2. 391st Fighter Generation Squadron (391 FGS) Maintenance Operation Officer or Senior Enlisted Leader and Squadron FOD/DOP Monitor. The Sortie Generation Flight Commander/Chief and Sortie Support Flight Commander/Chief are approved, alternative representatives.

2.2.3. 389th Fighter Generation Squadron (389 FGS) Maintenance Operation Officer or Senior Enlisted Leader and Squadron FOD/DOP Monitor. The Sortie Generation Flight Commander/Chief and Sortie Support Flight Commander/Chief are approved, alternative representatives.

2.2.4. 366th Maintenance Squadron (366 MXS) Maintenance Operation Officer or Maintenance Superintendent and Squadron FOD/DOP Monitor.

2.2.5. Propulsion Flight Officer in Charge or Flight Chief.

2.2.6. 366th Civil Engineering Squadron (366 CES) Director of Operations or Superintendent, and Squadron FOD/DOP Monitor.

2.2.7. 366th Logistics Readiness Squadron (366 LRS) Director of Operations or Superintendent, and Squadron FOD/DOP Monitor.

2.2.8. 366th Security Forces Squadron (366 SFS) Director of Operations or Superintendent, and Squadron FOD/DOP Monitor.

2.2.9. 366th Fighter Wing Quality Assurance (QA).

2.2.10. 366th Maintenance Operations (366 MXO) Weapon Standardization Superintendent or Flight Chief.

2.2.11. 366th Operation Support Squadron (366 OSS) Airfield Management Representative.

2.2.12. 366th Munitions Squadron Director of Operations or Superintendent, and Squadron FOD/DOP Monitor.

2.2.13. All other appointed FOD/DOP Monitors are encouraged to attend if possible.

2.3. Meeting Agenda Items. Meeting agenda items should include issues that resulted in the wing exceeding the FOD standard, such as:

2.3.1. The total number of airframe, engine, and tire FOD/DOP incidents during the reporting period. Indicate quantity and cause. The current status of all other pending incidents will be discussed.

2.3.2. Mechanical/vacuum sweeper status.

2.3.3. Review and refinement of the existing FOD/DOP Prevention Program.

2.3.4. New directives/actions established to minimize FOD.

2.3.5. Status and condition of engine run-up screens as applicable.

2.3.6. Results of X-rays for FO during engine bay inspections, acceptance inspections, variable ramp maintenance, and PH inspections. Maintenance trends should be discussed when an increase in FO is discovered during these X-rays.

2.3.7. Identification of potential FOD sources.

2.3.8. Lost tools/items.

2.3.9. Increased potential for FOD within the next 30-60 days.

2.3.10. Dropped objects. Pay particular attention to those that result in downstream FOD.

2.3.11. Breakdown of FOD inspections/assessments.

2.3.12. Cockpit FO incidents.

2.3.13. Recognition of personnel making significant contributions to FOD prevention (such as golden bolt program, FOD poster contests, or other FOD recognition programs locally developed at each squadron).

Chapter 3

FOD BULLETIN BOARDS

3.1. FOD Bulletin Board Placement.

3.1.1. All squadrons with personnel (military, civilian, and contractors) working in, on, around, or traveling through areas on the flightline, near aircraft, munitions, AGE, engines, or components will have a FOD board for each section unless workcenter/building display area is deemed sufficient by the 366 FW FOD/DOP Monitor. The 366 FW FOD/DOP Monitor will maintain a list of approved FOD bulletin board locations.

3.1.2. FOD board will contain, at a minimum, most recent meeting minutes, current FOD Flash, FOD Poster of the Month, FOD Board Representative Letter, 366 FW FOD/DOP Monitor Appointment Letter, ACC Form 145, Blade blend Intructions, FOD Walk AORs, FOD Checkpoint Exemption Letter, Clothing Foreign Object Damage (FOD) Prevention Policy, and FOD Checkpoint Responsibilities.

3.1.3. Squadron FOD/DOP Monitor(s) will update the squadron FOD bulletin board by the 5th calendar day of the month.

3.1.4. Placement of the bulletin board is at the discretion of the concerned facility manager but FOD bulletin boards will be located to afford the greatest visibility to shop personnel.

3.1.5. Multiple workcenters within a small facility must request approval via e-mail from the 366 FW FOD/DOP Monitor to share a common bulletin board.

3.1.6. A FOD (and Dropped Object, as applicable) continuity book is required to be maintained for each unit by the designated monitors of that squadron.

3.1.6.1. FOD/DOP Monitor(s) shall have one continuity book per FOD board. Each geographically separated flight will be required to have their own board separate from the squadron FOD board.

3.1.6.2. Continuity book will contain the following items: index, appointment letters, FOD/DOP Monitor(s) responsibilities, award programs, lost tool procedures, blade blend worksheets (as required), and the FOD training guide.

Chapter 4

FOD INCENTIVE PROGRAMS

4.1. FOD Posters.

4.1.1. All wing personnel can submit FOD posters. All submissions need to be made by the 25th of each month to the 366 FW FOD/DOP Monitor. The 366 FW FOD/DOP Monitor will determine the winner. Winning monthly FOD poster submission shall be posted on all maintenance complex FOD boards and the QA SharePoint page.

4.1.2. FOD Poster of the Month and Quarter. The poster must promote FOD prevention or awareness. The poster must not include any inappropriate material. If aircraft are depicted on the poster, they must be of the type locally assigned to include aircraft maintained by 366 FW or 428 FS.

4.1.3. Monthly winners will automatically be entered in the quarterly competition. The quarterly poster will be chosen from monthly winners.

4.1.4. All monthly winners will receive a one-day pass and quarterly winners will receive a three-day pass from the FW/CV. Supervisors shall coordinate a time for winners to take their one/three-day pass.

4.2. FOD Fighter Award.

4.2.1. Individuals nominated for the FOD Fighter Award must have performed an action that significantly reduced a FOD hazard(s), or directly contributed to the prevention of a FOD-related incident.

4.2.2. Submit nominations for 366 FW FOD Fighter of the Month by the 25th of each month to the 366 FW FOD/DOP Monitor. Entered nominations received after the 25th will be eligible for the following month. Monthly winners shall receive a certificate and one-day pass from the FW/CV. Supervisors shall coordinate a time for winners to take their one-day pass.

4.3. Golden Bolt.

4.3.1. The Golden Bolt is placed around the airfield, in hangars, or in buildings before FOD walks. It will also be placed in such a way as to not cause a FOD hazard. The Golden Bolt is used as an assessment tool for the FW/CD to gauge the quality of FOD walks and incentivize attentiveness during FOD walks. If the bolt is not found following the FOD walk, the Golden Bolt is retrieved by the 366 FW FOD/DOP Monitor/Quality Assurance personnel.

4.3.2. Finder of the Golden Bolt receives a certificate and one-day pass from the FW/CD. Supervisors shall coordinate a time for winners to take their one-day pass.

Chapter 5

FOD PREVENTION

5.1. FOD Prevention Wing Requirements.

5.1.1. Covers (such as engine, pitot tube(s) to include ejection seat) need to remain installed on aircraft as close to crew show as possible to prevent FOD, as determined by the FW/CD or designated representative guidance refer to AFI 21-101 ACC SUP.

5.1.1.1. Keep intake covers installed except when access to inlets/adjoining areas is required. Insert-type intake plugs will have removeable before flight streamers and connecting lanyards attached with a non-metallic, soft type material to minimize the amount of hard FO.

5.1.2. When conducting maintenance/training on upper fuselage surfaces in and around the F-15 ramp area, seal with tape/barrier material and install engine intake covers.

5.1.3. CTK FO will be controlled to prevent FOD. Individuals using a CTK will ensure that all FO is contained in the FOD bag and removed/emptied before each CTK turn-in. Support section personnel inspecting the CTK at turn-in will verify that all FO is removed before the CTK is signed into the support section.

5.1.4. Due to the extreme FOD potential, nothing will be placed in the intake hazard area (to include intake lip) that could allow items to be ingested into the intake. Observed instances will be reported by QA.

5.1.5. Store all removed fasteners, bolts, screw bags, loose equipment, water bottles, and any other items in an area away from the aircraft before engine operation.

5.1.6. Ensure all hardware removed without the ability to be temp installed on the aircraft, engine, LRU's, and support equipment is properly tagged, marked, and stored. All associated hardware will be placed in a screw bag and/or securely attached to the item or aircraft. All hardware will be labeled with a precise inventory and component/panel location of its contents (i.e., 2 bolts, 2 nuts, 4 washers, etc. for panel 85L).

5.1.7. On aircraft, uninstalled engines, uninstalled CFTs, LRUs, and AGE. Openings, ports, lines, hoses, electrical connections, and ducts will be properly plugged or capped to prevent FO from entering the systems. Proper plugs and caps will be visible from the outside of ducts, lines, tubes, etc. to prevent the possibility of installing items over plug or cap. Items stuffed inside of ducts, lines, tubes, etc. do not meet the intention of FOD prevention.

5.1.8. Restricted area badge holder will be secured with a subdued non-metallic lanyard, plastic armband or affixed to the sleeve via Velcro when worn on the flightline. Ensure badges secured on lanyards are stowed securely when within the vicinity of running aircraft, JFS, engines, etc.

5.1.9. During maintenance and upon completion of maintenance, remove all debris such as rags, hardware, safety wire, and so forth, from work areas. Do not use drip pans as FO containers. Remove debris from fuel bowser drain screens after each use.

5.1.9.1. All items/tools will be cleaned up and returned to the toolbox if leaving the work area.

5.1.9.2. Inventory all items IAW **Chapter 8** of DAFI 21-101 and applicable supplements.

5.2. Engine Operations in Low Temperatures.

5.2.1. With low temperatures, rain, fog, snow, etc., the possibility of engine ice FOD greatly increases. If the MOC determines Ice FOD conditions are present, accomplish the following:

5.2.2. Before starting engines, inspect inlet/intake for ice or moisture. If present, remove all ice and moisture from intake before starting the engine. Additionally, removal of engine antipersonnel guards is required during Ice FOD alerts or conditions are met, refer to LCL 366FW-10-2.

5.2.3. Squeegees/Non-metallic bristled brooms must be made available for use in F-15 parking areas to remove standing water 5 feet behind and 25 feet forward and to the sides of the intake lip before the engine start.

5.2.4. After engine start, ensure that engine anti-ice procedures are followed per the applicable technical data.

5.2.5. To accomplish inlet observation, a ground observer will be stationed outside the danger zone and if needed will use a flashlight to observe the intake/inlet of the aircraft as the engine(s) is/are being operated. The ground observer will be responsible for the safety of personnel in the immediate aircraft danger areas.

5.2.6. Do not enter the aircraft danger areas for any reason.

5.2.7. Continually observe air inlet leading edge for ice formation. If ice is observed, the engine will be shut down IAW applicable technical data. Any time an engine is shut down due to ice formation, the Maintenance Operations Center (MOC) will be notified, and an inlet/intake inspection will be performed.

5.2.8. Maintenance personnel performing End of Runway inspection in presence of standing water, snow, or ice will use extra caution and have one person monitor intake/inlet lip(s) for ice buildup. End of Runway personnel will have brooms and squeegees available to ensure the engine run area is clear at all times. MOC will be notified of any ice buildup noted.

5.3. Engine Blade Blending Procedures.

5.3.1. All F100-PW-220, F100-PW-229 and F110-GE-129C/E engine first stage fan blade anomalies will be entered on applicable maintenance documents.

5.3.2. All qualified personnel who perform blade blends on installed aircraft will complete the required Blade Blend worksheet and will send a copy via e-mail to the 366 FW FOD/DOP Monitor.

5.3.3. Only certified personnel identified on the special certification roster (SCR) will accomplish blade blending. Support sections will maintain a list of personnel from the SCR authorized to sign out blade blending kits.

5.4. Flightline Vehicle Operation.

5.4.1. If possible, vehicles will have a properly secured self-closing lid type container in the bed of the vehicle. Vehicles that do not have a container in the bed will have, at a minimum, a foreign object (FO) pouch secured in the driver’s area. Containers will be secured in a manner to prevent them from tipping over while the vehicle is in motion.

5.4.2. Vehicle operators who drive on the flightline will inspect their vehicles for cleanliness before and after each use and ensure the vehicle is free of debris at all times; trash and FOD containers will be emptied at each shift turnover. Clean magnetic bars at the beginning of each shift and check in conjunction with tire checks.

5.4.3. Any holes found in the floorboard or bed of a vehicle must be immediately/permanently repaired to prevent items from falling through onto aircraft movement areas.

5.4.4. All vehicles will have rubber boots installed around the gearshift (if manual) and hand brake controls (if applicable).

5.4.5. All vehicles operated on the flightline will have a flashlight and FOD key (pick) attached to the keyring or permanently assigned to and stored in the vehicle.

5.4.5.1. Items permanently stored in the vehicle will be documented on AF Form 1800 (flashlight, first aid kit, spill kit, ice/snow brush, etc.), the vehicle serial number will be etched or permanently marked on these items.

5.4.5.2. For vehicles requiring a fire extinguisher, annotate the fire extinguisher on the vehicle forms and check it monthly for serviceability and security.

5.4.6. During winter months FOD checks will include the removal of snow and ice from all vehicle surfaces to exclude truck beds.

5.4.7. Driving on the asphalt along the edges of the runway and taxiways is prohibited; the only exceptions are vehicles responding to emergencies, those necessary to perform RWR checks, and those moving out of the way of taxiing aircraft.

5.4.7.1. Perform a visual foreign object inspection of tires while also collecting all debris brought onto the hardened surface by the vehicle and ensure undercarriages of the vehicle are free of rocks and debris before leaving the area.

5.4.7.2. If the quantity of debris is too large, Airfield Management or MOC will be notified to coordinate with 366 CES to have a sweeper clean the area.

5.4.8. Roll Over type FOD inspections will be accomplished on all tires at entry control points listed on the AOR FOD map. Vehicle operators will stop, check their vehicle and tires (pull forward to check tire in contact with pavement) for foreign objects at all FOD checkpoints (lines and signs) on the airfield. Before exiting the vehicle, the operator will turn off the ignition and set the parking brake.

5.4.9. If FOD prevention procedures need to be conducted during hours of darkness, members will use sufficient illumination to identify FO.

5.4.10. Attach pintle hook pins with a lanyard or chain to the pintle assembly. Only remove pins from the pintle when opening the pintle hook. Stow pins in the pintle all other times. Keep vehicles used on the flightline clean and free of trash and debris.

Chapter 6

FOD CHECKPOINT AREAS OF RESPONSIBILITY

6.1. FOD Checkpoint and Areas of Responsibility.

6.1.1. FOD walks will be conducted under the responsibilities as defined by the 366 FW AOR FOD map located on the 366 FW FOD SharePoint site. This listing is subject to change so monitors must remain vigilant of their duties to brief as such.

6.1.2. During daylight hours accomplish a minimum of one daily FOD walk for the assigned ramp, hangar(s), hangar apron, flightline access road, etc.

6.1.3. Accomplishment of FOD walk procedures are as follows:

6.1.3.1. During daylight hours, accomplish the first FOD walk of the day on all applicable aircraft parking ramps, taxiway surfaces, hangar(s), and hangar apron(s) listed on the 366 FW AOR FOD map (located on the 366 FW FOD SharePoint site and in attachment 2 of this document). Additional FOD walks will be completed around the aircraft prior to engine start. Accomplish the first FOD walk of the day prior to the first aircraft taxi when daylight permits. When take-off times are scheduled within 1 1/2 hours of sunrise, the following procedures apply: 3 hours prior to the scheduled take-off time, utilize a FOD Boss Rapid Response Sweeper on all parking ramp and taxiway surfaces that are reachable while maintaining proper flightline vehicle operation procedures. After the last aircraft for the first scheduled go has taxied, all personnel will fall in for a formal FOD walk. Utilize FOD Boss Sweepers, push magnets, and other FOD removal equipment to supplement FOD walks once daily.

6.1.3.2. During snow removal operations, FOD walks will be postponed until the airfield is cleared of ice and snow, and will be performed prior to any aircraft operations.

6.1.3.3. In conjunction with daily FOD walks launch crew personnel will also perform a thorough FOD walk around aircraft and parking spot as soon as sufficient light becomes available, but before engine start and after aircraft has taxied.

6.1.3.4. EOR crew will perform FOD sweeps of the EOR area and adjacent taxiway(s) before the first flight of the day.

6.1.4. Personnel who perform duties in buildings adjacent to flightline access road will police area surrounding their buildings, including parking lots and flightline access road, at least once daily.

6.1.5. Personnel using trim pads, hush house, EOR, and hot cargo pad will ensure areas are free of FO before and after each use. Each using organization is responsible for ensuring areas are FOD free.

6.2. Pre/Post-Flight/Aircraft Run FO Prevention Procedures:

6.2.1. Aircrew members must account for all equipment and personal items brought with them before and after each flight. If items are identified as missing or dropped in the aircraft cockpit after flight, perform an immediate visual inspection of the cockpit. If the item/object is not found during the initial search, a RED X will be entered in the aircraft AFTO Form 781A and MOC will be notified.

6.2.2. All aircraft run individuals will perform tool/item inventory before and after aircraft runs to ensure accountability for all equipment and items. If the item/object is not found during the initial search, a RED X will be entered in the aircraft AFTO Form 781A and MOC will be notified.

6.3. Airfield Damage/Deterioration Procedures:

6.3.1. When damage/deterioration is identified on the airfield the 366 FW FOD/DOP Monitor shall coordinate corrective measures with Airfield Management, Civil Engineering, and relevant Maintenance Group Flights as required.

Chapter 7

CLOTHING POLICY

7.1. Clothing Policy.

7.1.1. All squadrons performing duties on the airfield will adhere to the flightline clothing guidance in DAFI 21-101 and other applicable supplements.

7.1.2. Articles of clothing (i.e., coats, shirts, gloves, etc.) will be properly fitted and secured. Secure/stow personal items (i.e., pens, pencils, keys, etc.) within the applicable engine operating danger areas. During inclement weather and/or winter months, ensure that cold weather hats are properly secured and do not interfere with the ability to properly apply double hearing protection when required. Security Forces beret with metal insignia will not be worn on the flightline.

7.1.3. When maintenance is to be performed in/around the aircraft cockpits, personnel will remove and secure all loose items from their person. Prior to cockpit entry, refer to **Chapter 9**.5 of this instruction.

Chapter 8

SWEEPER POLICY

8.1. Sweeper Policy.

8.1.1. 366 OSS/OSAA Chief will ensure an effective plan for runway and taxiway sweeping and vacuuming is in effect. This plan will account for routine and unusual circumstances (e.g., response time and availability for scheduled night and weekend flying and wing exercises). Review plan yearly to accommodate changes in airfield conditions.

8.1.2. When a sweeper vehicle is required, personnel identifying the issue will contact MOC or 366 FW FOD/DOP Monitor who will coordinate with Airfield Management for a sweeper truck to clean affected areas.

Chapter 9

FOD PREVENTION PROGRAM

9.1. FOD Identification.

9.1.1. FOD: Any damage to an aircraft, engine, aircraft system, component, tire, munitions, or SE caused by a foreign object(s) (FO) which may or may not degrade the required safety and/or operational characteristics of the aforementioned items.

9.2. FOD Investigation.

9.2.1. Do not perform maintenance, repair or clean FOD damaged aircraft, engines, or components until the 366 FW FOD/DOP Monitor, 366 FW Wing Safety, or QA has conducted an initial investigation.

9.2.2. If internal engine FOD is confirmed, the engine will be impounded IAW DAFI 21-101 and applicable supplements.

9.2.3. Squadrons must make every attempt to determine the root cause of FOD-related mishaps before returning engines and modules to the depot for investigation.

9.3. Reporting Procedures.

9.3.1. Anyone discovering or suspecting FOD in an aircraft, including bird strikes, will immediately report the finding to their immediate supervisor or production superintendent who will notify MOC. This information will also be annotated as a RED X on the Air Force Technical Order (AFTO) Form 781A, Maintenance Discrepancy and Work Document.

9.3.2. Upon notification of a possible FOD incident, MOC will immediately report available information to QA, Airfield Management, and the 366 FW FOD/DOP Monitor. The 366 FW FOD/DOP Monitor or QA will assign a control number.

9.3.3. The reporting squadron will complete the ACC FOD/DOP Incident Report Excel worksheet and route for a proper review, as follows: Section Chief, Production Superintendent, FGS/FS Supervision, and 366 FW FOD/DOP Monitor within three duty days.

9.3.4. 366 FW FOD/DOP Monitor will advise the FW/CV, the MXG/CC, and other squadrons CCs of all final investigations/reports that are preventable and non-preventable FOD incidents.

9.3.5. For radiographic inspections (x-ray inspections, etc.) report IAW AFI 21-101 ACCSUP and other applicable supplements.

9.4. FOD Identification and Reporting [Transient Aircraft Only].

9.4.1. All transient aircraft FOD incidents to include bird strikes will be reported IAW originating base.

9.4.2. 366 FW FOD/DOP monitor, Airfield Management, and Command Post will be notified as a courtesy.

9.4.3. Transient aircraft blade blending will be performed and documented IAW T.O. procedures for the aircraft type.

9.5. Cockpit FOD.

9.5.1. Before entering the aircraft cockpit, personnel are required to remove all items from their pockets/belts (i.e., pens, change, keys, etc.) and check the bottom of their shoes to ensure rocks or other foreign objects are not being deposited in the cockpit.

9.5.2. Tools, small parts, and hardware needed to perform maintenance in the cockpit should be placed in a tool bag or pouch. Do not allow small tools, parts or hardware to be placed on consoles or canopy sills.

9.5.3. The use of drop cloths or barrier paper should be utilized where the potential for items to be dropped into critical or inaccessible areas exists.

Chapter 10

DROPPED OBJECT PREVENTION PROGRAM

10.1. Dropped Object Prevention Program.

10.1.1. A dropped object is any aircraft part, component, surface, LO coating (exceeding 8 inches in any dimension), or other item lost during aircrew operations (unless intentionally jettisoned) from engine start to engine shutdown. Inadvertently released munitions are not considered dropped objects and will be reported IAW DAFI 91-204. Note: Missing Chafe/Flare/Decoy end-caps are not reportable dropped objects.

10.2. Investigation.

10.2.1. The 366 FW FOD/DOP Monitor or QA with the assistance of the reporting squadron will investigate each dropped object incident. The reporting squadron is responsible for initiating the deficiency report anytime a material or design deficiency is suspected as the cause.

10.2.2. Do not facilitate repair of aircraft or replacement of missing objects until the 366 FW FOD/DOP Monitor or QA has conducted an initial investigation.

10.2.3. Every effort needs to be made to determine the precise cause to ensure positive corrective action is accomplished. Any time a material or design deficiency is the cause or suspected cause, a deficiency report will be submitted IAW T.O. 00-35D-54, even when an exhibit is not available.

10.2.4. Investigation results will be distributed to each appropriate work center for inclusion in personnel training and education programs.

10.3. Reporting Procedures.

10.3.1. Upon identification of a possible dropped object, the squadron reporting the incident will notify MOC, QA, Airfield Management, and the 366 FW FOD/DOP Monitor. The 366 FW FOD/DOP Monitor or QA will assign a control number.

10.3.2. The reporting squadron will complete the ACC FOD/DOP Incident Report Excel worksheet and route for a proper review, as follows: Section Chief, Production Superintendent, FGS/FS Supervision, and 366 FW FOD/DOP Monitor within three duty days.

10.3.3. The 366 FW FOD/DOP Monitor will file the completed ACC FOD/DOP Incident Report Excel worksheet.

10.4. Dropped Object Prevention Program Transient Aircraft Only.

10.4.1. All transient aircraft DOP incidents will be reported IAW originating base procedures. 366 FW FOD/DOP Monitor, Airfield Management, and Command Post will also be notified as a courtesy.

10.4.2. The host Wing FOD/DOP Monitor will be responsible to investigate dropped objects from any transient aircraft.

10.4.3. The 366 FW FOD/DOP monitor will track all transient aircraft DOP incidents. These will not be charged against the 366 FW.

Chapter 11

DEPLOYED FOD MONITOR

11.1. Deployed FOD Monitor.

11.1.1. If QA personnel are not tasked to deploy, the Fighter Generation Squadron commander will designate an individual as the FOD and DOP monitor before the deployment. Before the deployment, the maintenance officer will forward the name of the deployed FOD/DOP Monitor to the 366 FW FOD/DOP Monitor. The 366 FW FOD/DOP Monitor will provide the necessary training to the deploying FOD/DOP monitor.

11.1.2. An electronic copy of the ACC FOD/DOP Incident Report Excel worksheet (e-mail) is encouraged.

11.2. The deployed FOD/DOP Monitor will.

11.2.1. Serve as the point of contact for the lost tool or item, dropped object, and FOD issues at the deployed location.

11.2.2. Develop, coordinate and inspect FOD walk areas of responsibilities for all maintenance areas.

11.2.3. Maintain a log of all lost tool and item reports, dropped object reports, engine FOD damage, and blended blades and ensure a copy of the log is forwarded to the 366 FW FOD/DOP Monitor.

11.2.4. All dropped objects and lost tool or item paperwork must be forwarded to the home station on the last duty day of each month.

Chapter 12

LOST TOOL/OBJECT PROGRAM

12.1. Lost Tool/Object Procedures.

12.1.1. The 366 FW FOD/DOP Monitor will maintain the wing's lost tool/object program.

12.1.2. For ramp quick-freeze procedures contact the MOC.

12.1.3. All 366 FW personnel working on/around the airfield, when a lost tool/object is suspected missing, will conduct an initial search of the area where the tool/object was discovered missing. If after the initial search the tool/object has not been found, a supervisor or production superintendent will notify MOC, and an ACC Form 145 will be initiated. MOC will notify QA and the Wing FOD monitor of any lost tools/objects.

12.1.3.1. If a lost tool/object is expected missing in the cockpit of an aircraft, the individual that discovers the lost item/tool will immediately notify the Production Superintendent, who will then notify the MOC.

12.1.4. Squadrons will obtain lost tool/object control number from the QA office or 366 FW FOD/DOP Monitor for completion of the ACC Form 145.

12.1.5. Squadrons completing an ACC Form 145 will submit it via the respective block on the form within five duty days. Lost tools/objects will be identified by the Squadron and reported on the quarterly FOD Slides.

ISAAC T. BELL, Col., USAF
Commander

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

DAFI 21-101, *Aircraft and Equipment Maintenance Procedures*, 1 October 2021

AFI 21-101 *Air Combat Command Supplement, Aircraft and Equipment Maintenance Procedures,* 22 April 2021

AFI 21-101 *Mountain Home Air Force Base Supplement, Aircraft and Equipment Maintenance Procedures,* 20 November 2019

Adopted Forms

ACC Form 145, *Lost Tool/Object Form*

AFTO Form 781A, *Maintenance Discrepancy and Work Document*

AFTO Form 350, *Repairable Item Processing Tag*

AF Form 1800, *Operator's Inspection Guide and Trouble Report*

Abbreviations and Acronyms

ACC—Air Combat Command

AFB—Air Force Base

AFI—Air Force Instruction

AFTO—Air Force Technical Order

AGE—Aerospace Ground Equipment

AOR—Area of Responsibility

CC—Commander

CES—Civil Engineer Squadron

CMA—Controlled Movement Area

CTK—Composite Tool Kit

CV—Vice Commander

CVF—Wing FOD Monitor

DOP—Dropped Object Prevention

ECP—Entry Control Point

FO—Foreign Objects

FOD—Foreign Object Damage

FGS—Fighter Generation Squadron

FS—Fighter Squadron

FW—Fighter Wing

IAW—In Accordance With

L.E.A.P—Logistics Evaluation Assurance Program

LO—Low Observable

LOLA—Live Ordinance Loading Area

LRS—Logistics Readiness Squadron

LRU—Line Replaceable Unit

MAJCOM—Major Command

MOC—Maintenance Operations Center

MTF—Maintenance Training Flight

MXO—Maintenance Operations

MXS—Maintenance Squadron

NDI—Non-Destructive Inspection

OSS—Operations Support Squadron

QA—Quality Assurance

QAP—Quality Assurance Program

SCR—Special Certification Roster

SFS—Security Force Squadron

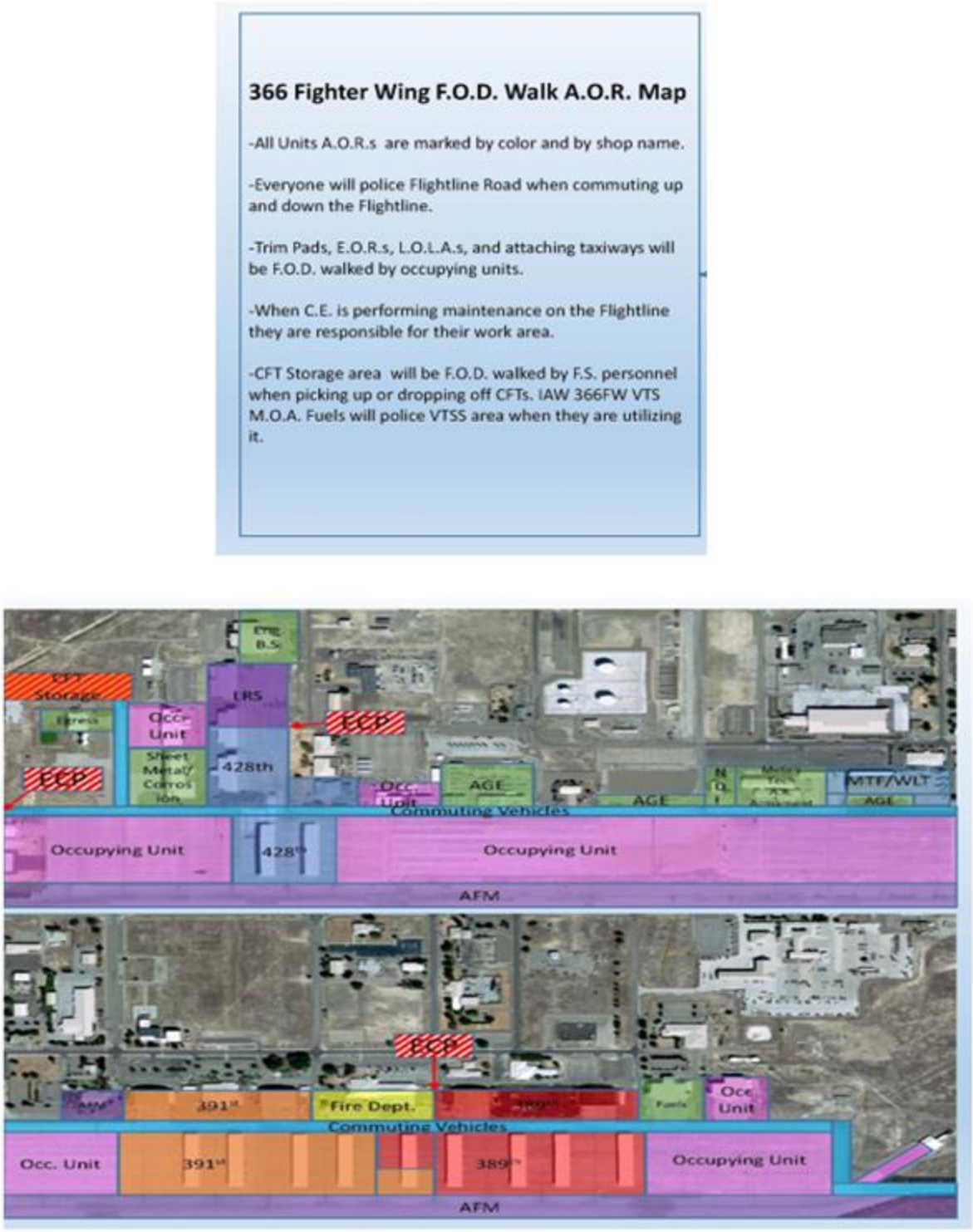
T.O.—Technical Order

WG—Wing

Attachment 2

AREA OF RESPONSIBILITY

Figure A2.1. Area of Responsibility FOD Map.



Attachment 3

FORMS AND PUBLICATIONS

Figure A3.1. AF IMT 2519 Weekly Spot Checklist.

ALL PURPOSE CHECKLIST	PAGE 1	OF 2	PAGES
TITLE/SUBJECT/ACTIVITY/FUNCTIONAL AREA Weekly FOD Prevention Checklist for: _____ 366FW, Mountain Home AFB, ID, 83648	OPR	DATE	

NO.	ITEM *(Assign a paragraph number to each item. Draw a horizontal line between each major paragraph.)*	YES	NO	N/A
1.	Are FOD walks conducted at least once during each shift?	☐	☐	☐
2.	Do the FOD walks cover the maximum area possible? Do FOD walks include pick up of rocks, tumbleweeds and any soft F.O. found?	☐	☐	☐
3.	Are the flight line ramp parking areas being inspected for deterioration/damage while performing FOD walks?	☐	☐	☐
	Are those areas in need of repair being reported to the Wing FOD Monitor?	☐	☐	☐
4.	Are high interest items such as cracks, expansion joints and aircraft/equipment grounding points checked for debris and cleaned if necessary?	☐	☐	☐
5.	Are FOD containers available for workers to utilize when necessary?	☐	☐	☐
	Are they emptied at the end of each shift?	☐	☐	☐
6.	Are flightline vehicles inspected for FOD after check-out/Check-in to include FOD containers?	☐	☐	☐
7.	Are FOD bosses being utilized during FOD walks? Does TC Max reflect check-out/check-in? Is status of FOD Boss's current and sent to Wing FOD monitor for record?	☐	☐	☐
8.	Are work areas policed for F.O. throughout the course of a Job?	☐	☐	☐
	Is final clean-up being accomplished to ensure CTK equipment and areas are free of F.O.?	☐	☐	☐
9.	Do technicians account for all tools before, during and after job completion?	☐	☐	☐
	Do technicians account for and store all tools/items when leaving work area even temporarily?	☐	☐	☐
10.	Are personnel ensuring that equipment openings, ports, lines and hoses are properly fitted with caps, plugs and covers to prevent foreign object intrusion?	☐	☐	☐
11.	Do supervisory personnel brief and ensure their subordinates understand the importance of FOD mitigation?	☐	☐	☐
12.	Are FOD topics/trends/special interest items being discussed at roll calls? List items discussed. _____ _____	☐	☐	☐
13.	Are personnel briefed on how to request the airfield sweeper?	☐	☐	☐

AF IMT 2519, 19911101 V5 PREVIOUS EDITIONS ARE OBSOLETE.

Figure A3.2. AF IMT 2519 Weekly Spot Checklist. (Continued).

AF IMT 2519 (Continued).

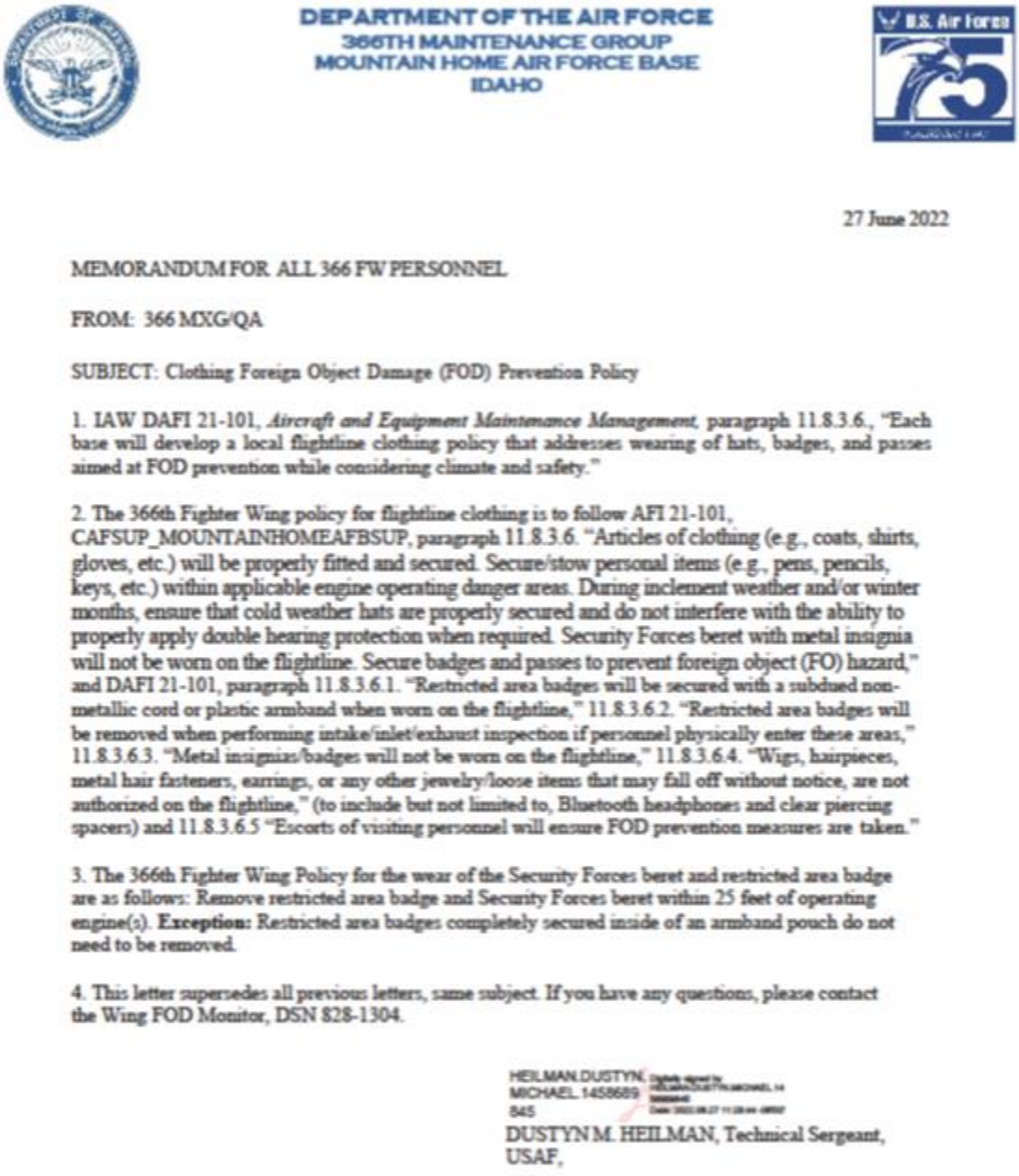
ALL PURPOSE CHECKLIST

PAGE 2 OF 2 PAGES

NO.	ITEM (Assign a paragraph number to each item. Draw a horizontal line between each major paragraph.)	YES	NO	N/A
14.	Are all unused set screws removed from grounding clamps? Used screws are required to be RTV'd or staked to prevent screw from backing out.	☐	☐	☐
15.	Do all flightline vehicles have a tire removal tool/ice scrapper and flashlight identified with a positive means of identification and annotated on the AF Form 1800?	☐	☐	☐
16.	Is the FOD board and continuity book current and updated as required?	☐	☐	☐
17.	Are blade blends properly annotated on a CS-22 and a copy routed to EMB and the WG FOD Monitor?	☐	☐	☐
	Are Pinwheels being annotated properly after blends are performed?	☐	☐	☐
18.	Are intake plug streamers connected with a soft non-metallic material?	☐	☐	☐

AF IMT 2519, 19911101 V5 PREVIOUS EDITIONS ARE OBSOLETE.

Figure A3.3. Clothing Foreign Object Damage Prevention Policy Letter.



DEPARTMENT OF THE AIR FORCE
366TH MAINTENANCE GROUP
MOUNTAIN HOME AIR FORCE BASE
IDAHO

27 June 2022

MEMORANDUM FOR ALL 366 FW PERSONNEL

FROM: 366 MXG/QA

SUBJECT: Clothing Foreign Object Damage (FOD) Prevention Policy

1. IAW DAFI 21-101, *Aircraft and Equipment Maintenance Management,* paragraph 11.8.3.6., "Each base will develop a local flightline clothing policy that addresses wearing of hats, badges, and passes aimed at FOD prevention while considering climate and safety."

2. The 366th Fighter Wing policy for flightline clothing is to follow AFI 21-101, CAFSUP_MOUNTAINHOMEAFBSUP, paragraph 11.8.3.6. "Articles of clothing (e.g., coats, shirts, gloves, etc.) will be properly fitted and secured. Secure/stow personal items (e.g., pens, pencils, keys, etc.) within applicable engine operating danger areas. During inclement weather and/or winter months, ensure that cold weather hats are properly secured and do not interfere with the ability to properly apply double hearing protection when required. Security Forces beret with metal insignia will not be worn on the flightline. Secure badges and passes to prevent foreign object (FO) hazard," and DAFI 21-101, paragraph 11.8.3.6.1. "Restricted area badges will be secured with a subdued non-metallic cord or plastic armband when worn on the flightline," 11.8.3.6.2. "Restricted area badges will be removed when performing intake/inlet/exhaust inspection if personnel physically enter these areas," 11.8.3.6.3. "Metal insignias/badges will not be worn on the flightline," 11.8.3.6.4. "Wigs, hairpieces, metal hair fasteners, earrings, or any other jewelry/loose items that may fall off without notice, are not authorized on the flightline," (to include but not limited to, Bluetooth headphones and clear piercing spacers) and 11.8.3.6.5 "Escorts of visiting personnel will ensure FOD prevention measures are taken."

3. The 366th Fighter Wing Policy for the wear of the Security Forces beret and restricted area badge are as follows: Remove restricted area badge and Security Forces beret within 25 feet of operating engine(s). **Exception:** Restricted area badges completely secured inside of an armband pouch do not need to be removed.

4. This letter supersedes all previous letters, same subject. If you have any questions, please contact the Wing FOD Monitor, DSN 828-1304.

HEILMAN.DUSTYN.MICHAEL.1458689845

DUSTYN M. HEILMAN, Technical Sergeant, USAF,