

**BY ORDER OF THE COMMANDER
HILL AIR FORCE BASE**



**AIR FORCE INSTRUCTION 21-101
AIR FORCE MATERIEL COMMAND
Supplement**

**HILL AIR FORCE BASE
Supplement**

7 AUGUST 2014

Maintenance

**AIRCRAFT AND EQUIPMENT
MAINTENANCE MANAGEMENT**

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This Air Force Instruction (AFI) 21-101, Air Force Materiel Command Supplement (AFMCSUP), Hill Air Force Base (HILLAFB) Supplement implements aircraft and equipment maintenance local management procedures to augment Air Force Materiel Command (AFMC) policy relating to aircraft and equipment maintenance procedures. This supplement supports Air Force Policy Directive (AFPD) 21-1, *Air and Space Maintenance*, and AFI 21-101, AFMC Supplement (AFMCSUP), *Aircraft and Equipment Maintenance Management*. This document applies to all units assigned or on temporary duty (TDY), or transient units associated with Hill Air Force Base (AFB) personnel performing maintenance or producing products or services, working in and around aircraft, engines, major end items, components, and support/test equipment (including personnel traveling through these areas) as specifically stated to include contractors providing service in support of Hill AFB operations. The authorities to waive wing/unit level requirements in this publication are identified with a Tier (“T-0, T-1, T-2, T-3”) number following the compliance statement. See AFI 33-360, Publications and Forms Management, Table 1.1 for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the Publication OPR for non-tiered compliance items.

Ensure that all records 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 the Air Force (AF) Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). 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 Forms 847 from the field through the appropriate functional chain of command.

14.11.1.1. **(Added)** The Hill AFB Dropped Object Prevention (DOP) program monitor will establish supplemental DOP program guidance as necessary. Contact information on the locally developed visual aid will include that of Hill AFB, 75 Air Base Wing (75 ABW) or tenant unit (as applicable), group and squadron DOP focal points (FP) (as applicable).

14.11.1.2. **(Added)** Formal major command (MAJCOM) DOP training will be included in the recurring training courses. Contractors consult your statement of work or contract management office for previously established DOP training requirements.

14.11.1.5. **(Added)** Any delay in reporting a dropped object (DO) could result in death or damage to aircraft and/or equipment as the object may be lying on the airfield in the path of an aircraft taxiing/landing/taking off. To ensure maintenance integrity of timely reporting, anyone who observes a condition which appears to have resulted in a DO will contact the appointed supervisor (at that present time) of the affected aircraft. The supervisor will in turn contact the applicable alert/control/operations center, which will immediately notify 75 OSS Airfield Management Operations (AMOPS) at (801) 777-1861 or via base land mobile radio tower net, of a possible foreign object (FO) on the taxiways/ runway. Base Operations (75 OSS/OSAMB) will in turn notify 75 ABW Safety (75 ABW/SE) and accomplish a cursory inspection of the areas concerned. When an instance of a DO is discovered by Transient Alert (TA), TA will notify the affected aircraft commander (pilot) and AMOPS.

14.11.1.5.1. **(Added)** All DOP reports, to include those of TDY units while operating at Hill AFB (and geographically separated locations under the stewardship of Hill AFB), will include Hill AFB DOP program monitor as a courtesy copy when sent to MAJCOM. Hill AFB DOP program monitor will in turn send a courtesy copy of the DOP report to Hill AFB DOP Program Manager, Hill AFB Consolidated Command Post , 75 OSS Airfield Management (75 OSS/OSAM), 75 ABW Public Affairs, and 75 ABW/SE.

14.11.1.5.4. **(Added)** Send DOP report updates and all supporting data (i.e. pictures, etc.) to Hill AFB DOP monitor until the incident report is closed.

14.11.1.5.5. **(Added)** Each designated DOP program representative (group level and higher) on Hill AFB will attend the Hill AFB Quarterly Foreign Object Damage (FOD)/DOP Program Committee Meeting and, if requested by the Hill AFB DOP monitor, will brief all DO occurrences for the previous quarter pertaining to their organization; this includes tenant wings at Hill AFB with flying operations. If unable to attend, ensure a qualified representative has access to quarterly data and any incident reports so they are able to field possible questions from committee members.

14.11.1.5.5.1. **(Added)** Units with flying operations at Hill AFB will submit quarterly DOP program data to the Hill AFB DOP Program Monitor by the 15th day of the first month after the

start of a new quarter. This report will contain details of each DO incident following Attachment 11 (DOP Reporting Format) of AFI 21-101, *Aircraft and Equipment Maintenance Management*, as well as public property damage or mishap caused by the DO (if known) and status of any deficiency reports related to any DO.

14.19. **(Added)** Supplemental Directives. The following outlines organizational areas of responsibility, with regard to FOD prevention, for Air Force Material Command (AFMC) 75 ABW will establish a host-tenant memorandum of agreement to outline organizational responsibilities for AFMC flightlines, runways, taxiways, parking ramps, and outside maintenance areas that are shared with the 75 ABW and assigned units (to include tenant units): 86 FWS Det 1 will ensure TDY units deployed under the Weapons System Evaluation Program understand their responsibility for applicable hot pad(s) and applicable ramp(s) when occupied, 388 FW and 419 FW–388 FW Ramp (rows A-I), alert ramp when occupied, mono rack and applicable hot pads(s) when occupied, OO-ALC – East Ramp, Flight Test Ramp, Hangar 270/674/680 Ramps, Incoming Ramp, South Ramp, South Ramp when occupied by transient aircraft, U.S. Forestry Service–Forest Service Tanker Base. 75 ABW maintains responsibility for all unoccupied hot pads, north and south end-of-runway areas, runway 14/32, and taxiways. Each organizational commander, civilian leader, deputy or equivalent, responsible for storing, producing, maintaining or regenerating aerospace vehicles, products, ground support and/or test equipment including the systems and/or subsystem components will ensure supplemental guidance is established addressing specific FOD prevention needs, when required to expand upon these and higher level FOD prevention program procedures, policies, and requirements while having a presence in these areas. Refer to Hill AFB orientation map contained in local Hill Air Force Base Instruction (HILLAFBI) 13-202, *Airfield Vehicle Control*, for location of aforementioned areas of responsibility.

14.19.1.3. **(Added)** The area within the painted lines which designate “stressed” or “usable full strength” pavement of runway 14/32, active taxiways (not designated a construction-free zone – closed for construction), and active aircraft parking ramps/hot pads (when aircraft are present or within 1 hour of scheduled transient/TDY arrival and not designated a construction-free zone–closed for construction) are critical aircraft operation areas and a combination of scheduled FOD walks, vacuum sweeper operations, and cursory inspections, by all who travel it, will be accomplished in the attempt to maintain this area FO free. Reference Hill Air Force Base Instruction (HILLAFBI) 13-202, *Airfield Vehicle Control*, Attachment 7, for a map of these designated areas. It is imperative the designated 75 ABW FOD program focal point coordinate with leadership in the event a new area is established and forward an updated listing/map to the Hill AFB FOD monitor to maintain currency.

14.19.2. **(Added)** All maintenance personnel will take action and adhere to the maintenance discipline known as “clean-as-you-go.” After performing work, personnel will accomplish end-of-task or end-of-shift clean up (whichever is applicable) to the immediate area as necessary to make the area free of FO. The designated work area will be cleaned at the end of each established duty shift as necessary to make the area free of FO for housekeeping purposes.

14.19.2.1. **(Added)** Aircraft, missiles, munitions, aerospace ground equipment (AGE), engines, any component in temporary storage, or removed from an end item to facilitate other maintenance, will be monitored by the responsible supervisor in the applicable organization to ensure covers and other associated caps/plugs remain installed and the surrounding areas kept clean for housekeeping purposes. Management will make readily available all necessary caps,

plugs, covers, etc., for use by maintenance personnel in their immediate work area for the prevention of FO intrusion.

14.19.2.2. **(Added)** Aircraft engines located inside the engine test cell will have an intake bellmouth screen installed prior to each engine operation (to include motoring).

14.19.2.3. **(Added)** Unless otherwise stated in maintenance group local guidance or a specific technical order (TO), covers and plugs (e.g., engine, pitot tube(s) to include ejection seat) required by the applicable TO will remain installed up to 1 hour prior to aircrew arrival; unless there are personal safety issues or cover installation impedes maintenance task being performed, as applicable.

14.19.2.4. **(Added)** All engine intake inspection (bunny suits) used for aircraft intake and exhaust inspections will have elastic/velcro® arm and leg cuffs.

14.19.2.5. **(Added)** Restricted/controlled area badges and other officially issued temporary visitor badges/passes must remain properly displayed and secured when not conducting operations in an AFI/TO identified critical intake area during engine operation. All badges/passes will be removed and secured (stowed) when within 50 feet of the AFI/TO identified critical intake area during engine operation.

14.19.2.6. **(Added)** Wear of Hats on the Flightline: HILLAFB Instruction 13-201, *Air Traffic Control and Flight Operations*, has established local guidelines for the wear of hats and head covers on the airfield (which includes flightline) with regard to FOD prevention and safety. The wearing of a badge, beret, hairpiece, hat, metal insignia, wig, etc. in a designated FO critical maintenance area, other than the airfield is authorized as long as there is no opportunity for the item to become entrapped in a component, ground support and/or test equipment. These items are to be securely held in place to prevent any possibility of FO risk to the components being worked and must not pose any safety risk to the person wearing them. Supervision is responsible to monitor the wearing of badge, beret, hairpiece, hat, metal insignia, wig, etc. and may direct the removal of such items if it is believed such items are not securely held in place. Organization commanders may evaluate and prohibit metal insignias/badges in maintenance areas other than the flightline and must be listed in their respective supplemental guidance. This prohibition is to prevent any possibility of FOD risk to the components being worked and to reduce the safety risk to the person wearing them.

14.19.2.6.1. **(Added)** Metal accoutrements/insignias and/or badges will not be worn in aircraft engine operation facilities or on trim pads. Refer to [paragraph 14.19.2.5](#) of this instruction with regard to restricted/controlled area badges or other officially issued badges/passes in AFI/ TO identified critical intake areas.

14.19.2.6.2. **(Added)** The wearing of wigs, hairpieces, metal hair fasteners, earrings, or any other jewelry, is not authorized to be worn while performing on/off equipment maintenance in designated FO critical areas. Aircraft engine run (excluding personnel who remain within the control/monitoring cab at the test cell/hush house facility) or launch team personnel will remove and secure all jewelry, badges, lanyards and loose pocket contents prior to performing any engine run tasks.

14.19.2.6.2.1. **(Added)** While in “off equipment” maintenance areas, which are not designated as FO critical; wigs, hairpieces, metal hair fasteners, earrings, or any other jewelry must be securely held in place as to not pose any safety risk to the person wearing them, must not conflict

with any established Air Force Occupational Safety and Health Standard, and must not pose a possible FOD risk to the components being worked.

14.19.2.6.3. **(Added)** Contact the designated FOD program representative of the applicable area to obtain the FOD prevention program briefing for visiting personnel.

14.19.2.8. **(Added)** Vehicle FOD container must be secured in a manner which will not allow it to tip or overturn. A disposable bag may be used as a FOD container liner to ease with emptying. This single disposable bag may remain in the container as long as it is apparent it is being used as a liner, thus the container shall meet the intent of being empty.

14.19.2.9.1. **(Added)** While in work and/or in temporary storage, aircraft, uninstalled engines, AGE, and components thereof; will be monitored by the responsible supervisor in the applicable organization, to ensure covers and other associated caps/plugs remain installed where applicable, and when a specific system or circuit is not actively being worked.

14.19.2.10. **(Added)** An absorbent pad will not be used in or on aircraft or missiles unless a control measure, which will include documentation to ensure its removal, has been established and approved by the designated FOD program representative and organizational leadership. Unless used to actively control or clean up a hazardous waste spill (which has been reported to the applicable alert/control/operations center); absorbent pads will not be left unattended lying on the ground or in a drip pan on the airfield (which includes flightline) or outside in the airfield industrial safety area.

14.19.2.11. **(Added)** Organizational responsibilities of designated portions of the airfield, will include scheduled FOD walks. All organizations will identify their areas of responsibility (AOR): of the airfield, buildings occupied (to include the area out to 25 feet around the building), and portions of the designated airfield industrial safety area (ramp and areas used as temporary storage/parking). Leadership will ensure personnel participate in all scheduled FOD walks for their AOR to reduce the potential for FO related incidents.

14.19.2.11.2. **(Added)** A FOD walk of each AOR under the stewardship of specific organizations will have a FOD walk performed within the designated airfield industrial safety area weekly (at a minimum, weather permitting, and only on designated duty days) to eliminate the migration of items which may pose a FOD hazard.

14.19.2.11.3. **(Added)** All designated airfield (which includes flightline) AOR's, under the stewardship of specific organizations, will have a FOD walk performed once a day (at a minimum, weather permitting, and only on designated duty days), prior to the first sortie/maintenance engine run of each day.

14.19.2.11.4. **(Added)** Airfield/airfield industrial safety area AOR's will have a post high-wind event (high-wind events are determined, notification sent out, and terminated by 75 OSS Weather Flight, through applicable alert/control/operations center) FOD walk accomplished as soon after termination as practicable; to gather debris which may have been blown into the area and ensure the presence and security of aircraft plugs/covers/streamers and other dash 21 equipment (down gear) as applicable.

14.19.2.11.5. **(Added)** A FOD walk of the end-of-runway (EOR) inspection area will be conducted by the unit using it (assigned/tenant/TDY) prior to its first scheduled sortie (at a minimum) for that unit each day.

14.19.2.11.6. **(Added)** Transient aircraft parking areas will have a FOD walk accomplished of the specific parking spot, by the TA contractor, prior to aircraft arrival or departure.

14.19.2.11.7. **(Added)** 75th Operations Support Squadron (75 OSS) AMOPS, will establish a daily priority list for the airfield sweepers and coordinate with the 75th Civil Engineering Squadron, Airfield Equipment and Pavement Section, (75 CES/CEOHP) for sweeping operations, to include all areas that will be utilized on the airfield each day. 75 OSS will ensure airfield sweepers conduct operations on airfield areas to be used by transient aircraft.

14.19.2.11.8. **(Added)** When an aircraft is required to land at an alternate/emergency landing location, aircraft maintenance crews will conduct a thorough daily FOD walk of the immediate area around the aircraft prior to performing maintenance. Maintenance supervision will coordinate with the local airport authority and request an airfield sweeper (when available) to conduct operations on the runway and taxi lanes. Aircraft maintenance crews will ensure a rapid response airfield sweeper unit (e.g. a FOD boss) is taken when responding to this type of alternate/emergency landing event in case an airfield sweeper is not available. This is only a requirement if the aircraft will be returned to serviceable/flying condition and will depart under its own power.

14.19.2.13. **(Added)** All personal items (pencils, erasers, etc.) or professional equipment (maps, life support items, etc.) reported lost by aircrew members during aircraft operation (cockpit/ flight deck FO) will be briefed during next applicable flying unit FOD prevention/aircrew briefings; to include the amount of time spent and maintenance required in the recovery of the item(s).

14.19.2.14. **(Added)** All personnel will inspect footwear for imbedded debris in the sole portion and remove any debris before entering the aircraft cockpit or flight deck. Personnel other than aircrew members will remove all pocket contents before entering the aircraft cockpit or flight deck. Aircrew members will ensure small loose items (items smaller than the standard pencil/ pen) are in pockets equipped with a method to ensure positive closure to prevent items from falling out. Aircrew members will use writing devices with the least amount of small items that could fall off (pocket clips, erasers, removable end caps, etc.). Recommend aircrew members place small items together in a small bag/container which can be closed before placing them in the pocket to create a redundant method of containment.

14.19.2.15. **(Added)** Engine intake and exhaust areas will be inspected immediately prior to and after engine operation by the maintenance or launch crew assigned to the operation and IAW the airframe or engine-specific TO engine intake and exhaust inspection procedures. This includes a minimum of 25 feet to the front and side of the intake, paying specific attention to panel seams and flight control surface gaps, which may conceal FO

14.19.2.17. **(Added)** Designated entry points to the airfield are identified with a combination stop sign, vehicle FOD checkpoint sign (Reference HILLAFBI 13-202). If at any time a FOD checkpoint sign is noted as damaged or missing, contact should be made to 75 OSS/OSAMB either via base land mobile radio tower net or phone (801) 777-1861 to provide the location.

14.19.2.17.1. **(Added)** Vehicle operators on any portion of the designated airfield, which deposit dirt/mud/rocks onto the paved surface upon re-entry and are unable to eliminate the FOD hazard on the spot themselves, will provide location of debris and request a vacuum sweeper through 75 OSS/OSAMB, Control Tower (75 OSS/OSAT), or Maintenance Operations Control

Center, either via base land mobile radio tower net or phone (801) 777-1861. All violations of this policy may result in revocation of airfield driving privileges by airfield management.

14.19.2.17.2. **(Added)** All items (AGE, aircraft, cargo trailers, support dollies, etc.) will receive a visual FO inspection immediately prior to being towed within a designated FO critical area, flightline, runway, or taxiway.

14.19.2.17.3. **(Added)** Aircraft tow operations which enter the designated airfield area will comply with a roll-over tire inspection at the point of entry like any other vehicle. Prior to completion of the tow operation, a tire roll-over inspection will be performed as follows: 1) IAW applicable TO, 2) IAW local supplemental guidance, or 3) stop 5 feet short of the intended final location to inspect tires from all angles, accomplish final positioning, then inspect the previously unobserved portion of tires. All violations of this policy may result in revocation of airfield driving privileges by airfield management.

14.19.2.17.4. **(Added)** Vehicle operators will ensure all debris/foreign objects are removed, and loose hand tools/tool attachments or loose hardware items are placed in a container while in the interior of the vehicle or any open cargo area prior to entering the airfield or airfield industrial safety area. This requirement also applies to all upper surface areas of towed equipment to ensure loose debris does not migrate or drop onto the airfield. Upon identifying any out of compliance vehicle, the driver of that vehicle shall immediately be directed to remove the vehicle from the area until corrected. All violations of this policy may result in revocation of airfield driving privileges by airfield management.

14.19.2.17.5. **(Added)** Vehicles not engaged in providing immediate support to aircraft maintenance or airfield operations, will no longer travel the routes which traverse the East Ramp, Flight Test Ramp, North Ramp and along the shoulder of Taxiway Alpha between the air traffic control tower and the South Ramp. These are active airfield operation areas, and IAW AFI 13-213, *Airfield Driving*, commanders are asked to limit the number of personnel authorized on the flightline to an absolute minimum necessary to accomplish the mission. Vehicles required to operate in this area, will adhere to HILLAFBI 13-202, Chapter 4, *Vehicle Operations on the Airfield*, specific attention given to driving diagonally across aircraft parking areas. All violations of this policy may result in revocation of airfield driving privileges by airfield management.

14.19.2.17.6. **(Added)** Vehicle operators will adhere to HILLAFBI 13-202, Chapter 4, to minimize the FOD potential for operating aircraft.

14.19.2.17.7. **(Added)** 75 CES "Pavements and Equipment" personnel will conduct a cursory post use inspection for airfield sweepers, snow removal and other construction equipment driven on the airfield with a focus on items prone to vibrate loose or shear during use. This inspection will be accomplished without delay upon arrival back to the equipment yard. Immediately notify airfield management of possible FO on the airfield upon discovery of any missing items that had not been previously identified. A checklist will be established for specific items on specific pieces of equipment.

14.19.2.17.8. **(Added)** 75 CES/CEOHP will ensure airfield vacuum sweepers/snow removal equipment are not equipped with metal bristles.

14.19.2.17.9. **(Added)** 75 OSS Airfield Management will incorporate and brief the restriction from having metal bristles on equipment used by contracted construction companies on the airfield.

14.19.2.18.1. **(Added)** The cable lug nut on the bayonet end of aircraft grounding cables will be routinely inspected for tightness and security to prevent FO.

14.19.2.18.2. **(Added)** Tie down points will be kept clean and inspected during FOD walks, the same as grounding points.

14.19.2.20. **(Added)** The FOD removal tool will be added to the vehicle's AF Form 1800, *Operator's Inspection Guide and Trouble report*, for inventory purposes.

14.19.2.20.1. **(Added)** Any item removed from a vehicle tire will be properly collected and disposed of, not left lying on the ground. This eliminates the potential for the item to continue to migrate.

14.19.2.20.2. **(Added)** The operator of any vehicle driven on the airfield during periods of darkness or that passes through vehicle tire FOD checkpoints without adequate lighting will ensure an operational illuminating device is available to accomplish the tire FOD inspection. If an illuminating device is kept in the vehicle as part of the vehicle equipment, it will be marked with the vehicle ID and added to the vehicle's AF Form 1800 for inventory purposes. 75 OSS Airfield Management is not responsible to provide lighting at airfield vehicle FOD checkpoints. Direct questions or concerns about the location or condition of airfield vehicle FOD checkpoints to AMOPS, (801) 777-1861.

14.19.2.22. **(Added)** Organizations with possession of an aeroprobe-type magnetic tool location device are encouraged to share the device with the other organizations on base to facilitate the magnetizing process and make the wand device available to aid with lost tool searches.

14.19.2.23.2. **(Added)** Applicable AFMC personnel who accomplish on-equipment/off-equipment maintenance tasks in the performance of their assigned duties will have a quarterly FOD/DO awareness and prevention briefing provided to them (contractors follow established statement of work, tenant units follow applicable MAJCOM requirements). IAW Headquarters (HQ) AFMC guidance, Hill AFB FOD Prevention Committee Meeting minutes will be used, at a minimum by supervisors, as information for the quarterly briefing. The Hill AFB FOD Prevention Committee Meeting minutes will be available on the Maintenance Information System under FOD/DOP Program (contact your FOD FP for needed assistance). An AFMC Form 316, *Supervisors Safety Meeting Minutes*, will be used as the locally-developed roster for AFMC organizations to document attendance at the quarterly FOD briefings. Quarterly FOD/DO briefings must be mentioned as its own line item on the form. The form will have the typed/written names of all employees assigned so the spelling of the names is distinguishable. Employees will sign/initial next to their name to verify attendance. Supervisors will maintain, at a minimum, the most recent years' worth (4 quarters) of FOD/DO quarterly briefing material (briefing material may be maintained in an electronic format) and corresponding attendance rosters. All other personnel (besides those who accomplish on-equipment/off-equipment maintenance tasks) who are merely required to pass through a maintenance area to perform their assigned duties, are not required to have a quarterly briefing provided to them, but must accomplish MAJCOM initial and the applicable MAJCOM refresher FOD Prevention training.

All supervisors should closely track employees absent at the time of the quarterly briefing and provide the material to them upon returning to duty. Supervisors may send the briefing material electronically to absent employees and use a reply from them indicating they have read the provided briefing material as an electronic signature. The reply will then be attached to that quarter's original AFMC Form 316 for which they were indicated as absent.

14.19.3.1. **(Added)** Hill AFB FOD program monitor will compose and coordinate the required FOD program monitor and alternate appointment letter when applicable. Contact information on the locally developed visual aid will include that of Hill AFB, Ogden Air Logistics Complex (OO-ALC), group (and squadron if applicable) FOD focal points (tenant units will follow guidance from their MAJCOM as applicable).

14.19.3.2.2. **(Added)** FOD program focal points; refer to [paragraph 14.19.5.1](#) of this supplement, AFI 91-204, *Safety Investigations and Reports*, and Air Force Manual 91-223, *Aviation Safety Investigations and Reports*; to ensure proper coordination occurs and for necessary support and/or personnel during FOD Mishap investigations. It is the responsibility of senior leadership of the organization, which incurs a preventable-chargeable FOD incident (over \$50K), to ensure an "Eight-Step Problem Solving Process" is accomplished.

14.19.4.2. **(Added)** Hill AFB FOD program monitor will accomplish weekly spot checks of the airfield (runway, taxiways, hot pads, EOR, aircraft parking areas, and the general airfield area) and document them on an AF Form 2420, *Quality Control Inspection Summary*, (may be in an electronic format).

14.19.4.5. **(Added)** Include Hill AFB FOD program monitor in all notifications sent to airfield management regarding damaged pavement, flightline construction, or other hazards in or near aircraft parking ramps or taxiways.

14.19.4.5.9. **(Added)** The standardized FOD program continuity book format developed by the Hill AFB FOD monitor will be used by units having on-equipment/off-equipment maintenance personnel (tenant units will follow guidance from their MAJCOM). The continuity book format will contain at a minimum: Tab (1) Applicable FOD/ DOP program appointment letter(s), duties of a FOD/ DOP FP, AFI 21-101, AFMC and Hill AFB Supplements, and applicable memorandums, Tab (2) HQ AFMC FOD/ DOP program checklist(s), Tab (3) FOD walk areas of responsibility, a sample copy of the AFMC Form 315, *Supervisors Safety Inspection Record*, and AFMC Form 343, *Quality Assurance Assessment*, Tab (4) Quarterly FOD committee briefing material; a sample copy of the quarterly FOD briefing attendance roster form, AFMC Form 316, Tab (5) The most recent quarterly Hill AFB FOD/ DOP committee meeting minutes, Tab (6) FOD/ DOP incident log containing the last 2 years' worth of incidents, Tab (7) FOD program publicity/awards nomination forms, and Tab (8) Miscellaneous, notes, cross-tell, items of interest. (**Note:** Organizations may exercise the option to maintain a DD Form 2861, *Cross Reference* with the current internet/local network drive address link to any of the aforementioned items.)

14.19.4.5.10. **(Added)** Complex/wing-level appointment letters will be forwarded to the Hill AFB FOD program monitor within 30 days of appointment and will include the individual's name, office symbol and phone number. All applicable group-level appointment letters will be forwarded to the Hill AFB FOD monitor within 30 days of appointment and will include the individual's name, office symbol and phone number. Applicable group FOD FP will maintain current appointment letters for each squadron requiring a FOD FP.

14.19.4.5.10.2. **(Added)** Applicable AFMC group and squadron FOD focal points, ensure group or squadron specific FOD (DOP where applicable) program-related quality assurance data is available to supervisors to assist with awareness and prevention briefings. FOD/DOP program focal points will ensure awareness material (i.e. posters, banners, decals, bulletins, [current] FOD program points of contact visual aid) is at least posted in highly visible areas throughout their areas of responsibility to promote FOD/DOP program awareness. FOD (DOP where applicable) program focal points will assist in the distribution of all FOD program-related information to the next subordinate level.

14.19.4.5.10.3. **(Added)** Applicable group and squadron FOD program focal points will accomplish two periodic FOD spot checks per month, as a minimum, within their areas of responsibility. Their entire area of responsibility is not required to be spot checked. Use the adopted AF Form 2420 to document the periodic spot checks.

14.19.4.5.10.4. **(Added)** Applicable primary or alternate group FOD program focal points of AFMC organizations will attend FOD program committee meetings.

14.19.4.5.10.5.1. **(Added)** TA and TDY units will notify AMOPS of FOD- (or DOP) related issues and incidents. AMOPS will notify the Hill AFB FOD monitor, and any other designated personnel, as per the locally developed FOD checklist, and send a description and location of the issues and incident. The supervisor of the affected end item will ensure all reporting requirements are immediately accomplished and will relay this information to their respective owning unit FOD FP. To meet the HQ AFMC 24-hour initial FOD incident reporting suspense; all engine damage (to include small turbine engines) will initially be reported as a FOD incident (unless caused by the natural environment or wildlife) until the investigation (to include forensic sampling) substantiates otherwise. Damage determined to have been caused by a workmanship discrepancy will be considered as a contributing factor to a FOD incident, not material failure. Commanders will ensure appropriate personnel are provided adequate time required to conduct/support FOD investigations. When a confirmed FOD event occurs with turbine or jet engines and the damage is beyond repairable limits established in the applicable TO, a forensic sample will be collected. The sample from the damaged area will be preserved in the event it is required to be processed by a metallurgy laboratory to aid in the investigation. Samples will be taken by group or engine shop personnel trained in collecting FOD forensic samples. The sample will be taken when the damage is readily accessible and does not require disassembly beyond the scope of the organization's capability to gain access to the damaged area. In this instance, when an asset is required to be sent to a repair and overhaul facility not associated with HILL AFB, a request to obtain a forensic sample will accompany the asset. Forensic samples will be placed in the damaged asset's serialized historical records file/folder. The forensic sample will be placed in a sealed envelope marked "Foreign Object Damage Forensic Evidence - Do Not Open Unless to Process." An aircraft engine sample will be maintained as part of the engine data file/folder.

RONALD E. JOLLY, SR., Colonel, USAF
Commander

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

AFI 13-213, *Airfield Driving*, 1 June 2011

AFI 21-101, *Aircraft and Equipment Maintenance Management*, 26 July 2010

AFI 91-204, *Safety Investigations and Reports*, 24 September 2008

AFI 21-101_AFMCSUP, *Aircraft and Equipment Maintenance Management*, 14 December 2007

AFMAN 33-363, *Management of Records*, 1 March 2008

AFMAN 91-223, *Aviation Safety Investigations and Reports*, 16 May 2013

AFPD 21-1, *Air and Space Maintenance*, 25 February 2003

HILLAFBI 13-201, *Air Traffic Control and Flight Operations*, 1 April 2009

HILLAFBI 13-202, *Airfield Vehicle Control*, 1 April 2009

Adopted Forms

AF Form 847, *Recommendations for Change of Publication*, 22 September 2009

AF Form 1800, *Operator's Inspection Guide and Trouble report*, 01 April 2010

AF Form 2420, *Quality Control Inspection Summary*, 1 August 1992

AFMC Form 315, *Supervisor Safety Inspection Record*, 01 July 1992

AFMC Form 316, *Supervisor Safety Meeting Minutes*, 01 July 1992

AFMC Form 343, *Quality Assurance Assessment*, 28 June 2007

DD Form 2861, *Cross Reference*, June 2003

Abbreviations and Acronyms

ABW—Air Base Wing

AFB—Air Force Base

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFMC—Air Force Materiel Command

AFMCSUP—Air Force Materiel Command Supplement

AFPD—Air Force Policy Directive

AGE—Aerospace Ground Equipment

AMOPS—Airfield Management Operations

AOR—Areas of Responsibility

DO—Dropped Object

DOP—Dropped Object Prevention

EOR—End of Runway

FO—Foreign Object

FOD—Foreign Object Damage

FP—Focal Point

HILLAFB—Hill Air Force Base

HILLAFBI—Hill Air Force Base Instruction

HQ—Headquarters

IAW—In Accordance With

MAJCOM—Major Command

OO-ALC—Ogden Air Logistics Complex

OPR—Office of Primary Responsibility

RDS—Records Disposition Schedule

SE—Safety Office

TA—Transient Alert

TO—Technical Order

TDY—Temporary Duty

75 ABW—Air Base Wing

75 ABW/SE—Air Base Wing/Safety

75 CES—Civil Engineering Squadron

75 OSS/OSAM—Air Base Wing Operations Support Squadron/Airfield Management

75 OSS/OSAMB—Air Base Wing Operational Support Squadron/ Base Operations

Terms

Airfield—Refers to all areas inside the Foreign Object Debris check points; to include the runway, taxiways, infield, flightline, buildings, hangars, facilities, parking aprons, and flightline ECPs. The Airfield Industrial Safety Area is not included in the term “airfield.”

Airfield Industrial Safety Area—The area between the airfield security chain link fence (PACER PROTECT) and the airfield movement area markings (painted movement area marking = double yellow lines) between FOD check signs. The painted double yellow line is solid toward the Airfield Industrial Safety Area and dashed toward the airfield.

Flightline—Any area where aircraft may be parked, stored (AMARG gravel storage areas are not considered flightline), serviced or maintained and operated under their own power to include aprons, hardstands, hot pads, and aircraft parking ramps (as specified by airfield management).

Foreign Object (FO)—A substance alien to aircraft, engines, munitions, missiles, drones, space systems, support equipment, AGE, trainers or components thereof that has been allowed to invade the product. Any FO in a maintenance area has the potential to cause damage.

Foreign Object Damage (FOD)—Damage caused by FO.

Hill AFB DOP Program Monitor—Individual designated by 75 ABW/CV (meeting AFI 21-101_AFMCSUP requirements).

Hill AFB DOP Program Manager—75 ABW/CV or individual designated by 75 ABW/CC (meeting AFI 21-101_AFMCSUP requirements).

Maintenance Area—Any area to include aprons, back shops, docks (closed or semi closed), fuels barns, hangars, hardstands, hush house, paint barns, run pads, shelters, test cell, wash racks, where on-equipment aircraft or off-equipment maintenance operations are conducted, weather within the Airfield Industrial Safety Area or outside on the flightline, (jet engine, aircraft assemblies, subassemblies, munitions, missiles, rockets, and support equipment).

Off-Equipment Maintenance—Maintenance tasks that are not or cannot be effectively accomplished on or at the weapon system or end item of equipment, but require the removal of the component to a shop or facility for repair.

On Equipment Maintenance—Maintenance tasks that are or can be effectively performed on or at the weapon system or end item of equipment.

Transient Aircraft—Aircraft not affiliated with, deployed to, or stationed at Hill AFB.