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Maintenance

**FOREIGN OBJECT DAMAGE
(FOD)/DROPPED OBJECT PREVENTION
(DOP) PROGRAM**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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(Col Darlene M. Sanders)

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This instruction is mandated by Air Force Instruction (AFI) 21-101_Air Mobility Command Supplement (AMCSUP), *MAF Aircraft and Equipment Maintenance Management*. It establishes the 374 AW policy on FOD/DOP prevention and directs compliance with 374 AW FOD/DOP instructions by both 374 AW and AMC tenant units. Commanders and supervisors will ensure all personnel comply with this instruction. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) AFMAN 33-363, *Management of Records*, and disposed of IAW the Air Force Records Disposition Schedule (RDS) located at <https://www.my.af.mil/afirms/afirms/afirms/rims.cfm>. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*; route AF Form 847 from the field through the appropriate functional chain of command.

SUMMARY OF CHANGES

This publication has been substantially revised and must be reviewed in its entirety. Major changes include: Renumbers to 374 AWI 21-101 from 374 AWI 21-103, clarifies policy, and incorporates wing policy letters. It has been revised in an effort to be more directive in nature, providing the user a clear picture of responsibilities. This revision is a complete rewrite.

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1. Compliance. The 374 AW FOD/DOP Prevention Program is defined by a combination of published guidance. Compliance with the applicable portions of 374 MXG OI 21-124, *Tool and Equipment Management and Control*, and the FOD/DOP section of AFI 21-101_AMCSUP chapter 14, constitute compliance with the 374 AW FOD/DOP Prevention Program.

2. Prevention Policy. FOD and dropped objects are costly and have a negative impact on mission accomplishment. Every effort will be made by all 374 AW personnel to ensure FOD and DOP prevention measures are followed. Supervisors at all levels will ensure everyone within their span of control is trained on, and implements FOD/DOP prevention procedures at all times.

3. General Procedures:

3.1. “FOD Elimination” is the standard. Attention to detail, coupled with a proactive approach at all levels, will result in a zero FOD rate. FOD prevention is everyone's responsibility. Supervisors at every level will ensure that proper FOD prevention procedures are strictly enforced.

3.1.1. “ZERO TOLERANCE” is the standard for all FOD prevention measures as well as for 374th Maintenance Group Quality Assurance (374 MXG/MXQ) assessments on aircraft, work areas directly in or around aircraft, tool boxes, work areas that support aircraft systems and Aerospace Ground Equipment (AGE).

3.1.2. All FOD assessments and spot checks will be objective based on the “zero tolerance” concept.

3.1.3. FOD found within one half hour of a FOD walk or hangar sweep will constitute a fail against the performing organization. FOD found, including FO discovered later than one half hour after a FOD walk or hangar sweep, will be subject to investigation by 374 AW FOD Monitor or QA inspectors.

3.1.4. The “clean-as-you-go” concept will be strictly followed. On the flight line and in the hangars, it is important to stress that proactive housekeeping procedures will be

initiated throughout every task. The task is not complete until the area is cleaned up. Strict use of parts bags will be enforced.

3.1.4.1. Incorporate “clean as you go” into FOD training to enhance the ability of reducing potential FOD.

3.1.4.2. “Clean as you go” procedures are expressed below:

Clean the immediate area when work cannot continue.

Clean the immediate area when work debris has the potential to migrate to an out of sight or inaccessible area and cause damage and/or give the appearance of poor workmanship.

Clean the immediate area after work is completed and prior to inspection.

Clean area at the end of each shift.

If you drop something or hear something drop--pick it up!

4. FOD Prevention.

4.1. FOD prevention is the responsibility of all personnel working in, on, around or traveling through the airfield and areas near aircraft, munitions, AGE, engines or components. Personnel working in or transiting the aforementioned areas will comply with this instruction.

4.1.1. Practice good housekeeping and hardware accountability at all times. Parts bags will be used at all times and will be attached to the associated component or area as applicable. Use attached tag to indicate types and totals of items inside, aircraft/equipment number and safely secure parts. Plastic “Ziploc” type bags may be used as parts bags, provided they have a listing included on paper or have the contents annotated on the package with permanent ink. Locally produced part accountability kits may also be used to account for component hardware (e.g., engine mount bolt kit).

4.1.2. Hardware and shop stock control. Hardware and shop stock (acid brushes, paint pens, razor blades, etc.) will be issued on a one-for-one basis. Bench stock must be secured in a controlled area. When obtaining these items from the Consolidated Tool Kit (CTK) or Supply area, turn in one item to receive one like item. For instances where a turn-in part is not available, CTK or supply personnel will annotate a locally produced log with the following minimum information: Name, rank, bin number, quantity, date, aircraft tail number, and job control number. Contracted maintenance operations will follow these guidelines, except in areas where their statement of work exempts them from it due to contractual FOD prevention requirements.

4.2. While maintenance is being performed on aircraft, components, uninstalled engines, and AGE properly cover openings, plug or cap ports, lines, hoses, electrical connections, pitot tubes, and ducts to prevent FOs from entering these systems. Ensure plugs fit snugly and properly and that securing hardware is serviceable. Test equipment and equipment in parts lockers will have receptacles capped and cable ends protected with a cap or bag when not in use.

4.2.1. Streamers. “REMOVE BEFORE FLIGHT” streamers will be used on ground wires and any external cover applied to the aircraft on the ground.

4.3. Clothing restrictions. Hats will not be worn on the flight line or in engine test cell areas. All personnel performing ground observer duties for engine start to include engine test cell personnel must clear pockets of foreign objects (pens, pencils, etc.) prior to engine operation.

4.3.1. Wear of the winter watch cap is authorized and may be worn during aircraft launch or recovery when using the following procedures:

4.3.2. Ear defender/communication headset devices should be worn over the watch cap.

4.3.3. If ear defender/communication headset is not worn over watch cap then cap must be firmly set on individual's head and pulled down over ears to prevent it from inadvertently coming off.

4.3.4. For FOD prevention and safety reasons the AF Form 1199, *Air Force Entry Control Card*, will be removed from the outer garment during engine inlet maintenance and secured on their person. Badge will be secured to the member by use of a plastic armband or quick release nylon/cotton cord. A metal clip may be used for securing the badge and cord by passing the cord through the hole to prevent loss. The badge will be replaced on the outer garment upon termination or when not in the immediate area where the engine inlet maintenance is conducted.

4.4. Flight deck FOD inspections. All 374 AW aircraft flight deck FOD prevention inspections will be accomplished no earlier than 4 hours prior to flight and annotated in the aircraft AFTO Form 781A, *Maintenance Discrepancy and Work Document*. Check for foreign, loose, or missing items (light lenses, covers, bulbs, and hardware) on all instrument, control, and circuit breaker panels. Pay particular attention to areas around seat tracks, flight control inputs, and openings in the throttle quadrant and floor.

4.4.1. All 374 AW C-130 aircraft throttle quadrant covers will be installed immediately after each flight and will remain installed while the aircraft is on the ground to include sealed spare and training aircraft. When removed to accomplish an engine run or maintenance in the throttle quadrant area, covers will be re-installed immediately after maintenance.

4.5. All aircraft hangars, maintenance production areas, and vehicles that frequent flight line/maintenance areas will have approved area FOD containers readily accessible to workers. An area FOD container will be a sturdy receptacle. Flight line vehicle containers must be lidded type containers. Shops may fabricate or procure small portable FO containers (coffee cans, FOD bags, etc.) for use where area collection points are not feasible such as on maintenance stands or work benches.

4.5.1. Containers will be stenciled with the word "FOD" in contrasting letters. "FOD" stickers may be used on FOD containers and are available from the 374 AW FOD Monitor's office.

4.5.2. All FOD containers will be emptied when full or at the end of each shift, whichever comes first.

4.6. Base FOD walks. FOD walks are mandatory to remove FO from the flight line parking ramp, access road, and adjacent areas.

4.6.1. 374 AW level FOD walks are conducted once a week at a time dependent on mission requirements to maximize participation (usually Tuesday prior to 1200 hours).

Squadron personnel will assemble at designated flight line area spots. Maximum participation is essential for a successful FOD walk.

4.6.2. FOD walk areas of responsibility are as follows:

Table 1. Responsibility of FOD Walk Areas

SQUADRON	AREA OF RESPONSIBILITY
374 AMXS, 36 AS	Parking Spot D-7 to AGE "AMC" Ready Line
374 OG, 374 OSS, 459 AS, 374 MOS	Building 800 to Parking Spot D-7
374 MXS (Fab, Prop & Accessory Flights)	Wash rack to Building 800
374 MXS (MUNS, Test Cell)	From Hold Line at Kilo Taxiway and Foxtrot intersection to Building 1504
374 MXS (Fuels, AGE WRM) and Aero Club	Building 1504 to Hold Line at Golf Taxiway Foxtrot Intersection
374 MXS (ISO, Refurbishment)	AGE "AMC" Ready Line to Aircraft Parking Spot C-8
730 AMS (FOD Walk on Wednesday)	Aircraft Parking Spots C-8 to Aircraft Parking Spot C5-4

4.6.3. The Wing FOD Monitor may adjust FOD walk days to meet mission requirements when necessary. FOD walks may be terminated by the Wing FOD Monitor during inclement weather (e.g., heavy fog, heavy rain, severe temperatures, or when the Maintenance Operations Center (MOC) announces lightning inside five nautical miles). FOD walks will be rescheduled accordingly if cancelled.

4.6.4. Aircraft maintenance units (AMUs) should conduct their own FOD walks on each duty day when group-level FOD walks are not accomplished. Individuals will conduct walks around individual aircraft and hangars prior to start and after completion of any maintenance on that aircraft. The alternative procedure is for units to assemble a structured line once a day in their area and conduct a FOD walk.

4.6.5. FOD walk procedures. All participants will assemble prior to FOD walk for a safety briefing. For safety reasons the FOD walk supervisor has ultimate authority in controlling procession of the line and personnel will disperse evenly as directed. Movement will be at a slow pace, paying special attention to equipment, grounding points, expansion joints, and cracks in pavement. Personnel will disperse evenly as directed and move slowly in an even line. If hardware (safety wire, rivets, nuts, washers, etc.) is discovered, inform the FOD walk supervisor of the parking spot where the item was found.

4.6.6. Aircraft parking spots will be FOD walked prior to parking and after moving aircraft from the spot. This requirement pertains to both towed and taxied aircraft. Tow supervisors/expeditors will ensure the spot is FOD walked no sooner than 30 minutes prior to parking on and no later than 30 minutes after moving from the spot.

4.7. Towed FOD sweepers and airfield sweeper vehicles will be used for base FOD prevention efforts.

4.7.1. Areas requiring airfield sweepers will be coordinated through the airfield manager by calling the Maintenance Operations Center.

4.7.2. Towed FOD Sweeper Usage. The FOD sweeper is an effective tool used to supplement airfield sweepers in removing FOD from large areas of the airfield in an efficient manner. In order for the FOD sweeper to be effective, units that are assigned a FOD sweeper must tow it on a regularly scheduled basis. The squadron FOD monitors are responsible for managing this program at the squadron level.

4.7.3. One triplex FOD sweeper is assigned to 374 MXS and one triplex FOD sweeper is assigned to 374 AMXS.

4.7.4. Any vehicle can be used to pull the FOD sweeper so long as good coverage of the ramp is achieved. To prevent damage to the FOD sweeper backing of the vehicle is prohibited with the FOD sweeper installed, and the FOD sweeper should not be towed during inclement weather. Vehicles towing a FOD sweeper should focus additional attention on parking spots recently vacated by aircraft.

4.7.5. FOD sweeper usage will be tracked and recorded by the CTK of the assigned workcenter on AF Form 3131, *General Purpose Form*. The form will track the following: Name of personnel, squadron/office symbol, date/time, hours driven, area covered, weight of material collected.

4.7.6. Units will decide which shift and how many hours the FOD sweeper will be towed based on mission requirements and ramp/taxiway condition. After days of inclement weather it is recommended that the FOD sweeper be pulled to ensure a FOD free ramp.

4.7.6.1. The unit FOD representative or CTK will notify the 374 AW FOD prevention office when a sweeper goes down for maintenance. Sweepers will be borrowed from another unit to sweep required areas, which will be credited to the unit pulling it.

4.7.6.2. FOD sweeper usage requirements are as follows:

Table 2. Requirements of FOD Sweeper Usage

SQUADRON ASSIGNED	AREA OF RESPONSIBILITY
374 AMXS	Parking spot D-11 to parking spot C-8
374 MXS	Wash rack to parking spot D-11

4.8. Incentive Program. Foreign Object Damage (FOD) Poster Competition/Golden Bolt Award.

4.8.1. The 374 AW has established the Quarterly FOD Poster Competition. This competition is open to the entire 374 AW and its tenant units. Posters may be drawn by hand or developed electronically. Submit completed posters to the 374 AW FOD Monitor either electronically or in person before the last day of each calendar quarter.

4.8.1.1. The Unit FOD Committee will vote for the best poster. For quarterly competitions, the winner will receive a certificate and be authorized/recommended

for a 1-day pass. The annual competition winner will receive a certificate and be authorized/recommended for a 3-day pass.

4.8.2. Each month the Wing FOD Monitor will hide a Golden Bolt in a maintenance work area or on the airfield during the weekly FOD walks. Whoever finds the bolt will be recommended for a 1-day pass and receive a certificate from the 374 AW Vice Commander (374 AW/CV). These passes must be coordinated with the individual's work center supervisor and be taken when workload permits. The bolt will be clearly tracked by the FOD Monitor to preclude its loss during FOD walk.

4.9. Airfield inspection and monitoring.

4.9.1. Representatives from 374 OSS Airfield Operations (374 OSS/OSAM) and the FOD monitor will conduct random ramp inspections. The FOD monitor will forward any findings from these inspections of damaged pavement, flight line construction, and other FOD hazards in or near aircraft parking ramps, taxiways, and access roads to 374 OSS/OSAM for tracking purposes.

4.9.2. Results of these inspections will be tracked in the Quality Assurance database or a locally devised form and briefed quarterly to the 374 AW/CV at the Wing FOD Prevention committee meeting.

4.10. Engine/propeller maintenance. Aircraft engine/propeller maintenance is a FO/FOD critical area. All personnel will exercise caution when performing maintenance in these areas. Strict tool and hardware control practices will be enforced during engine/propeller maintenance. All hardware will be accounted for at all times.

4.10.1. Covers (e.g., engine inlet, pitot tube(s), and protective covers) will not be removed more than 4 hours prior to flight and will be installed within 30 minutes following engine shutdown. Engine inlet covers will be installed for any maintenance accomplished on the engine/propeller forward of the engine firewall. All covers will be inspected after any severe weather condition to ensure serviceability and inventory.

4.10.2. All engine inlet maintenance, to include inlet/exhaust inspections prior to/after each engine operation and blade blending, will be annotated on a Red X symbol in the AFTO Form 781A. Inlet/exhaust inspections before and after operation or maintenance will be conducted by a qualified 7-level or red-X qualified 5-level as identified on the unit's Special Certification Roster (SCR) for that task.

4.10.3. Blade damage. Upon discovery of blade damage, annotate AFTO Form 781A on a red dash and notify the MOC and 374 AW FOD Office prior to any rework of blades.

4.10.3.1. A propulsion 7-Level (2A671B) will determine if damage is repairable/non-repairable by conducting a thorough visual inspection of the engine inlet, 5th and 10th stage bleed air port, and turbine exhaust areas. Air Force or field-level engineering experts may also be contacted to assist in determining repair limitations.

4.10.3.2. When damage has been previously blended with no rework required, the applicable areas will be recoated with blue layout dye and annotated in the AFTO Form 781A.

4.10.3.3. When blending is required the damage will be measured using a borescope. At this time, upgrade the original discrepancy to a Red-X symbol.

4.10.3.4. Only qualified personnel that have attended a formal blade-blending course conducted by a qualified blade blending instructor will perform blade blending. This qualification will be documented on the unit's SCR.

4.10.3.5. An all systems Red X certified or an Field Training Detachment (FTD) trained and certified propulsion 7-level, as documented on the unit SCR, will inspect the blending and clear the Red-X discrepancy from the aircraft forms.

4.10.3.6. Blade blending (installed engines). Notify Wing FOD Monitor (730 AMS/QA FOD Monitor for AMC aircraft) prior to any blade blending on installed engines. Complete a *Blade blending worksheet* (Attachment 2) and forward by fax or e-mail to applicable 374 AW FOD monitor and the engine management branch (EMB). EMB will document this data in the AFTO Form 95, *Significant Historical Data*, IAW TO 00-20-1-WA-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policy and Procedures*.

4.10.3.7. Blade blending (uninstalled engines). Notify Wing FOD monitor of any blade blending. Complete a Blade blending worksheet (Attachment 2) or approved work package tracking sheet and forward by fax or e-mail to applicable 374 AW FOD monitor and the engine management branch (EMB). EMB will document this data in the AFTO Form 9, IAW TO 00-20-1-WA-1 upon review of the work package.

4.10.3.8. Non-repairable blade damage. When damage is verified by the previously mentioned methods and is confirmed as non-repairable, notify the applicable unit supervision and initiate impoundment procedures IAW AFI 21-101_AMCSUP and applicable operating instructions. Also, ensure the MOC and 374 AW FOD monitor are updated with this information.

4.11. Vehicles. Vehicles are potential FO/FOD hazards. All vehicles will be maintained FO-free at all times. Vehicles and FOD bars will be checked for cleanliness prior to initialing the AF Form 1800, *Operator's Inspection Guide and Trouble Report (General Purpose Vehicles)*. Each subsequent operator will ensure the vehicle and magnetic bar are FO free. All vehicle/equipment tires and magnetic bars will be checked and cleared of debris prior to entering the flight line. During hours of darkness, a bright flashlight will be used for this inspection. Vehicles involved in an actual emergency response are exempt from these tire checks.

4.11.1. All vehicles prior to entering a flightline gate (with the exception of the control tower gate, and the dental gate) will come to a complete stop, turn off the engine and set parking brake. Control tower and dental gate FOD checks will be completed after the flightline gate. Passengers will exit the vehicle and check for imbedded foreign objects on vehicle tire surfaces, then pull forward (roll-over) and check any previously unexposed tire surface area for imbedded foreign objects. Vehicle operators will also check for any loose objects or unsecure cargo on the vehicle. This check will be accomplished inside or as close to the "FOD Roll-Over Tire Check Box" as possible, and will be accomplished prior to the FOD check sign.

4.11.2. Magnetic FOD bars may be installed on all "high use" Transit Alert/dispatch/expediter vehicles. Vehicles exempt from this requirement are as follows:

Crash/recovery vehicles, mules/golf carts, tow vehicles, Grove crane, forklifts, other special purpose vehicles, and any vehicles not operated frequently on the flight line.

4.11.3. If used, FOD bars will be installed either on the front or back bumper of the vehicle approximately 3"- 5" off the ground. All FOD bars will be removed prior to turn in to vehicle maintenance and reinstalled immediately upon return.

4.12. Approved FOD containers will be installed on all multi or special purpose vehicles (metros, deicers, tow vehicles, etc.) which frequent flight line/maintenance areas. Due to safety concerns, Grove cranes and forklifts are exempt from this policy.

4.13. Tool Management. All personnel working in, on, around, or traveling through areas near aircraft, munitions, AGE, engines or components, will account for all tools and/or equipment used in performance of their duties. Comply with all requirements in AFI 21-101_AMCSUP.

4.14. Cell phones, pagers, etc. used on the flight line or in maintenance work areas will only be used for official/authorized business. Cell phones will not be used while actively performing maintenance. During maintenance actions, cell phones and other electronic devices (e.g., PDAs, pagers) not required in the performance of maintenance, shall be turned off. Placing cell phones or other electronic devices in the silent or vibrate mode does not satisfy this requirement. This restriction does not apply to personnel performing maintenance management duties (e.g., Pro Super, Expediter). Care/prudence should be exercised when using electronic devices on the flightline so as not to create a FOD hazard.

4.14.1. Government equipment issued for the performance of official duties on the flight line must be appropriately marked/identified with squadron and office symbol, (i.e., 374 MXG/MXQ). Personnel will also comply with restrictions in T.O. 00-25-172, AFMAN 91-201, AFI 91-207, AFI 31-218 and AFI 21-101.

5. Dropped Object Prevention (DOP).

5.1. DOP is the responsibility of all aircraft operators and maintainers. Prevention begins when aircraft panels are removed, access doors opened, or when maintenance is performed on an exterior component.

5.2. General. When installing/operating aircraft panels, doors, and components, place special emphasis on the condition of latches, fasteners, hinge pins, and hinge lobes. Preflight inspections must ensure panels, doors, and components fit properly and are attached securely.

6. Reporting and Investigations.

6.1. FOD/DOP reporting and investigations will be accomplished IAW AFI 91-204, *Safety Investigations and Reports*, and AFI 21-101_AMCSUP as applicable. Informational copies of the reports will be sent to the applicable flight safety office as requested. The FOD/DOP monitor will notify 374 AW Public Affairs officials if large objects are lost in-flight or incidents are likely to cause adverse publicity.

6.2. When FOD or a dropped object incident is discovered, unit supervision will immediately notify the MOC. The MOC will notify the applicable FOD/DOP Monitor and QA office. Impound aircraft/engine, if required, IAW AFI 21-101_AMCSUP and applicable operating instructions.

6.2.1. Do not perform maintenance in the affected area of the aircraft/equipment until cleared by the investigator. Save all evidence of the incident for turn-in to the applicable FOD/DOP office.

6.2.2. The 374 AW FOD/DOP Monitor or QA offices will accomplish all FOD and dropped object investigations with the assistance of the Unit FOD/DOP Monitor. The unit responsible for the incident will complete the FOD/DOP worksheets; 374 AW Form 70, *Dropped Object Investigation Worksheet*, 374 AW Form 71, *Cost Estimate Worksheet*, and 374 AW Form 72, *Foreign Object Damage (FOD) Incident Investigation*. The investigation and cost estimate worksheets will be submitted the next duty day to the 374 AW FOD/DOP monitor or QA office as applicable. Consult the Air Force Safety Center website at <http://afsafety.af.mil/> "Hourly Labor Rates" chart for current rates. When possible, crewmembers will be interviewed prior to leaving debrief. This time allotment ensures timely reporting to headquarters as required per AFI 21-101_AMCSUP.

6.2.3. The 374 AW FOD/DOP monitor, located in the 374 MXG QA office, is responsible for any HQ AMC reporting requirements outlined in AFI 21-101_AMCSUP.

6.2.4. When material deficiency is determined to be the cause, or a suspected cause, the owning unit will submit a material deficiency report IAW TO 00-35D-54, *USAF Deficiency Reporting and Investigation, and Resolution*, (even when an exhibit is not available) within 5 working days to the 374 MXG/MXQ.

6.2.5. For engine compressor FOD investigations where the impacting item is not easily identifiable, the forensic metal sampling process from Failure Analysis Service Technology or "FAST" sampling may be used. This will be at the request of the owning unit or the applicable FOD monitor; however, the unit is responsible for the cost of this service.

7. Training.

7.1. Initial FOD prevention training for aircraft maintenance personnel will be conducted during maintenance orientation briefing and will include results from previous FOD/DOP investigations as well as an orientation on this instruction.

7.2. Recurring FOD/DOP prevention training for aircraft maintenance personnel will be conducted during maintenance block training.

7.3. Unit and flight FOD/DOP representatives will receive training on requirements associated with their position from the applicable FOD/DOP monitor.

8. FOD/DOP Program Management.

8.1. The 374 AW/CV is the Wing FOD/DOP Program Manager.

8.2. The FOD/DOP Program Manager will appoint and assign all duties and responsibilities to the Wing FOD Monitor. The minimum responsibilities of the Wing FOD/DOP Monitor are:

8.2.1. Ensure personnel accessing the flight line and maintenance areas comply with program directives and perform spot inspections.

8.2.2. Conduct all FOD and dropped object investigations and ensure sound corrective actions.

8.2.3. Inform units of potential FOD/DOP trends and hazards.

8.2.4. Perform duties of 374 MXG QA augmentee; conduct and document spot checks and FOD assessments in/around the flight line and maintenance areas.

8.2.4.1. FOD assessments will be determined by the 374 MXG QA Routine Inspection Listing.

8.2.4.2. Spot inspections and assessments will cover, but are not limited to, the following areas: FOD continuity book/awareness board (content and condition), prevention (sweeper utilization and condition), housekeeping (shop, aircraft, tool control, hardware control, etc.), CTK (FOD in tool boxes, support equipment electrical receptacles capped/plugged, sweeper log (if applicable) and lost tool log), vehicles (FOD bars, cleanliness, roll-over FOD checks, and FOD containers), and aircraft (use of intake plugs, tubing, and electrical caps/plugs, pitot tube covers, streamers, flight deck cleanliness and throttle quadrant covers).

8.2.4.3. Spot inspections and assessments will be annotated in the 374 MXG QA database and incorporated into the 374 MXG QA Maintenance Standardization and Evaluation Program (MSEP) briefing.

8.2.4.4. All inspection documentation will be kept on file with the applicable QA office.

8.2.5. Organize Wing FOD walks and analyze recovered FO.

8.2.6. Develop and monitor FOD/DOP training programs with necessary changes.

8.2.7. Brief the quarterly or monthly FOD/DOP Program Committee meetings as required.

8.2.8. Maintain dropped object historical data.

8.3. FOD/DOP assistant. A FOD/DOP assistant from the 374 MXG QA will be assigned in writing to the FOD/DOP monitor. The FOD/DOP assistant will perform all 374 AW FOD/DOP duties and responsibilities in the absence of the FOD/DOP monitor.

8.3.1. The FOD/DOP assistant will be approved by the 374 AW/CV.

8.4. Unit FOD representatives. The following units are required to have FOD representatives: 374 AMXS, 374 AW/SE, 374 CES, 374 LRS, 374 MOS, 374 MXS, 374 OG, 374 SFS, 374 CS and 730 AMS.

8.4.1. Yokota's weekly FOD walk is the responsibility of the Unit FOD Monitors and their squadron members. If the Monitors are on leave, TDY or have departed PCS, the squadron is responsible to arrange for a replacement to take over the Unit FOD Monitor duties.

8.4.1.1. Unit FOD Monitors FOD walk duties are to:

8.4.1.1.1. Perform a safety briefing before each FOD walk.

8.4.1.1.2. Provide hearing protection.

8.4.1.1.3. Provide plastic bags or suitable substitute.

8.4.1.1.4. Make sure everyone is properly spaced out and remains in straight line for the entire walk.

8.4.1.1.5. Ensure personnel are actively looking for FOD.

8.4.1.1.6. Ensure personnel pull grass growing through cracks.

8.4.1.1.7. Turn in anything out of the ordinary to the FOD Monitor (e.g. pins, bolts, license plates, etc).

8.5. Unit commanders will appoint primary and alternate FOD/DOP representatives and forward the name, grade, office symbol, DEROS, and duty telephone of those individuals in the form of an appointment letter to the 374 AW FOD office. Additional flight FOD representatives are required for units/flights with geographically separated sections (Aero Repair (A/R), support section, inspection docks, test cell, fuels maintenance section, wash rack, corrosion, etc.) and will be appointed in writing by the unit commander.

8.5.1. Inform sections within unit of potential FOD/DOP hazards, trends, and prevention practices.

8.5.2. Maintain current FOD/DOP awareness board which is subject to spot inspections IAW AFI 21-101_AMCSUP.

8.5.2.1. Required awareness board items:

8.5.2.1.1. 374 AW FOD/DOP Monitor Flyer.

8.5.2.1.2. Unit/Flight FOD/DOP Representative.

8.5.2.1.3. Current Quarterly FOD/DOP Awareness Tips (In color if available).

8.5.2.1.4. Current quarterly FOD Awareness Poster.

8.5.2.1.5. Optional awareness board items include but are not limited to:

8.5.2.1.5.1. Photos (Wing/Squadron/Flight incentive program award winners, FOD/DOP incidents).

8.5.2.1.5.2. FOD Walk collection slides.

8.5.2.1.5.3. FOD/DOP related news/magazine articles.

8.5.3. Conduct and document a minimum of one FOD/DOP unit/flight briefing per quarter on updated or significant information (e.g., FODs, DOs, instruction changes) located on the 374 AW FOD/DOP SharePoint web page.

8.5.3.1. FOD/DOP briefings will be documented on an AF Form 3131, *General Purpose Form*, and at a minimum contain the following information: Name and rank of briefer, date accomplished, and briefing subject. This briefing may be accomplished through e-mail. This form will be kept by the unit FOD/DOP monitor for the current fiscal year and replaced with a new form at the start of each new fiscal year. This form will be reviewed during the unit's annual FOD SAV.

8.5.4. May develop unit level FOD/DOP prevention and recognition programs as required.

8.5.5. Monitor unit FOD sweeper usage (if applicable).

8.5.6. Assist Wing FOD/DOP Monitor with investigations as requested.

8.5.7. Conduct and document a minimum of one spot-check per duty week within the unit/flight. Unit representatives will also be provided a copy of any spot inspection results conducted by the Wing FOD/DOP Monitor. Unit/flight monitors are responsible for briefing their squadron/flight supervision.

8.5.8. Attend FOD/DOP Program Committee meetings as required.

9. FOD/DOP Program meetings. FOD/DOP prevention program committee meetings will be conducted quarterly or as required. The committee chairperson will be the 374 AW/CV. In the 374 AW/CV's absence, the 374 MXG/CC will chair the meeting.

9.1. The wing's FOD Prevention Committee meetings are to ensure the FOD Prevention Program is sound and meeting base needs. The following personnel and agencies will attend or have their representative attend the FOD Prevention Committee meeting: 374 AW/CV, 374 AW FOD Monitor, 374 AW/SE, 374 MXG/CC, 374 MXG/MXQ, 374 AMXS/CC, 374 MXS/CC, 374 OG/CC, 374 OSS/OSAM, 374 MSG/CC, 374 LRS/CC, 374 CES/CC, 374 CS/CC, 374 SFS/SFTCA and 730 AMS/SE/MXAQ.

WILLIAM M. KNIGHT, Colonel, USAF
Commander, 374th Airlift Wing

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

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

AFI 21-101_AMCSUP, *MAF Aircraft and Equipment Maintenance Management*, 14 February 2011

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

AFOSHSTD 91-100, *Aircraft Flight Line Ground Operations and Activities*, 1 May 1998

TO 00-20-1-WA-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policy and Procedures*, 15 June 2011

TO 00-35D-54-WA-1, *USAF Deficiency Reporting and Investigation, and Resolution*, 1 November 2011

TO 1C-130H-2-10JG-00-1, *Ground Handling Parking and Mooring*, 15 June 2011

Prescribed Forms

374 AW Form 70, *Dropped Object Investigation Worksheet*

374 AW Form 71, *Cost Estimate Worksheet*

374 AW Form 72, *Foreign Object Damage (FOD) Incident Investigation*

Adopted Forms

AF Form 847, *Recommendation for Change of Publication*

AF Form 1199, *Air Force Entry Control Card*

AF Form 1800, *Operator's Inspection Guide and Trouble Report (General Purpose Vehicles)*

AF Form 3131, *General Purpose Form*

AFTO Form 95, *Significant Historical Data*

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

Abbreviations and Acronyms:

AFI—Air Force Instruction

AFTO—Air Force Technical Order

AG—Airlift Group

AGE—Aerospace Ground Equipment

AMC—Air Mobility Command

AME—Alternate Mission Equipment

AMU—Aircraft Maintenance Unit

AMXS—Aircraft Maintenance Squadron

A/R—Aero Repair

AW—Airlift Wing

CEMS—Comprehensive Engine Management System

CTK—Composite Tool Kit

CV—Vice Commander

DOP—Dropped Object Prevention

EMB—Engine Management Branch

ERRC—Engine Regional Repair Center

FO—Foreign Object

FOD—Foreign Object Damage or Foreign Object Debris

FTD—Field Training Detachment

IAW—In Accordance With

LCL—Local Checklist

MAJCOM—Major Command

MOC—Maintenance Operations Center

MOS—Maintenance Operations Squadron

MSEP—Maintenance Standardization and Evaluation Program

MXG—Maintenance Group

MXS—Maintenance Squadron

OG—Operations Group

QA—Quality Assurance

QAP—Quality Assurance Program

SCR—Special Certification Roster

TO—Technical Order

Terms

Aircraft Impoundment—Isolation of an aircraft due to an unknown malfunction or condition making it unsafe for flight.

Bench Stocks—Stores of expendability, recoverability, reparability coded XB3 items kept on-hand in a work center to enhance maintenance productivity.

Composite Tool Kit—A controlled area or container used to store tools or equipment and maintain order, positive control, and ease of inventory. CTKs are assembled as a kit and designed to provide quick, easy visual inventory and accountability of all tools and equipment. CTKs may be in the form of a toolbox, a shadow board, shelves, system of drawers (Stanley

Vidmar, Lista, etc.), cabinets, or other similar areas or containers. The CTK contains tools and equipment necessary to accomplish maintenance tasks, troubleshooting, and repair.

Quality Assurance—Office responsible to the 374 MXG Commander for monitoring compliance in all facets of military and contract aircraft/equipment maintenance on a daily basis.

Foreign Object—Any item that is external or alien to an aircraft, major end item, or component.

Foreign Object Damage—Any damage to an aircraft, engine, structure, system, or tire caused by FO that may or may not degrade the required safety and/or operational characteristics of the engine, aircraft structure, or tire.

Foreign Object Debris—Any item foreign to an aircraft, engine, structure, system, or tire which has the potential to cause damage to said system. Items liberated from an aircraft system may be considered foreign when detached during operation. Examples include but are not limited to: failed compressor rotor blades and/or stator vanes.

Dropped Object—Any object dropped or inadvertently released from an aircraft during aircrew operations. Examples include but are not limited to: aircraft components, issued or personal tools and Alternate Mission Equipment (AME) items (guillotine knives, cargo straps, etc.).

Attachment 2

BLADE BLENDING WORKSHEET

Figure A2.1. Sample Blade Blending Worksheet

- 1. Notify Quality Assurance and 374 Airlift Wing FOD monitor (225-6327) if blade damage is noted according to T.O. 1C-130H-2-70JG-00-1.

374AW FOD Monitor Signature: _____

- 2. The following information will be forwarded to Quality Assurance and Engine Management so the AFTO Form 95 can be updated.

Aircraft serial number: _____

Job control number: _____

Engine serial number: _____

Stage number/location: _____

Number of blades blended: _____

Depth before and after blend:	Blade #	1	2	3	4
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Before: _____

After: _____

Area of blend: _____

5-level name and employee # _____

7-level name and employee # _____

Engine Management Signature: _____

AFTO Form 95 documented Y N if not, reason why _____
