BY ORDER OF THE COMMANDER 19TH AIRLIFT WING (AMC)

19th AIRLIFT WING INSTRUCTION

21-108

16 DECEMBER 2020

Maintenance

WING TOOL CONTROL AND CYBER
DISCIPLINE



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(Colonel James D. Hood)

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This instruction implements Air Force Policy Directive (AFPD) 21-1, Maintenance of Military Materiel, and fulfills the requirements of Air Force Instruction (AFI) 21-101, Aircraft and Equipment Maintenance Management, and Air Mobility Command (AMC) supplement (AMCSUP) to AFI 21-101, to develop a coordinated wing instruction to control tools, equipment, and electronic devices from all wing agencies dispatching to aircraft parking/runway/taxi areas and maintenance areas. This instruction applies to all Group organizations assigned to the 19th Airlift Wing. Ensure that all records created as a result of processes prescribed in this publication are maintained IAW AFI 33-322, Records Management and Information Governance Program, and disposed of IAW Air Force 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. The authorities to waive wing/unit level requirements in this publication are identified in Tier 3. See AFI 33-360, Publications and Forms Management, Table 1.1 for a description of the authorities associated with this Tier. 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. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

SUMMARY OF CHANGES

This publication was rewritten to incorporate previous administrative changes. Also included in this change is the incorporation of cyber discipline requirements for tools, equipment and electronic devices used in the flightline environment and maintenance areas. An updated list of workcenters and EIDs has also been included.

1. Purpose. Tool Control and Cyber Discipline on flightline

- 1.1. Positive control and accountability of tools, equipment, and electronic devices used on aircraft parking, runway, hangars and taxi areas are essential for the elimination of Foreign Object Damage (FOD). The purpose of this publication is to provide all units that require a tool control program the necessary guidance to implement a sound program to control the tools and equipment taken onto the airfield. Due to the diverse nature of agencies located on Little Rock Air Force Base, this publication can only provide general guidance. To be in compliance with this instruction, units must establish a program or demonstrate that existing programs meet the intent of positive tool and equipment accountability and control.
- 1.2. Maintaining positive cyber discipline practices of Department of Defense (DoD) Information Technology (IT) is critical to mission sustainment. DoD Instruction 8500.01, *Cybersecurity*, defines both hardware and software that is physically part of, dedicated to, or essential in real time to the mission performance of a special purpose systems. DoD IT is the most common IT encountered in flightline environments, and includes (but is not limited to) electronic tools, support equipment, and aircraft. The culture of positive cyber security must be fostered by all personnel working on the flightline.

2. Roles and Responsibilities.

- 2.1. Unit commanders are responsible for ensuring an effective program is in place and duty sections are in compliance with this instruction for those that perform duties on the airfield or in aircraft maintenance facilities. Commanders must also ensure that contractors who work on the airfield or in and around aircraft maintenance facilities understand the importance of tool control and cyber discipline in these areas. Example: The designated squadron liaison to any contractor that has been hired to complete work on the airfield or in and around aircraft maintenance facilities must ensure these businesses employ an acceptable tool control program.
- 2.2. Flight chiefs/section non-commissioned officers in charge (NCOIC) (or equivalent) will:
 - 2.2.1. Develop/Enforce a tool/equipment/electronic device accountability/control program. They may determine if tools/equipment/electronic devices that do not dispatch out to the airfield/maintenance facilities will fall under the scope of this instruction.
 - 2.2.2. All tools/equipment/electronic devices that are dispatchable to the airfield/maintenance facilities that are used for aircraft maintenance will follow this instruction.

19AWI21-108 16 DECEMBER 2020

- 2.3. Program must include an inventory process for items leaving/returning from jobs out on the airfield/maintenance facilities (e.g., 19MXG Form 232 or TCMax®).
- 2.4. Everyone who performs duties on the airfield or in and around maintenance facilities is responsible for safeguarding their equipment against loss by ensuring accountability before and after each trip. Immediately notify the 19 Maintenance Operations Center (MOC) of items suspected to be lost near an aircraft or in a maintenance facility.
- 2.5. Once a tool control program is established, each unit will perform an annual self-inspection.

3. Tool Accountability.

- 3.1. While not mandatory for non-aircraft maintenance units, TCMax® is the preferred automated method to effectively manage a tool control program. Any locally developed method of tool control (e.g., locally developed forms, 19MXG Form 232, etc.) must follow the tool control guidelines established by AFI 21-101 and AFI 21-101 AMC-Sup.
 - 3.1.1. AGE and PMEL sections will be considered non-aircraft maintenance areas unless tools, equipment, electronic device or Haz-Mat is dispatched to an aircraft maintenance area or facility.
- 3.2. If TCMax® is used Sections must notify 19 MXG/Quality Assurance (QA) of their assigned Equipment Identification Designators (EID).
- 3.3. If TCMax® is used but not available (such as at a deployed location or during network outages), units will use the 19MXG Form 232 (CTK Checkout Log) or AF Form 1297 (Temporary Issue Receipt) for accountability and control of tools, equipment, composite tool kits (CTKs) and electronic devices. When computer based tracking access becomes available, these records will be maintained until electronic tool control program records are updated.

4. Aircrew Tool/Equipment Accountability.

4.1. Aircrew members must account for and maintain positive control of all equipment and personal items after each flight and ensure that any item lost during flight is documented on the AFTO Form 781A for that particular aircraft. Aircrew members will assist maintenance personnel in searching for lost items. The Squadron Director of Operations, due to mission requirements, may waive aircrew participation in the search.

5. Cyber Discipline Requirements and Training

5.1. The following requirements and controls are intended to fulfill requirements outlined in AFMAN 17-1301, Computer Security (COMPUSEC), without incurring requirement for waivers, AFI 21-101, Aircraft and Equipment Maintenance Management, and T.O. 33-1-38, Cybersecurity for Automatic Test Systems and Automatic Test Equipment in FSC. Additional information regarding information assurance requirements and training can be found at: https://cs2.eis.af.mil/sites/10060/default.aspx.

- 5.1.1. Only government equipment authorized by MDS or specialized equipment technical orders will be connected to Platform IT or other DoD IT via Universal Serial Bus (USB), card reader, cannon plug, Bluetooth, Infrared Red (IR), WiFi®, or other connection method yet developed.
- 5.1.2. Government personnel will install updates, security patches, and software as directed by Air Force Network Alerts on Air Force enterprise network enabled desktops, laptops, eTools, and other Personal Electronic Devices (PEDs).
- 5.1.3. Government personnel will scan all removable media to include Automated Computer Program Identification Number System (ACPINS), Removable Mass Media (RMM) cards, software downloaded from government sites, e.g. Automated Weight & Balance System (AWBS), Electronic Software Distribution System (ESDS), etc., and flight data or faults from aircraft which facilitate data transfer across an "Air Gap".
- 5.1.4. If Malicious Code/Cyber Issues are suspected while using government information technologies equipment, personnel must immediately report and take remedial actions IAW T.O. 33-1-38.
- 5.2. Initial and annual Cyber Discipline training will be documented for all DoD personnel that utilize PEDs, computers, or test equipment that may be connected to weapon system Platform IT, and could result in malware intrusion into DoD IT or Platform IT.
 - 5.2.1. Initial cyber discipline training will be included in Newcomers and MXG orientations, when possible.
 - 5.2.2. Maintenance personnel will utilize Maintenance Information System (MIS) training course code (ANCL 000002) to record training.
 - 5.2.3. Non-maintenance personnel will receive through any combination of classroom, computer based training, block training, or testing procedures as coordinated with Unit Training Monitor (UTM).
- 5.3. Cyber Discipline Training will include the following elements:
 - 5.3.1. Weapon system Platform IT requirements to supplement Cyber Awareness Total Force Awareness Training (TFAT).
 - 5.3.2. Recent cyber incidents that have degraded or damaged weapon systems to include lessons learned.

19AWI21-108 16 DECEMBER 2020

5.3.3. Quarantine and turn-in for media, equipment, or computer suspected of having malware to appropriate support section, Logistics Network (LOGNET), Information Assurance Office (IAO) or Communication Squadron IAW T.O. 33-1-38.

JOHN M. SCHUTTE, Colonel, USAF Commander

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 21-101, Aircraft and Equipment Maintenance Management, 16 January 2020

AFI 21-101_AMCSUP, Aircraft and Equipment Maintenance Management, 3 August 2020

AFI 33-360, Publication and Forms Management, 1 December 2015

DAFI33-360 DAFGM2020-01, Air Force Guidance Memorandum to Air Force Instruction AFI

33-360, Publications and Forms Management, 7 August 2020

AFMAN 17-1301, Computer Security (COMPUSEC), 12 February 2020

AFI 33-322, Records Management and Information Governance Program, 23 March 2020

AFPD 21-1, Maintenance of Military Material, 1 August 2018

T.O. 33-1-38, Cybersecurity for Automatic Test Systems and Automatic Test Equipment in FSC, 9

December 2019

Prescribed Forms

None

Adopted Forms

AF Form 847, Recommendation for Change of Publication

AF Form 1098, Special Task Certification and Recurring Training

AF Form 1297, Temporary Issue Receipt

Abbreviations and Acronyms

ACPINS—Automated Computer Program Identification Number System

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFPD—Air Force Policy Directive

AFRIMS—Air Force Records Information Management System

AMOPS—Airfield Management Operations

AWBS—Automated Weight & Balance System

COR—Contracting Officers Representative

19AWI21-108 16 DECEMBER 2020

ESDS—Electronic Software Distribution System

IR—Infra Red

IT—Information Technology

MDS—Mission Designator Series

MIL—Master Inventory Listing

MXG—Maintenance Group

OGV—Standard Evaluation

TCMAX®—Tool Control Asset Management Control

T.O.—Technical Order

Terms

Air Gap—Term used to designate vulnerability of data transfer to and from weapon system Platform IT and traditional network IT. Air Gaps require proper media handling procedures to include proactive removable media (transfer) anti-virus scanning.

Aircraft maintenance facilities—Includes those buildings occupied full time by aircraft maintenance personnel, to include all hangars.

Airfield—Includes all areas of the installation involved in aircraft operation such as taxiways, parking ramps and the runway.

Composite Tool Kit (CTK)—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.

Electronic Device—Portable items such as land mobile radios, cell phones, and laptop computers.

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

Master Inventory Listing (MIL)—Primary source document for inventory of CTKs. The MIL indicates the total number of items in each drawer or section of the tool kit. MIL may be automated.

Tool—A hand-held implement used in accomplishing work, such as a hammer, saw, wrench, drill, shovel, axe, etc.

Attachment 2

ORGANIZATION WWID ASSIGNMENT LISTING

Table A2.1. Organization and WWID Assignment Listing

Table A2.1. Or	ganization and WWID Assignment Listing
WWID	ORGANIZATION
LPMB	19 MXG MOBILITY KIT
LPGW	19 MXG QA AFREP
LPAG	19 MXG QA
LPOT	19 MXG TA
LPDT	19 AMXS DASH 21/DUAL RAILS
LPST	19 AMXS
LPMO	19 MXO TRAINING
LPMG	19 MXS AGE FLT
LPCE	19 MXS E&E
LPCF	19 MXS FUELS
LPFM	19 MXS METALS TECH
LPMT	19 MXS MAINTENANCE FLT
LPMW	19 MXS MUNITIONS FLT
LPFN	19 MXS NDI
LPCP	19 MXS PNEUDRAULICS
LPMD	19 MXS TMDE FLT
LPFR	19 MXS REFURB
LPFS	19 MXS STRUCTURAL MAINTENANCE
LPMP	19 MXS TEST CELL
LPFE	19 OSS AIRCREW FLT EQUIP (Life Support) (5)
LPOJ	19 OSS Л
LPSM	41 AS LOADMASTER
LPGN	61 AS LOADMASTER
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Attachment 3

19MXG FORM 232, CTK CHECKOUT LOG

Table A3.1. 19MXG Form 232, CTK Checkout Log

CTK CHECKED OUT BY:							CHECKED IN BY:			
TK #/TOOL	EMP#	LAST NAME	SIGNATURE	DATE	TIME	EMP#	LAST NAME	DATE	TIME	
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19 MXG FORM 232, 17 JANUARY 2012

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