

**BY ORDER OF THE COMMANDER
90TH MISSILE WING**

**90TH MISSILE WING INSTRUCTION
21-207**



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Maintenance**

**TOOL, EQUIPMENT, AND
CONSUMABLES MANAGEMENT**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction establishes policy and procedures for Tools, Equipment, and Consumables Management as directed by Air Force Manual (AFMAN) 21-200 paragraph 9.1. Guidance in this instruction will be used in conjunction with AFMAN 21-200 Chapter 9. The objectives of this instruction are to prevent and eliminate foreign object debris (FOD) to missiles, training, and support equipment, and to reduce costs through strict effective control and accountability of assets within the 90th Missile Wing complex. This includes 90th Munitions Squadron (90 MUNS), 90th Missile Maintenance Squadron (90 MMXS), 790th Maintenance Squadron (790 MXS), 90th Maintenance Group (90 MXG) Quality Assurance (QA) and all 90th Missile Wing agencies dispatching to perform maintenance on missiles, training and support equipment located at Launch Facilities and Missile Alert Facilities. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Instruction (AFI) 33-322, Records Management and Information Governance Program, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). Comply with AFI 33-332, Air Force Privacy and Civil Liberties Program, for documents containing Privacy Act information. Comply with AFI 16-1403, Air Force Information Security Program for documents containing Classified and Controlled Unclassified Information (CUI). Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the Department of the Air Force (DAF) Form 847, Recommendation for Change of Publication; route DAF Form 847s from the field through the appropriate functional chain of command. See [Attachment 1](#) for Glossary of References and Supporting Information.

SUMMARY OF CHANGES

This document has been substantially revised and needs to be completely reviewed. Major changes include the addition of the updated 90 MXG Lost Tool Report, and reference and supporting information revisions.

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Chapter 1

PROGRAM GUIDANCE FOR THE 90TH MISSILE WING

1.1. This Chapter applies to all 90th Missile Wing agencies while dispatching to perform maintenance on missiles, training and support equipment located at Launch Facilities and Missile Alert Facilities.

1.2. Dispatch Procedures.

1.2.1. Prior to dispatch. The Team Members and Team Chief will be actively involved in the tool control process. Each dispatching team will sign out tools utilizing the CTK sign out sheets and the designated tool accountability system. Team Members or Team Chiefs will inventory and sign open the tool inventory sheets in each CTK prior to loading into vehicles. Team Chiefs will sign tool accountability forms prior to departing Missile Support Base (MSB).

1.2.2. On site. After completion of site maintenance and prior to site departure, CTK inventories need to be re-accomplished. A different signature needs to be annotated on the CTK sign in sheet to close the kit. Example: The Team Chief inventories the CTK and signs it open prior to base departure. Prior to site departure a Team Member needs to accomplish the inventory and sign the CTK closed.

1.2.3. Multiple sites. CTKs used on another site must be inventoried and signed open again prior to use on site. Upon completion of site maintenance, again someone other than the person who signed open the CTK must inventory and sign the kit closed prior to site departure.

1.2.4. Tool transfer. Teams receiving CTKs in the field from another team must inventory and sign the kits open. Teams will not accept the CTKs or sign them open unless they have been signed closed by the transferring team.

1.2.5. Return to base. Tool room technicians will receive and inventory the CTKs upon return to base in the designated tool accountability program. Tools Room Technicians will immediately notify the Team Chief if there are any inventory discrepancies.

1.3. Procedures for Lost or Missing Tools.

1.3.1. The maintenance team/individual shall notify Missile Maintenance Operations Center (MMOC) or 90 MUNS for hardness degrade determination and shall await further instructions from MMOC/90 MUNS, if a tool/item cannot be found during inventory prior to departing work location.

1.3.2. The responsible team or individual shall initiate a Lost Tool Report (see [Attachment 2](#)) and MMOC or 90 MUNS will then perform all applicable notifications.

1.3.3. An initial search shall be completed within 4 hours on base or as soon as reasonable off base of discovering the item is missing, and subsequent initial notifications completed within 8 hours on base and as soon as possible off base of loss.

1.3.4. The secondary search and secondary notifications shall be completed within 24 hours of loss whenever possible. Update TCMAX or designated accountability system, and associated Inventory Lists (ILs) to reflect the current inventory status of the CTK if the item cannot be immediately found.

1.3.5. QA will maintain completed reports for trend analysis.

Chapter 2

PROGRAM GUIDANCE FOR THE 90TH MAINTENANCE GROUP

2.1. This chapter applies to all field dispatch eligible sections of the 90 MXG, to include situations where two or more work centers operate out of the same tool room or support section.

2.2. Security, Control, and Accountability of Composite Tool Kits (CTKs), Tools, Equipment and Consumables.

2.2.1. Tool room access will be controlled at all times. Unoccupied tool rooms will be kept locked.

2.2.2. Store CTKs, tools, equipment, and consumables in a designated location for positive control and ease of inventory.

2.2.3. Each CTK must be etched, stamped, or otherwise permanently marked with the sections Worldwide Identification Code (WWID). Sections shall use the remaining 5 digits of the Equipment Identification Designator (EID) to identify the tools stored in a CTK. The assigned WWIDs for the 90 MXG maintenance activities are listed in [Attachment 3](#) of this instruction.

2.2.4. Master Inventory Lists (MILs) and ILs will include the nomenclature and quantity, for each CTK item, by drawer/section number. MILs shall contain the date signed, name, rank and signature of the Noncommissioned Officer in Charge (NCOIC), and Flight Commander/Chief for validity confirmation. Copies of the MILs will be maintained in the section's administrative files, issuing tool room and respective CTK. Tool sets with their own container (e.g., drill bits, allen wrench sets) shall contain an IL specific to the given tool set.

2.2.5. Prior to dispatch, CTKs or individual tools will be accounted for on a log or load list which lists (as a minimum) those fields of data found on the AF Form 1297. TCMax and/or Integrated Maintenance Data System (IMDS) will be the primary methods for tool accountability. Authorized tool custodian/monitors will issue CTKs and annotate accountability for the dispatched CTK on the log.

2.2.6. When a vehicle containing a CTK is left unattended the vehicle must be locked/secured.

2.3. Inventory Procedures.

2.3.1. Inspect/inventory all CTKs quarterly regardless of utilization levels and document inspectors name, rank, and the date accomplished in TCMax Accountability System.

2.3.2. Ensure CTKs and tools are signed in/out by a different technician. CTKs used in work centers during a shift may be controlled by a single team that is responsible for the control and security of said CTK. The work center shall ensure the next inventory is performed by a different person when a CTK is inventoried by the same person at the beginning or end of a job/shift.

2.3.3. Maintenance teams shall inventory CTKs prior to dispatch and prior to departing any job site.

2.3.4. Each individual shall inventory their own Personal Protective Equipment (PPE)/Gear prior to departing for the work site and shall report missing items IAW [paragraph 1.3](#) of this instruction.

2.3.5. Account for all rags when used in the performance of maintenance. Each rag dispatched to the job site must be accounted for prior to departure.

2.3.6. When transferring tools/CTKs at a job site, both the losing and gaining teams shall accomplish a complete inventory prior to completing the transfer. The transfer must then be documented on an AF Form 1297 or equivalent.

2.3.7. Upon return from dispatch, a tool room technician shall accomplish an additional complete tool/CTK inventory prior to being issued out to another maintenance team or storing CTKs on a serviceable shelf.

2.3.8. When maintenance vehicles are intended to be stored with CTKs and equipment for an extended period, team members and a tool room technician shall both perform complete inventories, to prevent any potential duration of an unidentified lost/missing tool.

2.4. Control and Management of Replacement, Expendable and Consumable Hand Tools, Hazardous Materials (HAZMATs), and Composite Tool Kits (CTK) Items.

2.4.1. Use TCMax or other AF approved tool control/inventory system per provisions in the Department of the Air Force Instruction (DAFI) 21-101.

2.4.2. Maintain CTKs in Fully Mission Capable (FMC) status at all times. Remove all un-serviceable tools and clearly separate un-serviceable/non-dispatchable CTKs from serviceable CTK storage areas.

2.4.3. Immediately update the IL and TCMax or other AF approved system per provisions in DAFI 21-101, when tools are un-serviceable and/or removed from the CTK. Replace un-serviceable and repairable tools with projected repair cycle time greater than the next scheduled mission requirement with a spare tool (if available). Minor defects that do not significantly degrade the performance of a given tool will not be cause for replacement of a CTK item, consistent with technical guidance.

2.4.4. Empty spaces (spaces not occupied by a tool) are not permitted in CTKs. Update the MIL, IL, TCMax per provisions in DAFI 21-101, immediately after a tool is permanently removed from a CTK and eliminate the empty space.

2.4.5. Process repairable tools for repair and dispose non-repairable items in a timely manner. Maintain a supply of spare tools to ensure mission continuity consistent with historical failure rates for a given item.

2.4.6. The owning work center custodian or monitor shall track tools and equipment under warranty and take appropriate action with the vendor to replace broken or faulty tools/equipment.

2.4.7. Segregate, secure, control and maintain an IL for spare tool stocks. Do not etch, stamp or otherwise mark. Maintain an inventory listing of spare tools IAW this instruction.

2.4.8. Replace expendable/consumable items from spare tool inventories as needed following each dispatch.

2.4.9. Control HAZMAT and turn in all items for proper disposition.

2.5. Personnel Authorized to Procure Tools.

2.5.1. Each Flight Commander/Chief maintaining tools/equipment will appoint a primary and alternate tool control person. These persons are responsible for the inventory, accountability, and procurement of any items owned by the work center.

2.5.2. The Flight Commander/Chief shall review/approve all tool purchases; substantiate replacement and disposition requirements of the original tools when tools require replacement.

2.6. Locally Manufactured and Developed Tools.

2.6.1. 90 MXG/QA is the approval authority for the design of locally manufactured tools not used during nuclear weapons maintenance operations. Work centers shall maintain and inventory these tools IAW this instruction once they are manufactured.

2.7. Procedures and Responsibilities for Distribution of Tools/Equipment to Decentralized Locations.

2.7.1. Owing tool rooms will issue all items using TCMax or other AF approved accountability system per provisions in DAFI 21-101.

2.7.2. Maintain crash recovery/hydrazine emergency response equipment IAW applicable technical guidance and emergency response plans. The 790 MXS Vehicles and Equipment Section (VES) will be the OPR for emergency response vehicles and equipment.

2.7.3. Control tools dispatched for flight line operations IAW this instruction. Life support tools are not applicable to 90 MXG.

2.8. Depot Teams, Factory Representatives, and Contract Field Teams.

2.8.1. Depot teams, factory representatives and contract field teams will operate IAW [Chapter 1](#) of this instruction and Air Force Sustainment Center Manual (AFSCMAN) 21-102 while performing maintenance with or for the 90 MXG.

JOHNNY L GALBERT, Colonel, USAF
Commander, 90th Missile Wing

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

AFI 16-1403, *Controlled Unclassified Information 5 October 2021*

DAFI21-101, *Aircraft and Equipment Maintenance Management 19 December 2023*

AFMAN21-200, *Munitions and Missile Maintenance Management 8 May 2022*

AFI33-332, *Air Force Privacy and Civil Liberties Program 9 March 2020*

AFI33-322, *Records Management and Information Governance Program 27 Jul 2021*

AFSCMAN21-102, *Depot Maintenance Management 4 April 2021*

Prescribed Forms

None

Adopted Forms

AF Form 847, *Recommendation for Change of Publication*

AF Form 1297, *Temporary Issue Receipt*

Abbreviations and Acronyms

CTK—Composite Tool Kit

EID—Equipment Identification Designator

FMC—Fully Mission Capable

IL—Inventory List

MIL—Master Inventory List

MMOC—Missile Maintenance Operations Center

MSB—Missile Support Base

OPR—Office of Primary Responsibility

PPE—Personal Protective Equipment

WWID—Worldwide Identification Code

Attachment 2

90 MXG LOST TOOL REPORT

Figure A2.1. 90MXG Lost Tool Report.

90 MXG Lost Tool Report	
<i>Section I – Loss Data</i>	
CTK Designator:	Owning Organization/Work Center:
Item Lost:	Responsible Team Chief Rank/Last Name:
Date Issued:	Date/Time Loss Discovered:
Trip #:	Location of Crew When Loss Discovered:
Site Where Loss Occurred:	Type of Work Being Performed:
<i>Section II – Initial Search Findings</i>	
Team Chief Rank/Last Name Responsible for Initial Search:	
Initial Search Findings:	<input type="checkbox"/> Found <input type="checkbox"/> Not Found
<i>Section III – MMOC/90 MUNS Initial Notification</i>	
Person Responsible for Initial Notifications:	
MMOC/90 MUNS	
Rank/Last Name:	
JCN:	
Date/Time:	
Additional Notes:	

Attachment 3

**90MXG MAINTENANCE ACTIVITY WORLDWIDE IDENTIFICATION CODES
(WWIDS)**

Figure A3.1. 90MXG Maintenance Activity Worldwide Identification Codes (WWIDS).

Maintenance Activity	WWID
MUNS	FWMU
AGE	FWAG
Corrosion	FWCT
ELAB	FWEL
EMT	FWEM
FMS	FWFM
HICS	FWHI
MAPS	FWMC
MCM	FWSC
MHT	FWMH
MMT	FWCR
PREL	FWPR
583 MMXS	FWHR
SST	FWSS
FTD	FWTR
VES/Recovery	FWVC