

**BY ORDER OF THE COMMANDER
919TH SPECIAL OPERATIONS WING**

**919TH SPECIAL OPERATIONS WING
INSTRUCTION 21-110**



4 FEBRUARY 2015

Incorporating Change 1, 3 April 2015

Maintenance

COMPOSITE TOOL KIT (CTK) PROGRAM

COMPLIANCE WITH THIS INSTRUCTION IS MANDATORY

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RELEASABILITY: There are no releasability restrictions on this publication

OPR: 919SOMXG/MXQ

Certified by: 919 SOMXG/CC
(Col Paul A. Weimer)

Pages: 8

Supersedes: 919SOWI21-110,
1 November 2011

This instruction implements Air Force Policy Directive (AFPD) 21-1, *Air and Space Maintenance*. This instruction extends the guidance of Air Force Instruction (AFI) 21-101, *Aircraft and Equipment Maintenance Management*, and AFI 21-101 *Aircraft and Equipment Maintenance Management* Air Force Special Operations Command (AFSOC) Supplement (SUP). It establishes responsibilities and outlines procedures for the Composite Tool Kit (CTK) program. It applies to all operational and maintenance activities functionally assigned to the 919th Special Operations Wing (SOW) Eglin Field 3 or better known as "Duke Field". 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. Requests for waivers must be submitted through chain of command to the OPR listed above for consideration and approval. 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 Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). 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 interim change revises 919 SOWI 21-110 paragraph 2.13 by removing the reflective tape dimensions and replacing the word “tape” with “material”.

1. Responsibility: Policy, standardization procedures for security, control, and accountability of tools and equipment.

1.1. Squadron maintenance officers/superintendents have responsibility. However, authority may be delegated to the Aircraft Maintenance Support Section (MXAS) tool room or to a Composite Tool Kit (CTK) custodial monitor for direct control in each work center.

1.2. Work centers that do not perform maintenance on aerospace equipment and/or are not involved in flight/maintenance operations are excluded from the CTK program. These include Maintenance Operation Center (MOC), Small Computer Management, Analysis, Training, Maintenance Supply Liaison, Programs and Mobility, Transportation, and Supply.

1.3. Tool issue sections will be limited to no more than one per work center.

1.4. All CTK's, dispatchable tools and equipment, to include land mobile radios, will be marked using the standard nine-digit worldwide identification code as the Equipment Identification Designator (EID) according to attachment 2 and loaded into the Tool Accountability System (TAS) referred throughout this instruction as the Tool Asset Management Software (TCMax). Tool issue sections will determine the last five characters of the identification (ID).

1.4.1. Tools and contents of CTK's can be marked with an abbreviated EID which must contain a minimum of five digits but no more than nine. Enough digits must be used to uniquely identify the tool to the assigned CTK.

1.4.2. Small tools or items that are part of a CTK and cannot be etched shall be maintained in a container marked using the nine digit CTK identification number.

1.4.2.1. Outside of container must be marked with total number of pieces (i.e. 26 pieces plus case).

1.4.2.2. Tools containing multiple pieces such as a combination screwdriver must be marked with total number of pieces and referred to as kit on the MIL.

1.4.3. All tools in CTK's will be in serviceable condition. If not serviceable, ensure tool is removed and documented as removed in their respective Master Inventory Listing (MIL) or local Broken/Lost Tool Form.

1.4.4. Removable foam sections that contain tools and cover other tools will be included as an item on the mil.

1.5. Canvas bags are not to be used as dispatch kits. Canvas bags may be included in a CTK or signed out from tool rooms. In these instances, the CTK is taken to the aircraft and the required tools placed in the bag at the work site. When the job is complete, the tools and bag (if included) must be placed in the CTK at the work site and inventoried.

1.6. Stored locations of special items such as shop/industrial equipment, sub-components, test equipment, etc., that are not part of a CTK, are arranged in a manner to conform with the show/know concept.

1.7. Test Measurement Diagnostic Equipment (TMDE) items will be identified with an EID in accordance with paragraph 1.4.

1.8. Locally manufactured tools or equipment will be controlled/managed under the CTK program IAW AFI 21-101, *Aircraft and Equipment Maintenance Management* and this instruction.

2. Procedures:

2.1. The tool room/tool issue center must be capable of being locked and afford protective measures such as monitoring, 24-hour coverage, or controlled key access. Tool issue center supervisor authorizes access to tool issue area posting current access letter.

2.2. Authorized personnel protective (PPE) equipment assigned by the work center will be marked with first name initial, last name and employee number.

2.3. 919 MXAS is the central location for collecting all unserviceable tools within the maintenance organization.

2.4. Broken tools under the warranty tool program are managed by 919 MXAS for exchange through the manufacturer's representative.

2.5. Crashed Damaged and Disabled Aircraft Recovery (CDDAR) CTK's and equipment will conform to the procedures in this instruction.

2.6. Replacement tools may be maintained in tool rooms or work centers. These tools will be secured in a cabinet or locker. The work center supervisor or written designated representative is the only person authorized to procure and issue replacement tools. An inventory of all replacement tools is accomplished and documented quarterly.

2.7. Post Aircraft taxi/Takeoff Procedures for Lost Tools: If a tool is discovered missing after the aircraft starts to taxi or during post takeoff, notify MOC immediately. Provide a description of the tool that was lost and the suspected location in the aircraft where the tool is believed to be located. MOC will notify at a minimum: the command post and the Aircraft Commander (AC) who will decide if returning to base is necessary.

2.8. Inventory Procedures/Disposition.

2.8.1. With the exception of items issued in TAS as Long Term Issue, turnover of CTK/items at the job site will be kept to a minimum. When the CTK is transferred between individuals at the job site, both individuals will perform a physical inventory and the responsibility for the CTK will change to the gaining individual. This exchange will be reflected on the AFRC Form 177, *Consolidated Tool Kit Inventory and Control Log*, maintained in the CTK and approved by the production supervisor. The gaining individual must take possession of the CTK in the TAS.

2.8.2. When an aircraft CTK is turned over to the aircrew for flight, the load master and the crew chief will inventory the toolbox and document an AFRC Form 177. After flight, the load master and the crew chief will again inventory the toolbox and document the AFRC Form 177.

2.8.3. Annual inventories will be tracked in TAS.

2.9. Lost Tool/Item Procedures.

2.9.1. Aircrew will account for all tools and equipment dispatched to the flight line (e.g., flashlights, knives, multipurpose tools, etc.). If an aircrew member discovers a tool or item missing and it cannot be located after an initial search, the aircrew member will enter a Red X in the AFTO Form 781A with a description of the tool and a specific last known location, and notify the Production Superintendent.

2.9.2. All rags not accounted for will be treated as a lost tool and reported.

2.9.3. If initial search for missing tool/item exceeds 30 minutes, the person issued the tool will generate an AFRC Form 174, *Lost Tool/Object Report*, and forward completed copy to the Quality Assurance office. The original report will be filed with the CTK custodian in the work center for one year from date of report.

2.9.4. If an item/tool is discovered missing after an aircraft has blocked, initiate normal lost tool procedures. Notify production superintendent and MOC immediately. MOC will notify the aircraft commander/ next station of arrival, as well as Command Post.

2.10. Depot Teams and Contractors. Depot teams will receive a briefing by the 919 SOMXG Quality Assurance upon arrival on base prior to beginning any maintenance on assigned aircraft or equipment. Briefing will include responsibilities for control of tools, safety, and hazardous waste. Contractors assigned to maintenance work centers will have tools marked using the standard nine-digit worldwide identification code and tracked in TAS.

2.11. Rag Control. Rags are defined as a remnant of cloth of uniform size and colors, such as those available through Government Services Administration (GSA) and commercial contract suppliers.

2.11.1. Rags will be exchanged on a one for one basis. Partial rags will not be accepted.

2.11.2. All requirements that apply to tools apply to rags with these exceptions: Rags are not required to be marked with an EID, shadowed or inlaid.

2.11.3. The 919 MXAS tool room responsibilities:

2.11.3.1. Will be the issue/collection for the rag control program.

2.11.3.2. Will be responsible for the accounting of all rags assigned to the squadron.

2.11.3.3. Track all incoming and outgoing rags in TAS.

2.11.4. Work center responsibilities for rags issued in bulk from MXAS tool room.

2.11.4.1. A predetermined amount of rags will be issued and maintained in containers marked "clean /dirty rags" as applicable and locked when unattended.

2.11.4.2. Issue of rags from the container will be annotated in TAS.

2.11.5. Work center responsibilities for the Lint free rag/cloth control program. Lint free rags unique to a shop will be controlled in the same manner as the work center guidance of this instruction.

2.12. Procedures for control of Mobility Equipment.

2.12.1. Each deployed mobility kit must have a current MIL, AFRC Form 177, and AFRC Form 175, *Missing/Removed Tools and Equipment*, enclosed.

2.12.2. All equipment/tools assigned to an aircraft (such as aircraft keys, fuel sump kit, etc.) will be identified with the assigned aircraft tail number and documented on the AF Form 4076, *Aircraft Dash 21 Equipment Inventory*.

2.12.3. While at the forward operating base, tool control will be annotated in TAS when available or on the AFRC Form 177.

2.13. Dispatchable CTKs/TMDE will have reflective material applied to all exposed sides (including top). Refer to 35-1-3 section 4 for large CTK's on trailers or dolly's.

2.14. Tool box Foreign Object Damage (FOD) Container.

2.14.1. A FOD container (bag) will be attached to each dispatchable toolbox.

2.14.2. Toolboxes, including FOD containers, will be FOD free at dispatch and turn in.

3. Tool Accountability System (TAS).

3.1. Operation

3.1.1. Assign TAS point of contact and alternate within each work center.

3.1.2. Maintain at least 2 years of TAS transaction and inspection history within the TAS program.

3.2. In instances when an individual issues tools/equipment to himself/herself in TAS and no other individual is available to return in TAS, tools/equipment will be inventoried, documented on AFRC Form 177 and secured. Next available individual to sign into TAS will re-accomplish inventory and return items in TAS.

3.3. Consumable tools, that can be dispatched, will be tracked in TAS.

JAMES M. PHILIPS, Col, USAFR
Commander

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

AFI 21-101, *Aircraft and Equipment Maintenance Management*, 26 July 2010
AFI 21-101 AFSOC SUP, *Aircraft and Equipment Maintenance Management*, 05 October 2011
AFMAN 33-363, *Management of Records*, 01 March 2008
AFPD 21-1, *Air and Space Maintenance*, 25 February 2003
TO 35-1-3, *Corrosion Prevention And Control, Cleaning, Painting, And Marking Of Usaf Support Equip (Se)*, 26 April 2014
AAC 10-403, *Eglin AFB Installation Deployment Plan (EAFB IDP)*, 17 Jun 2009

Adopted Forms

AF IMT 847, *Recommendation for Change of Publication*
AF Form 4076, *Aircraft Dash 21 Equipment Inventory*
AFRC Form 174, *Lost Tool/Object Report*
AFRC Form 175, *Missing/Removed Tools and Equipment*
AFRC Form 177, *Consolidated Tool Kit Inventory and Control Log*

Abbreviations and Acronyms

AAC—Air Armament Center
AC—Aircraft Commander
AF—Air Force
AFI—Air Force Instruction
AFMAN—Air Force Manual
AFPD—Air Force Policy Directive
AFSOC—Air Force Special Operations Command
MXAS—Aircraft Maintenance Support Section
CC—Commander
CDDAR—Crashed Damaged and Disabled Aircraft Recovery
CTK—Composite Tool Kit
EAFB—Eglin Air Force Base
ECM—Electronic Warfare System
EID—Equipment Identification
FOD—Foreign Object Damage

GSA—Government Services Administration

IAW—in accordance with

ID—Identification

IDP—Installation Deployment Plan

IMT—Information Management Tool

ISO—Isochronal Inspection

MIL—Master Inventory Listing

MOC—Maintenance Operation Center

MXAS—Aircraft Maintenance Support Section

OPR—Office of Primary Responsibility

PPE—Personnel Protective Equipment

RDS—Records Disposition Schedule

SOMXG—Special Operations Maintenance Group

SOW—Special Operations Wing

SUP—Supplement

TAS—Tool Accountability System

TCMAX—Tool Control Asset Management Software

TMDE—Test Measurement and Diagnostic Equipment

Terms

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.

Equipment Identification Designator (EID)—a number assigned to a piece of shop equipment, used to track status and accountability.

Master Inventory List (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 Asset Management Software (TCMax)—Air Force approved system to track tools, equipment, tool kits, HAZMAT items, and Technical Orders (TOs)

Attachment 2

EQUIPMENT IDENTIFICATION DESIGNATOR (EID) CODES.

Table A2.1. Equipment Identification Designator (EID) Codes.

1ST AND 2ND DIGIT CODE:	
	DUKE FIELD = W6
3RD DIGIT CODE:	
	WING = W
	OPS = O
	MAINT = M
	CONTRACTORS = S
4TH DIGIT CODE:	
<u>MAINTENANCE</u>	
<u>W6ME</u>	<u>ELECT</u>
W6MF	FUELS
W6MG	AGE
W6MI	AVIONICS
W6MJ	ENG/PROPS
W6ML	CENTRAL TOOL ROOM
W6MM	MACHINE SHOP
W6MN	NDI
W6MQ	QUALITY ASSURANCE
W6MS	SHEET METAL
W6MT	AERIAL DELIVERY
W6MW	MUNITIONS
<u>CONTRACTORS</u>	
W6SN	SNC
<u>OPERATIONS</u>	
W6OL	LOAD MASTER
W6OS	AFE/AIRCREW FLIGHT EQUIPMENT