

**BY ORDER OF THE COMMANDER
45TH SPACE WING**

45TH SPACE WING INSTRUCTION 21-102



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Maintenance

**AIRFIELD TOOL CONTROL FOR NON
AIRCRAFT MAINTENANCE AGENCIES**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This publication implements AFPD 21-1, *Air and Space Maintenance*, and fulfills the requirements of AFI 21-101, *Aircraft and Equipment Maintenance Management*, 16 August 2011, Paragraph 3.2.2 to develop a coordinated wing instruction to control tools, equipment, and electronic devices from all wing agencies dispatching to aircraft parking/runway/taxi areas or aircraft maintenance facilities. It applies to all 45 Space Wing units that bring tools onto the aircraft parking/runways/taxi areas or aircraft maintenance facilities at Patrick Air Force Base and/or Cape Canaveral Air Force Station, with one exception. Aircraft maintenance agencies within 45th Operations Group (45 OG) and their contractor are the exception that will follow the stricter guidance in AFI 21-101, 45 SWI 21-101, and applicable local and MAJCOM supplements. For non-Aircraft Maintenance tool control activities, the acting agencies will refer to their governing Air Force Instructions and regulations appropriate to its functional discipline. This AFI may be supplemented at any level, but all supplements that directly implement this publication must be routed to SAF/AALII Policy Branch for coordination prior to certification and approval. 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. 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 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).

1. General Positive control and accountability of tools, equipment and electronic devices used on aircraft parking, runway and taxi areas are essential for the elimination of FOD (Foreign Object Debris). FOD-related incidents cost the Air Force millions of dollars each year. The purpose of this publication is to provide 45 SW agencies the necessary guidance to implement a solid program to control tools and equipment taken onto the airfield. Due to the diverse nature of 45 SW agencies, one size does not fit all when it comes to tool control policy. Some units may have only a few items, while others account for hundreds of pieces of equipment. To comply with this instruction, units must establish a program or demonstrate that existing programs meet the intent of positive tool and equipment accountability and control.

2. Definitions

2.1. Tool: Device/instrument used to perform maintenance and repair of Real Property facilities, roadways, airfields, airfield systems, power distribution systems, airfield lighting, aircraft barriers, and utility functions.

2.2. Equipment: A device required to accomplish a task or carry out work, such as surveyors' transit, portable generator, etc.

2.3. Electronic Device: Portable items such as but not limited to the following, land mobile radios (LMR), cell phones, and laptop computers.

2.4. Airfield: Includes all areas of the installation involved in aircraft operations, such as taxiways, parking ramps, hardstands, and the runway.

2.5. Aircraft and flight line maintenance facilities: Includes all buildings & structures inside PL2 and PL3 areas, aircraft maintenance hangars, and facilities/grounds that house equipment to support airfield services.

3. Responsibilities

3.1. Unit commanders are responsible for ensuring an effective program is in place and compliant with this instruction for those sections that perform duties on the airfield or in aircraft maintenance facilities. Commanders must also ensure that contractors who work on the airfield or on aircraft maintenance facilities understand the importance of tool control in these areas.

3.2. Flight chiefs/section NCOICs (or equivalent) determine what tools, equipment, and electronic devices fall under the scope of this instruction and will develop a system of inventory and control for all items brought out to the airfield or maintenance facilities to ensure they are returned to the section upon the completion of the job.

3.3. Everyone who performs duties on the airfield or in maintenance facilities is responsible for safeguarding their equipment against loss by ensuring accountability before and after each trip. Lost or missing tool/equipment items within FOD critical areas are reported to the work center custodian or supervisor immediately. Organizations should take deliberate

measures to locate missing item(s). If missing item(s) are not located within one hour, the supervisor will contact the 45 Operations Support Squadron Airfield Management Operations (45 OSS AMOPS) office at 321-494-2222 immediately.

4. Products Available

4.1. Each non-aircraft maintenance entity that accesses the airfields or its maintenance facilities should refer to its governing Air Force Instructions and regulations appropriate to its functional discipline when conducting its tool control activities. 45 SW offers up several products that could serve as a basis for managing its tool control activities, if the functional guidance does not offer an equivalent basis.

4.2. The Consolidated Tool Kit (CTK) Inventory and Control Log Template is available for use to sign tool kits or other equipment out and to document returns to inventory. See attachment 2. Each non-aircraft maintenance entity that accesses the airfields may use its own functionally prescribed log.

4.3. An individual that loses a tool or object on the airfields or corresponding maintenance facilities must complete a Lost Tool / Object Report. The Lost Tool / Object Report Template is available for use in attachment 3. Each non-aircraft maintenance entity that accesses the airfields may use its own functionally prescribed Lost Tool / Object Report. Supervisors of organizations that lose controlled tools/objects should submit a copy of this report to 45 Space Wing Safety office (45 SW/SEF 321-494-2239; 45 SW/SE 321-494-2114).

5. Program Elements

5.1. 45 SW recommends that non-aircraft maintenance entities with access should develop a solid tool control program in the context that incorporates the follow elements:

5.1.1. Master Inventory Listing (MIL): A listing of all items dispatched out. Individual tool boxes should include an inventory of all items in that box.

5.1.2. Daily Inventory Log: Proof of physical accountability of all items on the MIL before and after each duty day or shift.

5.1.3. Sign In/Sign Out Log: Method to show custodial responsibility of items checked out for use on the airfield or in maintenance facilities. NOTE: Ideally, a second person (if available) should sign in the item upon turn-in.

5.2. For programs with stricter control, 45 SW recommends that units incorporate the following:

5.2.1. Clearly mark all CTKs/TKs and tools with the EID. The EID will consist of units organizational shop code and three digit number. Units place the EID on all CTKs, tools, and dispatch-able equipment that is of sufficient size. The EID is placed on the outside of dispatch-able CTKs.

5.2.2. Program continuity book or electronic equivalent: Specific contents are at the discretion of the flight chief/section NCOIC (or equivalent), but should include shop policy and the MIL.

5.2.3. For additional guidance refer to AFI 21-101, Chapter 10 and Chapter 1.

NINA M. ARMAGNO, Brigadier General, USAF
Commander

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

45 SWI 21-101, *Tool Control for Aircraft Maintenance Agencies*, 5 Dec 2013

AFI 10-403, *USAF Mobility Planning*, 20 Sep 2012,

AFI 21-101, *Maintenance Management of Aircraft*, 26 Jul 2010

AFMAN 23-220, *Reports of Survey for Air Force Property*, 1 Jul 1996

AFI 24-302, *Vehicle Management*, 26 Jun 2012

AFMAN 91-201, *Explosive Safety Standard*, 12 Jan 2011,

AFI 90-821, *Hazard Communication*, 27 Jan 2014

TO 32-1-101, *Maintenance and Care of Hand Tools*, 31 Jul 2012

TO 34-1-3, *Inspection and Maintenance of Machinery and Shop Equipment*, 14 Dec 2013

TO 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policies and Procedures*, 15 Jun 2013

TO 00-25-245, *Operating Instructions, Testing and Inspection Procedures for Personnel Safety and Rescue Equipment*, 10 Aug 2013

Abbreviations and Acronyms

AFI—Air Force Instruction

AFTO—Air Force Technical Order

AFOSH—Air Force Occupational Safety & Health

AFMAN—Air Force Manual

AMOPS—Airfield Management Operations

CA/CRL—Assigned/Controlled Equipment Account List

CDDAR—Crash Damaged or Disabled Aircraft Recovery

COR—Contracting Officer Representative

CTK—Consolidated Tool Kits

EID—Equipment Identification Number

FOD—Foreign Object Damage

HAZMAT—Hazardous Materials

MIL—Master Inventory List

MOC—Maintenance Operations Center

NCO—Non Commissioned Officer

OI—Operating Instruction

QA—Quality Assurance

SW—45th Space Wing

TA—Transient Alert

TAS—Tool Accountability System

TCMAX—Tool Control System/Software

T.O.—Technical Orders/COTS Manuals

TMDE—Test Measure and Diagnostics Equipment

VID—Visual Identifier

WWID—World Wide Identification Designator

Attachment 3

LOST TOOL/OBJECT REPORT TEMPLATE

Figure A3.1. Lost Tool/Object Report Template

LOST TOOL/OBJECT REPORT				PAGE	OF	PAGES
BASE	AIRCRAFT SERIAL NUMBER	ORGANIZATION AND W/C	DATE(S)	TIME LOST		
COMPOSITE TOOL KIT NUMBER	DESCRIPTION OF OBJECT	AFTO 781A PAGE BLOCK	AIRCRAFT IMPOUNDED: <input type="checkbox"/> YES <input type="checkbox"/> NO TIME DATE			
W/C SUPV NOTIFIED <i>(Last Name, Initial)</i> NAME TIME DATE	MAINT SUPV NOTIFIED <i>(Last Name, Initial)</i> NAME TIME DATE	MOC NOTIFIED <i>(Last Name, Initial)</i> NAME TIME DATE	CTK CUSTODIAN NOTIFIED <i>(Last Name, Initial)</i> NAME TIME DATE	QA NOTIFIED <i>(Last Name, Initial)</i> NAME TIME DATE		
AREA ITEM LOST						
ITEM NO.	MAINTENANCE SUPERVISOR/SUPERINTENDENT WILL INSURE ALL ITEMS COMPLETED				INDIVIDUAL INITIALS	TIME/DATE INITIALED
1	NAME OF INDIVIDUAL(S) THAT LOST OBJECT					
2	WORK BEING PERFORMED WHEN ITEM LOST					
3	AREAS CHECKED AND STEPS TAKEN TO FIND OBJECT					
4	SEARCH CONDUCTED BY <i>(List all individuals)</i>					
5	ITEM WAS/WAS NOT FOUND <i>(If found, give location)</i>					
6	COPY OF FORM FILED BY CTK CUSTODIAN					
7	FORM FILED BY RECORDS CLERK <i>(If Applicable)</i>					
8	SIGNATURE OF MAINTENANCE SUPERVISOR/SUPERINTENDENT					