BY ORDER OF THE COMMANDER RAMSTEIN AIR BASE

RAMSTEIN AIR BASE INSTRUCTION 21-501

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TOOL, EQUIPMENT AND TECHNICAL ORDER CONTROL PROCEDURES



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This Ramstein Airbase Instruction is required by Air Force Instruction (AFI) 21-101, Aircraft and Equipment Maintenance Management, paragraph 10.2.1. It establishes procedures for the control and management of tools/equipment used on the flight line and in aircraft/aerospace equipment maintenance industrial areas. It provides tool and equipment inventory, inspection, identification, and lost or missing tool/object procedures. Paragraph 1 of this instruction applies to 86th Maintenance Group (MXG), 309th Airlift Squadron, Chievres Air Base, and 496th Air Base Squadron, Moron Air Base. Paragraph 2 applies to all other personnel operating at Ramstein Air Base to include depot teams, factory representatives, contracted field teams (CFT), and temporary duty or deployed units 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 847s from the field through Major Command (MAJCOM) publications/forms managers. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, Management of Records, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at https://www.my.af.mil/gcss-af61a/afrims/afrims/.

SUMMARY OF CHANGES

Minor changes were made to this publication. Included is the realignment of the 86th Airlift Wing and 435th Air Base Wing. Standardization of who can authorize the turnover of Consolidated Tool Kit (CTK) and/or equipment has been clarified in paragraph 1.3.2. The control of warranted tools has been extended and clarified in paragraph 1.8. The 180-day

inspection requirement for CTK/tool inspections was changed to an annual inspection to match AFI 21-101. The 180-day inspection for spill response kits was also changed to an annual inspection. Master Inventory Listing (MIL) files are no longer required to be maintained.

1. TOOL/TOOL KIT CONTROL FOR 86 AW, 309 AS and 496 ABS.

- 1.1. General Policy. Personal tools will not be used on the flight line, in aircraft or in aerospace equipment industrial areas. Only tools and equipment tracked in Tool Accountability System (TAS) are authorized for use in these areas.
 - 1.1.1. A Master Inventory Listing (MIL) will be kept with each dispatchable Consolidated Tool Kit (CTK) and dispatchable support equipment/special tool containing multiple pieces. The MIL is not required to be signed.
 - 1.1.2. For non-dispatchable CTKs, support equipment, and special tools, the MIL resides within TAS. A MIL is not required to be printed and signed for non-dispatchable items.
- 1.2. **TAS Program.** Only the approved version of TAS will be used for accountability and control of tools and equipment, in accordance with (IAW) AFI 21-101, paragraph 10.4.1.
 - 1.2.1. Units must electronically backup all TAS programs to external media on a monthly basis.
 - 1.2.2. In the event TAS is not available, each work center will have a back-up tool accountability procedure in place that will not hinder the mission.
 - 1.2.3. Tools, technical orders, equipment, etc. that are loaded in TAS will have all inspections listed, along with applicable items, in accordance with specific item guidance.
 - 1.2.4. Units will use the mobility function of TAS as prescribed by Air Mobility Command (AMC) Supplement to AFI 21-101, paragraph 10.4.1.2.
- 1.3. **CTK/TOOL/CONSUMABLES ACCOUNTABILITY.** Flight Chiefs, Flight Officers-in-Charge (OICs) and section Non-Commissioned Officers-in-Charge (NCOICs), through CTK custodians, are responsible for tool and equipment accountability and control (knowing where tools are and who has responsibility for them). Personnel who sign for tools or pieces of equipment remain accountable for those items until the items are returned to the tool room and accountability transfers back to the CTK custodian, through a representative or tool room employee. The following procedures apply:
 - 1.3.1. At no time will anyone sign in their own CTK/equipment. It will be signed in by a second party or work center supervisor.
 - 1.3.2. CTK and/or equipment may be turned-over at locations other than the support section during sortie surges or extensive maintenance. Only the on-duty production superintendent or above may approve these turnovers. Keep transfers to a minimum. However, when transfers do occur, the person relinquishing control of and the one assuming control of the CTK will perform an inventory of the CTK in the presence of an E-6 or above. Use an Air Force Form 1297, *Temporary Issue Receipt*, to issue the CTK/equipment to the next person. The E-6 or above witnessing the transfer and both personnel (issuer and receiver) initial the hand receipt. The person relinquishing control of the CTK/equipment will ensure the hand receipt is immediately delivered to the Support Section. Support Section personnel will make the appropriate changes in TAS

- and Support Section will keep this hand receipt until the CTK/equipment returns to Support. These turnovers will be treated as if the CTKs were being turned in or signed out at the Support Section.
- 1.3.3. The issue/turn-in of CTKs to the Support Section will include the CTK and the key. If a CTK folder is used for the CTK, it will also be accountable. The MXG Form 140, Composite Tool Kit (CTK) Inventory and Control Log (sign in/out form), will be used for CTKs not transported in and out of the Support Section. This form will be provided by the CTK custodians and used to sign in and out CTKs by the users. When the old form is full, a new form will be placed in the CTK binder and the old form will be maintained in the Support Section until at least three entries are created on the new form.
- 1.3.4. All contents of non-dispatchable CTKs will be listed in TAS. All contents of dispatchable CTKs, equipment, or tools with multiple pieces will be listed in TAS and on the MIL.
- 1.3.5. All CTKs will have the keys and CTK folder (if applicable) signed in and out of TAS as one, symbolizing a full CTK. If folders are used, they will be accounted for like any other tool (e.g. designated shadowed location if in a CTK/on the MIL, or designated location in a Support Section that meets accountability requirements).
- 1.3.6. Engine blade blending blue dye will be controlled in TAS in the same manner as dispatchable Hazardous Material (HAZMAT) items.
- 1.3.7. CTK procedures also apply to tools/equipment outside the Support Section (e.g. trailers, vehicles, CTKs sub-located to different work centers, on floor, etc).
 - 1.3.7.1. The keys and the CTK folder (if applicable) will be signed in and out of the TAS as one, symbolizing a full CTK. When signing out through TAS, the individual will sign out the whole CTK and receive the folder (if applicable). The MXG Form 140 will be used to sign open and close CTKs as described in paragraph 1.3.3.
 - 1.3.7.2. Owners are responsible for inspections and replacement of tools for tools/CTKs that are permanently sub-located to another organization/work center. It is the owning Support Section's responsibility to control these items in TAS and to issue and receive them on a daily basis.
- 1.3.8. Spill Recovery Units, Environmental Protection Agency (EPA) Trailers, and Hazardous Waste Accumulation points that contain safety/Personnel Protective Equipment will be marked with the owning squadron designation (86 MXS, 86 AMXS, etc.) and one of the following: office symbol, accumulation site, or trailer number. An equipment content listing will be kept with spill kits and consumed items will be documented. All kits will be sealed and inventoried/inspected for serviceability annually. This inspection will be documented.
- 1.3.9. To allow continued use of personal issue equipment when an individual accomplishes a permanent change of station (PCS) or permanent change of assignment (PCA), identify personal issue equipment (e.g., ear defenders, reflective belts, etc.) with minimum first initial, last name, and last four of the individual's Social Security Number (SSN). The individual's employee number may be used in lieu of the last four of the individuals SSN. Markings are not required on personally issued clothing. Work center

- personal protective equipment (PPE) not assigned to a CTK and not dispatched to the flight line will be marked with squadron and office symbol and will have a designated location for accountability. Equipment previously identified with last name, unit, and employee number does not need to be re-etched or replaced solely to comply with new marking requirements.
- 1.3.10. Each Support Section will have an entry control roster listing personnel authorized for entry without an escort. This letter will be approved, as a minimum, by the NCOIC of Support Section. Quality Assurance (QA) inspectors are authorized unescorted entry into CTK controlled areas to perform required inspections.
- 1.3.11. The markings and shadow location for tools no longer required will be removed to reflect the tool/item is no longer considered part of the CTK. Cutouts will be plugged to illustrate that no items are missing and will be secured to prevent loss and potential Foreign Objects (FO) entering these areas. Shadowing/outlining of permanently removed tools will be painted over or thoroughly marked over. For permanently removed tools, TAS will be updated to show deletion. For dispatchable CTKs, equipment, or tools with multiple pieces, a new MIL will be printed.
- 1.3.12. Consumable/expendable hand tools (razor blades, acid brushes, wire brushes, plastic pin insertion/extraction tools, syringes, sanding/cutting and wire brush attachments) that are maintained in a CTK will be listed on the Master Inventory List. Dispatchable consumable/expendable hand tools that are not maintained in a CTK will be accounted for at the completion of each maintenance task.
- 1.4. **CTK LAYOUT/SETUP.** Proper marking and layout of CTKs is critical to accountability and tool control. CTKs will be laid out/set up as follows:
 - 1.4.1. The custodian will ensure all toolboxes/equipment are etched/permanently marked with an Equipment Identification Designator (EID). Etchings and/or markings must be clear and legible. The first four digits are contained in Attachment 2. The unit establishes the remaining five characters IAW AFI 21-101, paragraph 10.5.
 - 1.4.2. CTK keys, locks, and tie down straps, if not permanently attached, are considered part of the CTK and must be marked with EID and identified on the MIL. All items will be identified on the MIL.
 - 1.4.3. Flight line dispatchable CTKs and equipment items will have reflector tape or reflective material installed in order to show the size and shape of the item during reduced visibility. The item will be visible from all angles.
 - 1.4.4. Outlines for hanging items will be marked with the same intent as shadowing.
 - 1.4.5. Tools inside a CTK may be color coded to allow for easy identification. All items belonging to a CTK must be of the same color. CTK markings will not duplicate any color used in the work section. Color coded tools still require an EID.
 - 1.4.6. All flight line dispatchable CTKs (toolboxes) will contain a Foreign Object Damage (FOD) container specifically marked with the letters "FOD" in contrasting colors. The container will not be a plastic bag. If the container is not permanently attached it will be marked with CTK EID and will be listed on the CTK's MIL. Contents of FOD containers will be properly disposed of prior to turn-in. CTKs that are restricted

- to in-shop use only are not required to have FOD containers; however, all CTKs will be kept free of FOD at all times.
- 1.5. **INSPECTIONS.** Thorough inspections/inventories are vital to tool accountability and maintaining serviceability of tools/equipment. The following procedures/requirements apply:
 - 1.5.1. Flight Chiefs and OICs will ensure CTKs, spare tool bins (see paragraph 1.5.4.), HAZMAT Lockers, and Individual Issue Bins (IIB) will be inspected annually. The annual inspection will be documented in TAS. At a minimum, the following items will be inspected:
 - 1.5.1.1. Legibility of etchings and required markings. Double etchings (multiple different etchings) are not authorized. Spare tools will have no etchings/markings until put into service. If a tool is removed from a CTK and will be used as a spare tool, then all etchings/markings will be removed as long as it is in spare tool status.
 - 1.5.1.2. Condition of tools.
 - 1.5.1.3. Existence of corrosion.
 - 1.5.1.4. Presence of any foreign objects.
 - 1.5.1.5. Condition/currency of any tech data in the CTK.
 - 1.5.1.6. MIL will be checked against the CTK/dispatchable equipment MIL and TAS to ensure accuracy.
 - 1.5.1.7. Inspect tool/equipment IAW specific Technical Order (TO)
 - 1.5.1.8. Check for overdue calibration.
 - 1.5.1.9. Ensure all sets contain the proper number of items (as identified on container).
 - 1.5.1.10. In addition to the prior to use inspection, the explosion-proof lanterns and extension lights will be inspected per T.O. 35F5-1-2, *Explosive-Proof Lanterns and Extension Light Assemblies*, paragraph 1-3.
 - 1.5.1.11. Shelf-life dates.
 - 1.5.1.12. Containers or cabinet for damage or leakage.
 - 1.5.2. For sub-located CTKs, the Support Section or designated CTK custodian is responsible for all major inspections.
 - 1.5.3. Infrequently used CTK/kits and CTK/kits placed in storage.
 - 1.5.3.1. Storage is defined as a CTK not projected for use within the standard inspection cycle.
 - 1.5.3.2. Infrequently used CTK/kits or CTK/kits placed in storage can be sealed so that the CTK/kit cannot be opened without breaking the seal (computer label sticker, lead seal, etc.). Annotate the seal with the signature of the individual performing the tool count, date completed, and next inventory date (not to exceed the annual inspection date). Inspection criteria will be the same as defined in paragraphs 1.5.1.1 through 1.5.1.12. of this instruction.

- 1.5.4. Flight Chiefs and OICs will ensure spare tools are inventoried annually and tracked in TAS as a CTK (SPARE).
- 1.6. **MOBILITY TOOLS** (Accountability, Control, and Inspection). Units will use the mobility function of TAS as prescribed by AMC Supplement to AFI 21-101, paragraph 10.4.1.2.
 - 1.6.1. Mobility CTKs will receive annual inspections and once completed, will be sealed so that the CTK cannot be opened without breaking the seal (computer label sticker, lead seal, etc.). Annotate the seal (if possible) or tag with the signature of the individual performing the tool count/inspection, date c/w, and next inventory date (not to exceed 1 year). Inspection criteria will be the same as defined in paragraph 1.5.1.1 through 1.5.1.12 of this instruction and tracked in TAS. When the CTK is deployed and the seal broken, the tools will revert back to the annual inspection cycle.
 - 1.6.2. Mobility CTKs should only be used for actual or simulated deployments. The deployed custodian will be responsible for all CTKs at the deployed site. The Support Section or deployed section supervisor will provide a secure area for storing mobility CTKs.
- 1.7. **SPECIAL PURPOSE TOOLS.** IAW AFI 21-101 paragraph 10.2.1.14., units will develop procedures for control of Crashed, Damaged or Disabled Aircraft Recovery (CDDAR) equipment permanently stored/located in trailers or vehicles. CDDAR tools/equipment will be properly marked and controlled in TAS. Ensure these items are inspected IAW all applicable Technical Orders, manuals, Air Force Instructions and this instruction, to include items stored and or located in vehicles.
- 1.8. **WARRANTED TOOL MANAGEMENT.** IAW AFI 21-101, paragraph 10.2.1.3., warranted tool management procedures are as follows:
 - 1.8.1. Warranted tools that are assigned to a CTK will be controlled IAW AFI 21-101 and this guidance.
 - 1.8.2. Warranted tools not assigned to a CTK will be controlled as spare tools IAW AFI 21-101 and this guidance.
 - 1.8.3. Broken warranty tools.
 - 1.8.3.1. Broken warranty tools will be removed from service IAW paragraph 1.10 of this Operation Instuction (OI).
 - 1.8.3.2. Warranty tools will be segregated from non-warranty tools and tracked by the CTK custodian to ensure proper identification and control.
- 1.9. **LOST TOOL PROCEDURES.** IAW AFI 21-101, paragraph 10.8., 86 AW lost tool procedures are as follows:
 - 1.9.1. The individual that discovers a missing tool will notify the expediter/production superintendent or equivalent who in turn will *immediately* notify the Operations Officer, Flight OIC/Chief, Support Section, Maintenance Operation Control (MOC) (86 AW MOC will notify 721 AMXS MOC for any lost tools that could possibly have an impact on 721 AMXS operations or ramp), and QA. Upon notification of a lost tool/item, the affected production superintendent will initiate a thorough search. If an

- aircraft/equipment is involved and the search has not resulted in the recovery of the lost tool within 1 hour, contact an impound authority for aircraft/equipment impoundment decision. Impoundment for lost tools will be at the discretion of the impound authority. If the suspected lost tool is on a taxiing or flying aircraft, immediately notify MOC to initiate actions for potential aircraft recall.
- 1.9.2. The MXG Form 145, *Lost Tool/Object Report*, must be used to document all lost tools. This form will be initiated by the person with custodial responsibility of the lost tool within 1 hour of initial identification that a tool is lost. QA will assign a local control number, which will be annotated on the upper right-hand corner of the form. Once QA issues a control number, the MXG Form 145 must be completed even if the tool has been found.
- 1.9.3. The lost tool form must be routed through proper channels within 3 duty days and provided to QA.
- 1.9.4. QA will review the completed form for accuracy and provide the original to the 86th Airlift Wing (AW) FOD Monitor. A copy will be maintained by the CTK custodian/responsible authority of item and kept for 1 year. When the lost tool is found, the respective unit will inform QA who will in-turn inform the 86 AW FOD Monitor.
- 1.9.5. The tool room shift supervisor and the individual who signed for the CTK will ensure the missing tool is annotated on the MIL for dispatchable CTKs, equipment, or tools with multiple pieces and updated in TAS.
- 1.10. **BROKEN TOOLS.** In order to standardize and clarify broken tool procedures, the following guidance will be followed:
 - 1.10.1. Unserviceable/removed tools. The user will account for all pieces of the broken tool and take them to the CTK custodian or Support Section. If the tool cannot be immediately replaced, the CTK custodian or Support Section personnel will document the MIL for dispatchable CTKs, equipment, or tools with multiple pieces and update TAS. As a minimum, annotate the MIL with "B/R" (broken and removed), the date broken, and employee number.
 - 1.10.2. For deployments, unserviceable/removed tools will be replaced immediately upon reconstitution after deployments. Any tools that cannot be replaced during deployments will be documented on the MIL as described in paragraph 1.10.1. Damaged tools will be annotated in the MIL. TAS annotations will be done during reconstitution phases.
 - 1.10.3. Serviceable damaged tools. When a tool is damaged but can still perform its designed function, the tool may be retained. Tool serviceability will be determined by appropriate technical orders or manufacturers guidance/manuals. Unsafe tools will NOT be used. At a minimum, the missing pieces/components of damaged tools will be documented on the MIL for dispatchable CTKs, equipment, or tools with multiple pieces and in TAS; also annotate the date damaged and employee number.
- 1.11. **TOOL REPLACEMENT.** The following tool replacement procedures will be followed in order to establish tool procurement.

- 1.11.1. No more than three individuals per work center will be authorized to procure tools.
- 1.11.2. Broken/unserviceable tools will not be stored in the same drawers as spare/serviceable tools.
- 1.12. **RAG CONTROL PROCEDURES.** The following procedures will be followed in order to prevent FOD and ensure proper control/accountability of rags:
 - 1.12.1. Positive accountability of rags and rag control is required. Marking or identifying each rag with a CTK number is not necessary. To ensure standardization, rags will be uniform in size and color and will be issued in groups of 5 each in a prepackaged container. The container will be marked with number of items contained. The container will be counted as one of the items. Mark container with 9-digit EID.
 - 1.12.2. An inventory will be conducted upon receipt of rags from a contracted cleaning service.
 - 1.12.3. Operational/dispatchable rags will be inventoried at every shift turnover.
 - 1.12.4. Bulk stored rags (those not in Support Section for dispatch or operational use) will be secured for control and be loaded in TAS as a spare tool for accountability.
- 1.13. **TECHNICAL ORDER CONTROL PROCEDURES.** Technical orders must be accounted for as any other tool or piece of equipment to prevent FOD and lost assets.
 - 1.13.1. Technical orders that may be dispatched to the flight line will be controlled in TAS and meet all of the requirements established by this instruction.
 - 1.13.2. Technical orders that will not be dispatched to the flight line are not required to be loaded in TAS.
- 2. OTHER UNITS AT RAMSTEIN AB, TO INCLUDE DEPOT TEAMS, FACTORY REPRESENTATIVES, CONTRACTED FIELD TEAMS (CFT), AND TDY OR DEPLOYED UNITS TOOL/TOOL KIT CONTROL. IAW AFI 21-101, paragraph 10.2.1.12., MXG/CC will establish procedures for depot teams, factory representatives, and CFTs when working on equipment within the unit. The following procedures apply to anyone that brings tools onto the flight line to perform maintenance on aircraft, equipment, or vehicles or anyone that performs maintenance on equipment or vehicles that have the potential of entering the flight line.
 - 2.1. Develop guidance to ensure positive tool and equipment control.
 - 2.1.1. Ensure guidance contains lost tool procedures. At minimum, the procedures will ensure MOC is notified (721 AMXS MOC will be notified for tools lost on Ramp 5 while 86 AW MOC will be notified for tools lost on all other ramps and taxiways).
 - 2.1.2. Ensure guidance directs 86 AW FOD monitor to be notified of lost tool and the lost tool report is turned in within 3 days of incident.
 - 2.2. When using 86 MXG assigned tools/equipment, comply with all requirements of this instruction.
 - 2.3. When using tools not assigned to 86 MXG, comply with the minimum requirements listed below.

- 2.4. Have a listing (or MIL equivalent) of each CTK/kit identifying components.
- 2.5. Secure CTK/equipment when left unattended.
- 2.6. Inventory each CTK/kit at the beginning and end of each shift, as well as at the completion of each maintenance task.
- 2.7. Personal tools will not be used on the flight line, in aircraft or in aerospace equipment industrial areas.
- **3. AIRCREW & LIFE SUPPORT TOOL/TOOL KIT CONTROL.** Tools used on the aircraft or the flight line by the 37 Airlift Squadron and the 86th Operations Support Squadron will be included in a CTK, properly etched per Attachment 2 and positively controlled. The owning organizations will draft tool control/accountability procedures which will include accounting for each CTK at the beginning and end of each flight. If a CTK is not sealed, an inventory of said CTK will be accomplished at the beginning and end of each flight, as well as at the completion of each maintenance task.

CHARLES K. HYDE, Brigadier General, USAF Commander

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 21-101, Aircraft and Equipment Maintenance Management, 12 April 2010

AFI 21-101, AMC Supplement(USAFE), Aircraft and Equipment Maintenance Management, 01 January 2008

AFMAN 33-363, Management of Records, 1 March 2008

T.O. 32-1-101, Use and Care of Hand Tools and Measuring Tools, 14 September 2007

T.O. 35F5-1-2, Explosive-Proof Lanterns and Extension Light Assemblies, 11 August 2008

Prescribed Forms

None

Adopted Forms

MXG Form 140, Composite Tool Kit (CTK) Inventory and Control Log, 26 February 2007

MXG Form 145, Lost Tool/Object Report, 26 February 2007

AF Form 1297, Temporary Issue Receipt, 1 July 1987

Abbreviations and Acronyms

AB—Air Base

AF—Air Force

AFI—Air Force Air Force Instruction

AFM—Air Force Manual

AFPD—Air Force Policy Directive

AS—Airlift Squadron

AMU—Aircraft Maintenance Unit

AMC—Air Mobility Command

AW—Airlift Wing

CDDAR—Crashed, Damaged or Disabled Aircraft Recovery

CFT—Contracted Field Teams

CTK—Consolidated Tool Kit

EID—Equipment Identification Designator

EPA—Environmental Protection Agency

FO—Foreign Object

FOD—Foreign Object Damage

HAZMAT—Hazardous Material

IAW—In Accordance With

IIB—Individual Issue Bins

MIL—Master Inventory Listing

MXG—Maintenance Group

MOC—Maintenance Operations Center

NCOIC—Non Commissioned Officer in Charge

OI—Operating Instruction

OIC—Officer in Charge

PCA—Permenant Change of Assignment

PCS—Permenant Change of Station

PPE—Personal Protective Equipment

QA—Quality Assurance

RDS—Records Disposition Schedule

SSN—Social Security Number

TAS—Tool Accountability System

TDY—Temporary Duty

TO—Technical Order

Attachment 2

WORLDWIDE (WW) IDENTIFICATION (ID) LISTING

The following table shows the current list of WWID for units assigned to Ramstein Air Base. The first two characters (RF) identify Ramstein Air Base. The third character of the WWID identifies the UNIT and the fourth identifies the SECTION/WORK CENTER. The section/work center establishes the remaining five characters (any combination of numbers/letters) for CTKs, tools, and dispatchable equipment identification.

86th Airlift Wing Units

86th Maintenance Group Units

86th Maintenance Squadron

Maintenance Flight	RF8A
Fabrication	RF8F
Propulsion	RF8P
Accessories	RF8C
TMDE	RF8D
AGE	RF8G
Transit Alert	RF8T

86th Aircraft Maintenance Squadron

37th Aircraft Maintenance Unit

Support Section RF3M ISO RF8M

76th Aircraft Maintenance Unit

Maintenance RF7M

86th Maintenance Operations Squadron

MTF RFTR

86th Maintenance Group Quality Assurance

QA RF8Q

86th Operations Group Units

37th Airlift Squadron

Loadmasters (Aircrew) RF3D

76th Airlift Squadron

Flight engineers RF7D

86th Operations Support Section

Life Support RF3L

DET 1 309 AS

Maintenance/ TA RF8U Support RF8S

86th Logistics Readiness Group

86th Materiel Maintenance Squadron

Armament RFMW

86th Vehicle Readiness Squadron

Vehicle Maintenance RF8V

(non-TAS ID 101VM)

86th Logistics Readiness Squadron

Fuels Compliance RF8L Aerial Delivery Section RF8Z

86th Munitions Squadron

Munitions RF8W

RF8R

86th Mission Support Group

86th Communications Squadron

Infrastructure Branch RF4I Customer Support Branch RF4S Airfield Systems RF4A Transmissions Systems RF4T

Ramstein Air Base Tenant Units

721st Aircraft Maintenance Squadron

Support Section RFAM

721st Aerial Port Squadron

Vehicle Maintenance RFAV

DET 1 AETC RFTR