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SECRETARY OF THE AIR FORCE

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EQUIPMENT INVENTORY, STATUS AND UTILIZATION REPORTING

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This publication implements Air Force Policy Directive (AFPD) 21-1, *Maintenance of Military Materiel*; and is consistent with AFPD 13-5, *Air Force Nuclear Mission*. It is the basic Air Force Instruction (AFI) that establishes inventory, status, and utilization reporting requirements and provides guidance and direction for managing mission-essential systems and equipment hereafter referred to collectively as "weapon systems". It is applicable to Regular Air Force, Air Force Reserve (AFR), Air National Guard (ANG) and Air Force civilian personnel. Major Commands (MAJCOMs) may supplement this instruction. Supplements must identify required deviations (applicability, variance, and/or differences in organizational placement of responsibilities/processes) on the supplement with the term Deviation, abbreviation "DEV". Place the "DEV" entry after the paragraph number and directly preceding the affected text. This instruction may be supplemented at any level, but all supplements that directly implement this publication must be routed to the Director of Logistics, Deputy Chief of Staff for Logistics, Engineering and Force Protection (AF/A4L) for 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 Air Force (AF) Form 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, and T-3") number following the compliance statement. See AFI 33-360, *Publications and Forms Management* for a description of the authorities associated with the tier numbers. Submit requests for waivers using AF Form 679, *Air Force Publication Compliance Item Waiver Request/Approval* through the chain of command to the appropriate tier waiver approval authority, or alternatively, 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 In Accordance With (IAW) Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of IAW Air Force Records Disposition Schedule located in the Air Force Records Information Management System (AFRIMS). 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.

(ANG) This Minimum Essential Subsystem List (MESL) compliments AFI 21-103, *Equipment Inventory, Status, and Utilization Reporting*. This addendum applies to all Air National Guard (ANG) units assigned the RC-26B aircraft. 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 847 from the field through the appropriate functional chain of command. Ensure that all records are maintained in accordance with AFI 33-322, *Records Management and Information Governance Program*, and disposed of in accordance with Air Force Records Disposition Schedule (RDS) located in the Air Force Records Information Management System (AFRIMS).

SUMMARY OF CHANGES

This revision changed the signature block at the end of the publication to AF/A4. Properly formatted the layout of **attachment 25**.

(ANG) This revision updates the RC-26B MESL to ensure correct status reporting.

Chapter 1

REPORTING GUIDELINES

1.1. Using Report Information. The AF uses the information from reports produced by each reporting system of record primarily for accounting and analysis. Each reporting system of record also provides basic historical management information and data on equipment availability and use to all levels of command. This information is used to:

1.1.1. Identify and compute AF accountable inventory IAW Department of Defense Instruction (DoDI) 3110.05, *Readiness-based Materiel Condition Reporting for Mission-Essential Systems and Equipment* and DoDI 5000.64, *Accountability and Management of DoD Equipment and Other Accountable Property*.

1.1.2. Build the AF programming documents and the related budget and staffing requirements.

1.1.3. Produce statistical analysis for congressional committees, the Office of Management and Budget, and the Department of Defense (DoD).

1.1.4. Compute AF Chief Financial Officer (CFO) information requirements.

1.1.5. Compute equipment availability in unit and Chief of Staff of the Air Force readiness reports in the Defense Readiness Reporting System.

1.2. Lead Command Reporting Requirements.

1.2.1. Lead commands will establish standards and capability goals in coordination with the applicable Program Office and Maintenance Division (AF/A4LM) to include but not limited to Mission Capable (MC), Total Non-Mission Capable Maintenance (TNMCM), Total Non-Mission Capable Supply (TNMCS) rates and Cannibalization (CANN) Maximum Acceptable Level (MAL). The MC rate goals and CANN MAL data go into the yearly DoD Materiel Readiness Report to Congress.

1.2.2. Lead commands will calculate the Aircraft Availability Standard for each mission design series annually using the equation in **Attachment 25** of this AFI. Remotely piloted aircraft are exempt from using the prescribed equation. The lead command will determine the Aircraft Availability Standard for remotely piloted aircraft using other criteria (for example, capabilities and operational requirements).

1.2.3. Aircraft Availability, MC, TNMCM, TNMCS, and CANN MAL standards and goals are completed for the subsequent two fiscal years (for example, if current Fiscal Year (FY) is FY2020 then report data for FY2021 and FY2022). This information is then reported to AF/A4LM no later than 15 Aug of the current FY.

1.3. Correct Reporting. The AF uses reports named in this instruction to develop and defend the United States Air Force (USAF) input to the planning, programming, budgeting, and execution process. For this reason correct and timely reporting is critical because errors in reporting can impact AF readiness to accomplish vital missions by losing needed funding for manpower authorizations, equipment and supplies.

1.4. Offices of Primary Responsibility are:

1.4.1. Air Force Aerospace Vehicle Distribution Officer at Air Force Material Command (AFMC)/A4M, 4375 Childlaw Rd., Area A, Bldg 262, Room N114, Wright-Patterson AFB OH 45433-5006.

1.4.2. Aerospace Vehicle Programing –Deputy Chief of Staff, Plans and Programs, Program Integration Division (AF/A8PE) 1030 Air Force Pentagon, Washington DC 20330-1030.

1.4.3. Intercontinental Ballistic Missile (ICBM) Status -Air Force Global Strike Command (AFGSC)/A4MQ, 841 Fairchild Ave Bldg. 5541 Suite 201, Barksdale AFB, LA 71110.

1.4.4. Aerospace Vehicle Utilization/Status - AF/A4LM, 1030 Air Force Pentagon, Washington DC 20330-1030.

1.4.5. Communications Status and Inventory Reporting –Air Combat Command (ACC)/ Cyberspace Support Squadron /Cyber Maintenance on behalf of-Chief Information Officer (A6), 203 W. Losey St., Room 2108, Scott AFB IL 62225-5222.

1.4.6. Mine Resistant Ambush Protected (MRAP) Vehicle Status – ACC/A4R, 130 Douglas St. Bldg. 681, Suite 312B, Joint Base Langley-Eustis, VA 23665.

1.4.7. Automatic Test Equipment Status – AFMC Air Force Life Cycle Management Center (AFLCMC)/WNA, 235 Byron St., Suite 19A, Robins AFB, GA 31098-1813.

1.4.8. Space Vehicle (Satellite) Status -Air Force Space Command (AFSPC)/A4UX, 150 Vandenberg St., Suite 1105, Peterson AFB CO 80914-4470.

1.4.9. Air Launched Cruise Missile Status -AFGSC/A4WN, 841 Fairchild Ave Bldg. 5541 Suite 201, Barksdale AFB, LA 71110.

1.4.10. Externally-Carried Pod Inventory – AFMC AFLCMC/HIM, 4170 Hebble Creek Rd., B280, D15, Wright-Patterson AFB, OH 45433-5655.

1.4.11. Nuclear Command and Control, Communications (NC3)-AFGSC/AFNC3C/NSA, 965 Twining Dr., Barksdale AFB, LA 71110.

1.4.12. Common Support Equipment, AFMC AFLCMC/WNZAA, 235 Byron Street, Suite 19A, Robins AFB, GA 31098-1670.

1.5. Supporting Publications. For personnel to carry out the procedures in this instruction, Maintenance Information System (MIS) program offices will develop user manuals that include:

1.5.1. Detailed rules for filling out the forms. **(T-1)**.

1.5.2. Instructions for data entry. **(T-1)**.

1.5.3. Report formats. **(T-1)**.

Chapter 2

AEROSPACE VEHICLE (INCLUDING AIRCRAFT, AERIAL TARGETS/DRONES (FULL OR SUB-SCALE), REMOTELY PILOTED AIRCRAFT) GROUND CONTROL STATION AND MINE RESISTANT AMBUSH PROTECTED VEHICLE INVENTORY, STATUS, AND UTILIZATION REPORTING

Section 2A—Reporting System Overview

2.1. Overview

2.1.1. Each aerospace vehicle, remotely piloted aircraft, ground control station and Mine Resistant Ambush Protected (MRAP) vehicle are always possessed by a designated and authorized AF reporting organization. MRAP vehicles and ground control stations are not aerospace vehicles but are covered within this publication and are treated like aerospace vehicles in order to utilize the Reliability and Maintainability Information System (REMIS) as its official inventory reporting system. **[NOTE:** For the purpose of this instruction the use of the terms loaned/leased includes bailment and other similar inventory management actions as defined in AFI 16-402, *Aerospace Vehicle Programming, Assignment, Distribution, Accounting, and Termination*. The designated AF reporting organization retains this responsibility in instances where an aerospace vehicle is loaned or leased for use/testing by an organization external to the AF. The possessing organization will report:

2.1.1.1. The hours it possesses the aerospace vehicle. **(T-0)**.

2.1.1.2. Changes in aerospace vehicle possession. **(T-0)**.

2.1.1.3. Status conditions affecting an aerospace vehicle's ability to perform assigned missions. **(T-1)**.

2.1.1.4. Flying hours and sorties. **(T-1)**.

2.1.1.5. Installed propulsion assets IAW Technical Order (TO) 00-25-254-1, *Comprehensive Engine Management System (CEMS) Engine Configuration, Status and Time Compliance Technical Order (TCTO) Reporting Procedures.* **(T-1)**.

2.1.2. Contractor requirements within this AFI must be contained within the performance work statement, contract line item number, task order or workload agreement. **(T-1)**.

2.2. The Reporting System. Units process inventory, status and utilization data using an approved MIS. **(T-0)**. HQ AF, MAJCOMs, Field Operating Agencies (FOA) and other authorized users of the REMIS database verify accuracy of the data.

2.3. Transmitting Data. Data will be sent to the REMIS database at specified times.

2.4. Security Classification. Aerospace vehicle inventory, status, and utilization data reported under this instruction is unclassified. **NOTE:** Do not enter classified data into the MIS or REMIS.

Section 2B—Reporting Responsibilities

2.5. Weapon System Program Activities.

2.5.1. The Weapon System Program Manager (PM) ensures CFO data elements (full cost and useful life) are properly reported in REMIS. The PM monitors REMIS updates in an effort to detect missing/inaccurate CFO reporting data elements as identified by the AF-Aerospace Vehicle Distribution Officer (AVDO), as inventory items are added, removed, or adjusted as a result of modifications. **NOTE**: For the purpose of this instruction the use of the term government furnished materiel is as defined in AFI 23-101, *Air Force Materiel Management* and AFMAN 23-122, *Materiel Management Procedures.*

2.5.2. The PM enters the CFO modification records, including determining the value of the modification on each asset and documenting when the modification was completed on each asset. Capitalize only those modifications that meet the DoD capitalization threshold as defined in DoD 7000.14-RV4, *Department of Defense Financial Management Regulation*, and add capability to the weapon system or extend the useful life of the weapon system beyond its originally planned useful life.

2.5.2.1. For aircraft and remotely piloted aircraft assets, CFO reporting data elements (full cost and useful life) value of each asset are entered (include the value of the government furnished materiel IAW DoD 7000.14-RV4), not more than 5 workdays after the AF-AVDO notifies the PM that the asset record was established in REMIS.

2.5.2.2. For aerial target/drone assets (full or sub-scale), enter the CFO reporting data element (full cost) value of each asset (include the value of the government furnished material) IAW DoD 7000.14-RV4, not more than 5 workdays after the AF-AVDO notifies the PM that the asset record was established in REMIS.

2.5.2.3. For MRAP vehicles, the PM records full cost and useful life data in REMIS not more than 5 workdays after the AF-AVDO notifies the PM that the asset record was established in REMIS.

2.5.2.4. For ground control stations, the PM records full cost and useful life data in REMIS not more than 5 workdays after the AF-AVDO notifies the PM that the asset record was established in REMIS.

2.6. Base and Depot Level Activities. Reporting starts at the base or depot level.

2.6.1. Wing/group commanders or depot maintenance directorate responsibilities:

2.6.1.1. Ensure personnel maintain, correct, and report all data using the procedures in AFI 16-402 and this instruction. **(T-1)**.

2.6.1.2. Appoint a primary and alternate AVDO to report inventory status for the unit or depot. By email message, provide the MAJCOM AVDO the name, grade, duty phone, email address, and office symbol of the primary and alternate AVDO annually at the beginning of each FY and as changes in personnel occur. **(T-2)**.

2.6.1.3. Maintenance and depot units will establish contact with a primary and alternate Flying Hour Program point of contact (POC) within operations to act as the maintenance or depot unit POC to record aircraft utilization and verify and reconcile daily flying hour inputs between operations and maintenance. **(T-1)**. Send the AF-AVDO, MAJCOM

AVDO and MAJCOM Flying Hour Program POC the name, grade, duty phone, email address and office symbol of the primary and alternate unit flying hour POC annually at the beginning of each fiscal year and as changes in personnel occur. **(T-2)**.

2.6.1.4. Ensure aerospace vehicle status attributed to supply is reported to the Logistics Readiness Squadron (LRS) POC. **(T-1)**.

2.6.2. Unit and Depot AVDOs will:

2.6.2.1. Be designated as the primary POCs for aerospace vehicle inventory and status reporting within their organization. **(T-1)**.

2.6.2.2. Distribute assigned aerospace vehicles as required. **(T-0)**.

2.6.2.3. Monitor and/or input data in the MIS daily. **(T-1)**.

2.6.2.4. Resolve any data reporting problems. **(T-1)**.

2.6.2.5. Ensure equipment loads to MIS for aerospace vehicles contain correct current operating time prior to performing gain transactions. **(T-1)**.

2.6.2.6. Initiate inventory transactions and movement reports as required. **(T-0)**.

2.6.2.7. Oversee the aircraft transfer/depot program (see **paragraph 2.6.2.14**) **(T-1)**. Coordinate any changes to the transfer/depot program/ depot or contract field teams/ programs with the Aircraft Maintenance Squadron/Aircraft Maintenance Unit and all affected agencies. **(T-1)**.

2.6.2.8. Maintain a Programmed Depot Maintenance schedule by tail/serial number for all assigned aircraft and equipment in support of AFMC and lead command plans and requirements. **(T-1)**.

2.6.2.8.1. This listing will contain all lead command directed modification and maintenance programs. **(T-2)**.

2.6.2.8.2. The schedules will be published monthly. **(T-2)**.

2.6.2.9. Send messages as required by this instruction and MAJCOM supplements. **(T-1)**. Emails are the standard format to transmit messages. Users will transmit email messages IAW AFMAN 17-1301, *Computer Security (COMPUSEC)* to ensure the required level of security is applied to the transmission of the email messages. **(T-1)**.

2.6.2.10. Follow procedures in AFI 16-402. **(T-1)**.

2.6.2.11. Ensure Department of Defense (DD) Form 1149, *Requisition and Invoice/Shipping Document*, or Air Force Technical Order (AFTO) Form 290, *Aerospace Vehicle Delivery Receipt* is completed IAW AFI 24-602V2, *Cargo Movement* and sent as required (See **Attachment 9**) **(T-1)**.

2.6.2.12. Physical Accountability. The AF reports accountability of aerospace vehicles as military equipment through the MIS and REMIS. Follow procedures in AFI 16-402 and DoDI 5000.64. for accomplishing annual inventory/verification by tail number of all assigned aircraft (on and off station). **(T-0)**.

2.6.2.12.1. Compare MIS products with REMIS ERP4020 Assignment/Possession Report quarterly. **(T-1)**.

2.6.2.12.2. Maintain key supporting documents, for example, Unit AVDO messages IAW AFRIMS, programmed depot schedules, aircraft transfer and/or loan memorandums.

2.6.2.13. Prior to processing MIS data and sending gain/loss messages, verify inventory transaction dates and times (Zulu) with corresponding units, depots or contractors to ensure they match to maintain data integrity. **(T-1)**.

2.6.2.14. Upon notification of an aerospace vehicle movement (assignment or possession change), but prior to the aerospace vehicle actually moving, a transfer schedule needs to be developed, funded and approved by the MAJCOM and program office. **(T-1)**. Ensure all nuclear weapon related materiel items are removed from the aerospace vehicle prior to transfer to the depot or Aerospace Maintenance and Regeneration Group (AMARG). **(T-1)**. All actions performed on serially controlled nuclear weapon related materiel items must be recorded in the MIS and transmitted to REMIS. **(T-0)**. Notify the MAJCOM AVDO and weapons system functional manager of the aerospace vehicle serial numbers and transfer dates by email message. **(T-1)**. When changes occur to the transfer schedule, an updated email message is required with justification of change. **(T-1)**.

2.6.2.15. Unit and depot AVDO will maintain a continuity book/electronic folder and AVDO training plan. **(T-1)**.

2.6.3. Wing Data Base Managers:

2.6.3.1. Monitor the receipt acknowledgment output transmittal files from REMIS daily. **(T-1)**.

2.6.3.2. Establish "dummy" depot reporting units for local depot and contract field teams reporting within the MIS. Ensure serial numbers on nuclear weapon related materiel assets are entered into the MIS as they appear on the asset data plate. **(T-1)**.

2.6.4. Unit and Depot Flying Hour Program POC:

2.6.4.1. In conjunction with the AVDO, establish and publish daily procedures for operations and maintenance to verify the accuracy of unit or depot flying hours. **(T-1)**.

2.6.4.2. Track and report flying hours and sorties on a daily, monthly and yearly basis as required by this publication and MAJCOM supplements. **(T-1)**.

2.7. MAJCOM/FOA AVDO and MAJCOM Flying Hour Program POC Coordination Guidance

2.7.1. MAJCOM AVDO ensure aerospace vehicle inventory and status errors are corrected in MIS within their organizations.

2.7.1.1. Represent their MAJCOM or FOA at AVDO meetings.

2.7.1.2. Perform aerospace vehicle assignment:

2.7.1.2.1. Assign command aerospace vehicles based on force program authorizations.

2.7.1.2.2. Coordinate with other MAJCOM AVDOs, staff agencies, Numbered Air Forces, and specific units in assigning, controlling, and distributing aerospace vehicles.

2.7.1.2.3. Assign aerospace vehicles within the command by issuing transfer instructions IAW AFI 16-402.

2.7.1.2.4. Complete aerospace vehicle assignments or reassignments no earlier than 30 calendar days prior to and no later than 30 calendar days after the effective date.

2.7.1.2.5. Help MAJCOM agencies extract data from REMIS to assist them in monitoring the programmed depot maintenance and modification schedules.

2.7.1.2.6. Serve as the Office of Collateral Responsibility for maintaining the geographic location code table, command code table, and organization table in REMIS, as shown in Air Force Computer Systems Manual (AFCSM) 25-524V4, *Reliability & Maintainability Information Systems (REMIS),* Section B, *Equipment Inventory Multiple Status Utilization Reporting Subsystem* user's manual.

2.7.1.3. Establish and implement procedures for unit and depot AVDOs to complete and report annual inventory/verification by tail number of all assigned aircraft (on and off station), utilizing the MIS and REMIS, IAW AFI 16-402 and DoDI 5000.64.

2.7.1.4. Accomplish an annual REMIS reconciliation for aerospace vehicles (includes MRAP vehicles) IAW AFI 16-402. ACC MRAP Weapon System Team will work with MAJCOM AVDO for REMIS annual reconciliations.

2.7.2. For aerospace vehicle transfer, replacement, or disposal MAJCOM AVDO will:

2.7.2.1. Coordinate with affected MAJCOMs, ANG, AFR, and non-USAF organizations to move, ship, or transfer vehicles inter-theater and to file applicable movement reports.

2.7.2.2. Provide technical assistance to subordinate AVDOs.

2.7.2.3. Assist transferring units to choose aerospace vehicle serial numbers to meet TO 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policies, and Procedures,* requirements.

2.7.2.4. Ensure nuclear weapons related materiel accountability is maintained IAW AFI 23-101, and AFI 20-110, *Nuclear Weapons-Related Materiel Management*.

2.7.3. Coordinate with the MAJCOM Flying Hour Program POC to:

2.7.3.1. Ensure utilization data reported by their units is correct and up-to-date, including mission symbols, program element code. Utilization errors will be corrected at the unit level.

2.7.3.2. Ensure flying hour/sortie data is coordinated/validated between operations and maintenance at the unit level.

2.7.3.3. Ensure aircraft utilization data is coordinated between operations and maintenance.

2.7.3.4. Represent the MAJCOM or FOA at HQ USAF utilization meetings.

2.7.3.5. Verify REMIS data each month, prior to the REMIS K002 Flying Hour Report being run.

2.8. AF-AVDO.

2.8.1. The AF-AVDO is an AF-level function that resides within HQ AFMC. The AF-AVDO is the subject matter expert for reporting information contained in this publication.

2.8.2. Collects, reviews, and validates data reported in REMIS IAW this instruction.

2.8.3. Maintains the master AF assigned aerospace vehicle inventory IAW AFI 16-402.

2.8.4. Monitors AF inventory using REMIS ERP4020.

2.8.5. Collect and review MAJCOM REMIS aerospace vehicles inventory reconciliations annually (includes MRAP vehicles). **(T-1)**.

2.9. Contract administration activities (except contract field teams). Report all gains, losses, and terminations as stated in this instruction, MAJCOM supplements, or IAW maintenance contracts. When a contractor controls or maintains an aerospace vehicle that requires inventory, status, and utilization reporting, the designated and authorized AF reporting organization retains responsibility for ensuring all reporting requirements are met. When responsibility is delegated via a contract, the administrative contracting officer submits the needed reports/information to the agency that asks for them, unless the applicable contract states otherwise. Use these reports whenever it is in the best interest of the government.

Section 2C—Aerospace Vehicle Inventory Reporting

2.10. Assignment Procedures. Inventory reporting starts when an aerospace vehicle is accepted as outlined in this section. AF/A4LM will assign active/inactive aerospace vehicles, via the AF Form 913, *Aerospace Vehicle Project Action* to commands for AF operational, support, training, test missions according to AFI 16-402. The AF-AVDO will send the information to the MAJCOM AVDO. **NOTE:** Aerial target/drones (full or sub-scale) reporting requirements in this section are exempt from licensing IAW AFI 33-324, *The Air Force Information Collections and Reports Management Program*.

2.11. Possession Reporting. Purpose Identifier Codes (PIC) are used to designate assignment and possession mission activities, refer to AFI 16-402 for additional PIC designation information (See **Attachment 17** for the list of authorized PICs).

2.11.1. What to report as possessed inventory

2.11.1.1. All USAF aerospace vehicles including those on loan or lease to agencies outside the AF are considered AF accountable property, must be reported in an Accountable Property System of Record IAW DoDI 5000.64 and DoDI 3110.05 and AFI 23-111, *Management of Government Property in Possession of the Air Force*.

2.11.1.2. Non-USAF owned aerospace vehicles as directed by HQ USAF.

2.11.2. Procedures. When a unit or depot gains or loses possession of an aerospace vehicle, the unit or depot will:

2.11.2.1. Start or stop possession reporting. **(T-0)**.

2.11.2.2. Coordinate the gain/loss time of transfer with the reciprocating unit. **(T-0)**.

2.11.2.3. Inform the base/depot engine manager of all aerospace vehicle losses, gains, and terminations by providing a copy of the appropriate e-mail message. **(T-1)**.

2.11.3. Criteria and limitations for use of Purpose Identifier Code (PIC) "BQ", "BT", "BU", "PJ", and "PR".

2.11.3.1. PIC "BQ" is not authorized when using an automated communication system and the only reason for the communication with depot or contract supported engineering has been directed by technical order or previous disposition instructions on an existing condition. **(T-1)**.

2.11.3.2. "BQ" is authorized for use when the wing has submitted a request IAW TO 00-25-107, *Maintenance Assistance*, or through an automated system to request depot, or contract supported assistance with a Non-Mission Capable (NMC) condition preventing the aerospace vehicle from flying, requesting a depot or contract field team, equipment, or funding is anticipated from MAJCOM and the following conditions are met (See **Attachment 17** for further guidance):

2.11.3.2.1. No additional field level scheduled or unscheduled NMC driver(s) are in-work, for example, phase. **(T-1)**.

2.11.3.2.2. The unit lacks capability to correct the deficiency at field level and the condition has been validated by quality assurance as a depot level or contract field team repair. **(T-1)**.

2.11.3.3. MAJCOMs shall approve the use of PIC "BT". Use of this code should not exceed a total of 48 hours, however units may request additional "BT" status code time approval through their MAJCOM AVDO if the situation warrants. **(T-1)**.

2.11.3.4. "BU" is authorized to prepare an aerospace vehicle 3 duty days prior to the start of depot level or contract supported maintenance performed at the unit level. "BU" is also authorized for up to 5 duty days after depot level or contract supported maintenance for rebuilding the aerospace vehicle and completing operational checks. During this rebuild period, under no circumstances will parts be cannibalized from the aerospace vehicle while in "BU" PIC. Prior to any cannibalization action(s), units will regain the aerospace vehicle in its primary PIC. **(T-1)**.

2.11.3.4.1. If other major field level maintenance (such as phase), is in-work, "BU" is only authorized for the portion of time that depot level or contract supported work is actually being performed. **(T-1)**.

2.11.3.4.2. "BU" repair instructions outlined in field level technical orders do not constitute depot level or contract supported repair and use of PIC "BU". **(T-1)**.

2.11.3.5. "PJ" is authorized for use from the first day of crating preparation until arrival at new location, reassembly, and ground operational checks are completed. Upon receipt the aerospace vehicle may be possessed in this code no longer than 10 duty days. If an aerospace vehicle is not reassembled or placed in PIC "PR" after 10 duty days, the aerospace vehicle will be changed back to its primary code and the current maintenance status will be reported (such as, NMC). **(T-1)**.

2.11.3.6. "PR" is authorized for aerospace vehicles in storage. The aerospace vehicle will be Full Mission Capable (FMC) or Partial Mission Capable (PMC) prior to being placed in storage and maintained in an MC condition. **(T-1)**. Aerospace vehicles can move from "PJ" directly to "PR" provided the MC requirement was met before shipment. Units will

continue to monitor aerospace vehicles in PICs "PR" or "PJ" to ensure fleet health is maintained. **(T-1)**. If a cannibalization action that creates an NMC condition is required, the aerospace vehicle will be removed from PIC "PR" and status changed to reflect the air vehicles current maintenance status (such as Non- Mission Capable Supply (NMCS)). **(T-1)**. Once aerospace vehicles are placed in PICs "PR" or "PJ", the unit will notify the MAJCOM AVDO of the code change through normal AFI 21-103 message reporting channels. **(T-1)**. Aerospace vehicles in PICs "PR" or "PJ" will continue to be tracked on a daily status sheet to ensure continued fleet health is maintained. **(T-1)**.

2.11.3.7. “XJ” is used for aerospace vehicles or trainers which have been reported to AF/A8PE as excess to the requirements of the possessing command or vehicles designated by HQ USAF as not currently required by a command but are maintained in a serviceable condition. **(T-1)**.

2.11.3.8. “XC” is used for situations when otherwise serviceable aerospace vehicles are not utilized for any AF mission due to the lack of funding or qualified personnel support to effectively operate them due to congressional action. **(T-1)**.

2.12. Criteria for Gaining or Losing Possession. Possession of an aerospace vehicle changes when:

2.12.1. The flight crew of the gaining organization accepts and leaves with the aerospace vehicle unless otherwise stated in an inter-command Memorandum of Agreement (MOA). The time of possession change is the actual time the aerospace vehicle takes off from the losing organization. For aerospace vehicles moved in a "PJ" purpose identifier, the possession status changes at the time the Deployment and Distribution Flight or Traffic Management Flight of the gaining organization accepts the aerospace vehicle.

2.12.2. The procedures for losing possession of an aerospace vehicle depend on the type of asset. Loss of possession criteria for aerospace vehicles: The flight crew of the losing organization, or a neutral flight crew, delivers the aerospace vehicle. The time of possession changes when the engines shut down at the gaining base. **NOTE:** The Air Combat Command/Air Operations Squadron (ACC/AOS) aircrew is considered a neutral crew. The neutral crew is not assigned to the losing or gaining unit. The flying hours and sorties are directly tied to the possessing unit of the aerospace vehicle. Unless specified in a MAJCOM approved MOA, the possessing unit will receive flying hour/sortie credit. This MOA will be coordinated by the MAJCOM AVDO prior to the aerospace vehicle transfer. **(T-1)**. **NOTE:** Loss of possession for reserve component aircraft requires compliance with AFI 16-402.

2.12.3. In the event, an aerospace vehicle is damaged or destroyed:

2.12.3.1. The nearest base with the necessary repair or reclamation capability takes possession. The time of possession change is the time of landing or crash. **(T-1)**.

2.12.3.2. Possession does not change if the parent organization does the repair, reclamation or termination; however the unit AVDO will initiate the proper station location code and possession PIC changes. **(T-1)**.

2.12.4. In the event, a transient aerospace vehicle requires maintenance lasting more than 7 calendar days:

2.12.4.1. The organization performing the maintenance will gain possession of the aerospace vehicle for the purpose of MIS documentation when it is known the work cannot be completed in 7 days. **(T-1)**. **NOTE:** Not Applicable (N/A) for G081 users.

2.12.4.2. Do not change possession if the parent organization does the maintenance. The unit AVDO will change the station location code and the possession PIC to "BL". **(T-1)**.

2.12.4.3. Do not transfer possession for Air Mobility Command (AMC) aircraft in-transit at bases where AMC has transient or enroute maintenance responsibility unless depot assistance is required. **(T-1)**.

2.12.5. An authorized government representative accepts an aerospace vehicle from a contractor on behalf of the AF. In this situation, AFMC becomes the first possessing activity for the new production aerospace vehicle. The AF-AVDO at HQ AFMC processes the gain in coordination with the respective Program Office.

2.13. Criteria for Terminating Possession. Possession terminates when aerospace vehicles are beyond economical repair, transferred to the National Museum of the USAF or at the time the aerospace vehicle meets the termination requirements of this instruction and AFI 16-402. Terminate the aerospace vehicle and cease reporting if it has permanently transferred to non-AF activities such as:

2.13.1. Foreign countries, as applicable.

2.13.2. Other DoD agencies, such as US Army or US Navy.

2.13.3. Other government agencies.

2.13.4. National Museum of the USAF.

2.14. Criteria for Reporting Aerospace Vehicles as Deployed. When sending aerospace vehicles for use at other locations or for specialized maintenance (other than that done by a depot), list such movements and their possession accountability according to the criteria contained in **paragraphs 2.14.1** through **2.14.5**

2.14.1. Satellite operation and detachment. An aerospace vehicle is in a satellite operation or detachment when it is moved to another station and the parent command unit continues to operate and support it. **NOTE:** Do not change possession accountability unless directed by an operation plan (OPLAN). The possessing command is the command to which the flying hours are allocated.

2.14.2. Rotations. An aerospace vehicle is on rotation when direct responsibility for its operation or support changes between Continental United States or overseas activities, commands, or units.

2.14.2.1. Aerospace vehicle flying hours are allocated IAW AFI 11-101, *Management Reports on the Flying Hour Program*; MAJCOMs may not change possession accountability unless the host organization is within their own command. **NOTE:** See **paragraph 2.29.5**

2.14.2.2. When the aerospace vehicle moves as a part of a total unit movement that will not integrate under a host control, the possessing organization stays the same or changes as stated in the OPLAN.

2.14.2.3. Change in station location may be made by MAJCOM option. All reporting is done according to the OPLAN.

2.14.2.4. MAJCOMs will include the time of transfer in the OPLAN describing the movement.

2.14.3. Supporting Exercises.

2.14.3.1. The OPLAN will state possession accountability for aerospace vehicles moved to support intra-command, inter-command, or inter-service missions.

2.14.3.2. If flying hour allocation uniquely allocates the flying hours or utilization for the aerospace vehicle, the command to which the flying hours are allocated is always the possessing command.

2.14.4. Consolidated or centralized repair activities. When an aerospace vehicle is moved for corrosion control, refurbishment, or other maintenance, normal reporting procedures apply unless otherwise directed by the MAJCOM AVDO or MAJCOM approved MOA.

2.14.5. Loaned aerospace vehicles. Possession changes to the command and unit having direct responsibility for using and supporting the aerospace vehicle. The MAJCOM AVDO or operational order directs the change.

2.15. Possession Reporting Criteria for Depot Teams. If an aerospace vehicle goes in for maintenance by contract or depot field teams, transfer possession according to these criteria:

2.15.1. For field teams, contract field team/depot field team, performing maintenance or modifications, the owning unit AVDO reports possession changes for both the owning and depot units. **(T-1)**.

2.15.1.1. Transfer possession to AFMC in purpose identifier "DJ" when the operating command receives formal AFMC acknowledgment of repair responsibility per TO 00-25-107, but before the team starts the repair. **(T-1)**.

2.15.1.2. Change possession to PIC "DM" when the contract field team/depot field team begins maintenance, repair, or modification on the aerospace vehicle. **(T-1)**.

2.15.1.3. Change the aerospace vehicle possession PIC to "DR" only if an AFMC aircrew will perform a functional check flight. **(T-1)**.

2.15.1.4. Possession returns to the owning organization if:

2.15.1.4.1. The aerospace vehicle has received all assigned work and the required operational check or functional check flight (if part of the workload agreement) is accomplished.

2.15.1.4.2. The host or operating organization receives, accepts, and controls the aerospace vehicle.

2.15.1.4.3. The host or operating organization accomplishes a permanent inventory loss transaction ("TP").

2.15.2. Other field teams. If an aerospace vehicle receives depot field team maintenance, other than stated above, the command with control responsibilities over the team doing the work possesses the aerospace vehicle.

2.15.2.1. Specific responsibilities will be stated in the workload agreement.

2.15.2.2. The host unit will do the required inventory reporting.

2.16. Notifying MAJCOMs of Possession Changes. Accurate reporting of possession changes is essential in order for the AF to accurately account for the location and use of the aerospace vehicle inventory. Possession change messages are required for all aerospace vehicle transfers.

2.16.1. For aerospace vehicle transfers, both reporting organizations will use the same Zulu time and date. **(T-1)**.

2.16.2. MAJCOMs determine procedures for reporting changes of possession within the command.

2.16.3. MAJCOMs will establish procedures for requesting use (training, CANN, TCTO, configuration changes) of non-possessed aircraft resulting from PIC changes with the applicable PM or equivalent engineering authority in the MAJCOM supplement to this AFI.

2.17. Gain Message, Aerospace Vehicle Possession Change Report. The unit or depot AVDO of the organization gaining the aerospace vehicle sends a gain email message not later than the first workday after the possession changes. **(T-1)**. See **Attachment 10** for a sample gain message and instructions for preparing it.

2.18. Loss Message Aerospace Vehicle Possession Change Report. The unit or depot AVDO of the organization losing possession of an aerospace vehicle sends a loss email message not later than the first workday after the possession change takes place. **(T-1)**. On new production aerospace vehicles where engines are tracked as outlined in TO 00-25-254-1, the AF program office will include engine serial numbers on the loss message. See **Attachment 11** for a sample loss message and instructions for preparing it.

2.19. Termination Message, Aerospace Vehicle Termination Report. The unit or depot AVDO of the organization losing accountability of an aerospace vehicle will send a termination email message not later than the first workday after it has been decided the aerospace vehicle should be terminated (If a Safety Investigation Board (SIB)/Accident Investigation Board (AIB) is convened the aircraft must be released back to maintenance prior to aircraft termination). **(T-1)**. See **Attachment 12** for a sample termination message and instructions for preparing it. **NOTE:** If a losing organization has removed the engine(s) from an aerospace vehicle prior to the aerospace vehicle being terminated then the aerospace vehicle termination message will state at item 12 that no engine(s) were installed on the aerospace vehicle. For aerospace vehicles being terminated by AMARG, engine serial numbers do not need to be listed on the termination message. The AMARG Engine Manager will continue to report all engines IAW TO 00-25-254-1. **(T-1)**.

2.20. PIC Change Message, Aerospace Vehicle PIC Change Report. When changing a PIC, the possessing unit or depot AVDO will send a message, via an email, not later than the first workday after the change. **(T-1)**. See **Attachment 13** for a sample possession PIC change message and instructions for preparing it.

2.21. Mission, Design, and Series (MDS)/Configuration Identifier Change Message, Aerospace Vehicle MDS/Configuration Identifier Change Report. The AVDO of the organization changing the MDS or configuration identifier will send a MDS/configuration identifier change e-mail message. **(T-1)**. Obtain proper authorization from the MAJCOM AVDO

before making the change, and send a message not later than the first workday after the change. **(T-1)**. See **Attachment 14** for a sample MDS/configuration identifier change message and instructions for preparing it.

Section 2D—Aerospace Vehicle Status Reporting

2.22. Reporting Maintenance Status. The reporting requirements in this section are exempt from licensing IAW AFI 33-324.

2.22.1. Use multiple status reporting to the maximum extent the MIS allows. Multiple statuses means an aerospace vehicle can be broken out for more than one condition at the same time. **NOTE:** See **paragraph 2.31** of this instruction.

2.22.2. To determine the possession PIC to use for calculating status metrics refer to TO 00-20-2, *Maintenance Data Documentation*.

2.22.3. Status reporting for permanently assigned Ground Instructional Trainer Aircraft and Training Aid Aircraft is not required. **NOTE:** For training aid aircraft this only applies to the "TA" PIC.

2.22.4. Aircraft that accomplish NC3 as part of an assigned Basic Systems List (BSL) duties may be required to report maintenance and equipment status data for the AN/USQ-225 Weapon System. The reporting instructions for this weapon system are found in **Chapter 12** of this instruction.

2.23. Determining Maintenance Status.

2.23.1. **Attachment 2 gives a list of maintenance and condition status codes and their definitions, which are based on DoDI 3110.** 05. These codes describe the capability of an aerospace vehicle to do its assigned missions, that is, a unit's specifically assigned wartime, training, or test missions as specified in:

2.23.1.1. The unit's Designed Operational Capability statements and Defense Readiness Reporting System.

2.23.1.2. Unit training syllabuses.

2.23.1.3. Test mission requirements.

2.23.1.4. Minimum Essential Subsystems List (MESL) or MDS equivalent.

2.23.2. Report any aerospace vehicle not FMC with a maintenance status code determined by the following criteria:

2.23.2.1. Units will report an aerospace vehicle that can perform at least one, but not all of its assigned missions as PMC and report an aerospace vehicle that cannot perform any of its assigned missions as NMC. **(T-0)**.

2.23.2.2. Add the letter M (maintenance), S (supply), or B (both maintenance and supply) to show the reason the aerospace vehicle is PMC or NMC. **(T-0)**.

2.23.2.3. Aerospace vehicles in status codes Non-Mission Capable Maintenance (NMCM) and Non-Mission Capable Both Maintenance and Supply (NMCB) also show if the needed maintenance is scheduled (S) or unscheduled (U). **(T-1)**.

2.23.2.4. The dual status condition--NMCB or Partial Mission Capable Both (PMCB)--starts when an aerospace vehicle requires both maintenance and supplies. **(T-1)**.

2.23.2.5. Change an existing maintenance or supply condition to the dual condition if discovering a second problem. For example, when an aerospace vehicle is in NMCM maintenance status code and a discrepancy that results in a valid Mission In-Capable (MICAP) supply part is found (NMCS), change the reported status to NMCB. **(T-1)**.

2.23.2.6. Change the dual condition when either the maintenance or the supply problem has been rectified. For example, if the maintenance problem is corrected before the supply problem, change the NMCB status code to NMCS (or vice versa from NMCB to NMCM when the part becomes available but maintenance is not). **(T-1)**.

2.23.2.7. Work Unit Codes (WUC)/Logistics Control Numbers (LCN) (F-22, F-35, and CV-22). WUCs/LCNs are an important part of the MIS status reporting. WUC/LCNs determine which maintenance AF Specialty Codes get credit for maintenance actions during Logistics Composite Model simulations. WUCs/LCNs determine subsystem problems and repair actions associated with a piece of equipment or a system. A proper WUC/LCN is required to be entered into the MIS status reporting when an equipment problem is discovered or repaired. **(T-1)**. If a specific WUC/LCN is not known initially due to troubleshooting, then a system or subsystem WUC/LCN may be used until the faulty component is identified. When the equipment is returned to service or when parts are placed on order, it is the expeditor's responsibility to provide the maintenance operations center (MOC) with the proper WUC/LCN to be used for the PMC or NMC status reporting period. **(T-1)**. The use of 000 and or 00 will not be used when a more specific WUC is available. **(T-1)**. **NOTE:** Units will not use indirect labor codes.

2.23.3. Scheduled or unscheduled maintenance status stops when maintenance is completed according to applicable technical data using the following criteria:

2.23.3.1. When all ground operational checks or cure checks are complete.

2.23.3.2. If in-flight operational checks are required by technical data, maintenance status will stop when all actions leading up to the operational check are completed.

2.23.3.3. When lack of parts which limits the mission is verified.

2.23.3.4. If a functional check flight is required IAW TO 1-1-300, *Acceptance/ Functional Check Flight and Maintenance Operational Checks,* -6 functional check flight requirements, or any other applicable technical data, maintenance status will not stop until the functional check flight is completed.

2.23.4. Supply status starts after all of these actions occur:

2.23.4.1. The aerospace vehicle requires an essential part.

2.23.4.2. A valid demand on supply and/or depot is made. **NOTE:** When the engine manager makes a demand on depot for a supported replacement engine to fill an aerospace vehicle hole for which no serviceable or repairable asset is available at the unit.

2.23.4.3. Maintenance verifies the part is essential.

2.23.4.4. Maintenance and supply together verify that the needed part (serviceable or repairable and not awaiting parts) is not available on base (does not apply to contract logistics support or contract operated and maintained base supply provided parts).

2.23.5. Supply time stops when maintenance receives the part(s). If maintenance cannot accept the part(s) when available, supply status time stops at the time supply attempts to deliver the part(s). **NOTE:** Supply time will continue if a part is received from LRS supply activities, but will be sent off-base to a contractor facility/depot for additional adjustments/configuring/drilling/ programming. In this instance, the supply time will stop when the part is returned to maintenance from off base.

2.23.6. When an aerospace vehicle discrepancy is identified during flight, maintenance status starts at the time the aerospace vehicle returns to its parking spot/engine shutdown.

2.23.7. When an aerospace vehicle discrepancy is identified during ground operation, maintenance status starts at the time the discrepancy was found.

2.23.7.1. It is imperative that aerospace vehicle status accurately reflects the capability of the aerospace vehicle to perform its assigned missions. While the majority of red X discrepancies require an aerospace vehicle to be reported in a non-mission capable condition, some red X entries do not. These entries do not necessarily affect the status or the mission capability of the aerospace vehicle and do not require a maintenance repair action. Examples of red X entries that do not affect the status and mission capability are:

2.23.7.1.1. External tanks/pylons ejector cartridges removed.

2.23.7.1.2. Openings/panels taped/covered prior to and during a wash.

2.23.7.1.3. Protective covers installed.

2.23.7.1.4. Ejection seats de-armed for static display/training.

2.23.7.1.5. Reconfiguration/installation/removal of primary mission equipment. This is not intended to be an all-encompassing list as there may be other red X entries that fall into this category. **NOTE:** Impounded aircraft/equipment are not considered mission capable.

2.23.8. When maintenance places an MC aerospace vehicle into scheduled maintenance on the printed flying schedule/maintenance plan, the status changes only if it is determined that maintenance cannot, and will not return the aerospace vehicle to a MC status within 2 hours. **(T-1)**. The authorized use of the two hour rule only applies to schedule maintenance printed in the weekly schedule/maintenance plan and does not apply to and will not be used for any unscheduled maintenance events. **(T-1)**.

2.23.8.1. If maintenance performs planned scheduled maintenance on an otherwise MC aerospace vehicle and can and will return, or is scheduled to return, the aerospace vehicle to MC status within 2 hours, do not report the aerospace vehicle as NMC. **(T-1)**.

2.23.8.2. If a discrepancy is found during scheduled maintenance which causes the aerospace vehicle to be declared NMC, and maintenance will need more than 2 hours to return the aerospace vehicle to MC status, NMC status starts when the discrepancy is found. **(T-1)**.

2.23.9. Aerospace vehicles entering major inspections (for example; phase, periodic, Aircraft Structural Integrity Program, isochronal, or home station check inspections) will be coded NMC using the support general WUC for the look phase portion of the inspection. The NMC time using the support general WUC will start when the work cards are initiated and continue through the look phase portion of the inspection. Normal NMC driver WUC reporting applies after the look phase portion of the inspection is complete. **(T-1)**.

2.23.10. Management uses certain groupings of status codes to perform summaries, analyses, briefings, and so on. These groupings show total supply and maintenance limitations. A complete list of these groupings is in **Attachment 2**.

2.24. Pacing Items.

2.24.1. Units will report the WUC/LCNs for the mission limiting condition that will take the longest for maintenance to correct on an aerospace vehicle in PMC and NMC status. Units will use a minimum of the 3-digit WUC/LCN when reporting the driving NMC condition.

2.24.2. All maintenance status codes are defined and associated with a condition status code as shown in **Attachment 2**. **NOTE:** For aerospace vehicles with systems awaiting operational check, units will report the status of the next highest NMC/PMC driver (if another mission limiting system is reported). Status reported will not be below that of system requiring operational check. When all mission limiting conditions are corrected, the unit will then report the system requiring operational check as the system driver. **(T-1)**.

2.24.3. When accomplishing single/multiple status reporting, use the following order of precedence, from most severe to least severe: Non-Flyable: NMCB(A), NMCB(B), NMCS(E), NMCM(D), NMCM(C). Flyable: NMCB(L), NMCB(K), NMCS(P), NMCM(M), NMCM(N), PMCB(A), PMCS(H), PMCM(G), FMC.

2.25. Minimum Essential Subsystems List (MESL) or MDS equivalent.

2.25.1. MESLs lay the groundwork for reporting the status of aerospace vehicle capability. MESLs list the minimum essential systems and subsystems that must function on an aerospace vehicle for it to perform specifically assigned unit wartime, training, test or other missions. The MESL brings together the Full Systems List (FSL) and the BSL.

2.25.1.1. The BSL lists a unit's specifically assigned wartime, training, and test missions and the systems and subsystems that must function for a unit to accomplish those missions.

2.25.1.2. The FSL lists all systems and subsystems needed for full mission performance. It lists the essential systems and subsystems that must function to do all BSL missions (specifically assigned unit wartime, training, or test missions), and other kinds of unit sorties such as Programmed Depot Maintenance delivery flights, aerospace vehicle transfer flights, cross country flights, or other training sorties units fly.

2.25.2. The MESL allows for comparison of aerospace vehicle systems, subsystems, and components, by WUC, against the FSL and BSL across the page. In each column, mark the equipment that must function with an "X".

2.25.3. A system may have an "X" in the FSL column only or in the FSL column and any or all of the BSL columns.

2.25.3.1. If there is an "X" in the FSL column only, the equipment does not have any specifically assigned unit wartime, training, or test mission. The equipment may have other kinds of unit sorties or missions to fly such as those listed in **paragraph 2.25.1.2**

2.25.3.2. If there is an "X" in the FSL column and any or all of the BSL columns, the equipment must be operational for the mission identified by the column heading.

2.25.3.3. If any system or subsystem with an "X" in the FSL column only is not functioning, put the aerospace vehicle in maintenance status code PMC.

2.25.4. If any system or subsystem with an "X" in the FSL and all BSL columns is not functioning, the aerospace vehicle cannot do any mission and is status code NMC. If any BSL column does not have an "X" for the inoperative system, the status code is PMC.

2.25.5. Determine the adverse impact of non-functioning components within listed systems or subsystems on a case by case basis. Components may appear on a MESL if the component is the only part of the subsystem that must be operational.

2.25.6. MAJCOMs in conjunction with the applicable lead command may provide weapon system specific guidance for determining and reporting of degraded system status against mission requirements, for example in supplements or addendums to this AFI.

2.25.7. Units with aerospace vehicles not equipped, and/or not programmed to be equipped, with a listed system or subsystem should not report status on that equipment, unless the MESL states otherwise.

2.26. Developing the MESL. MESLs will be developed IAW AFPD 10-9, *Lead Command Designation and Responsibilities for Weapon Systems*. Lead commands will ensure MESLs list only the minimum essential aerospace vehicle systems or subsystems that must function in order for a unit to accomplish its mission. A sample MESL is shown in **Table 2.1**. **(T-1)**.

2.26. (ANG) Minimum Essential Subsystems List (MESL) or Model Design Series Equivalent

2.26.1. Units can fly missions and sorties other than specifically assigned wartime, training, or test missions. Since the FSL is an all-inclusive list, build it to include all systems and subsystems on any or all BSLs and those required for sorties and missions not specifically assigned to that unit by the Designed Operational Capability, aircrew training, or flight test taskings.

2.26.1. **(ANG)** The MESL is the basis of status reporting IAW AFI 21-103. MESLs lay the ground work for reporting the status of aircraft. It list the minimum essential systems and subsystems that must work on an aircraft for it to perform specifically assigned unit wartime, training, test or other missions. Mission Ready Available (MRA) is used in Force Readiness Reporting and denotes Mission Capable (MC) aircraft capable of being configured for a contingency mission in accordance with the Commander, Air Combat Command OMNIBUS Plan.

2.26.1.1. **(Added-ANG)** Aircraft status for generation and deployment: The goal is to generate or deploy Fully Mission Capable (FMC) aircraft, recognizing status actually achieved may be less than FMC. A Not Mission Capable (NMC) aircraft may be deployed provided it is safe for flight and can be configured and generated to Mission Ready Available (MRA) status at an employment site.

2.26.1.2. **(Added-ANG)** All ANG units will generate, or deploy and regenerate, using ANG MESLs. Major Command (MAJCOM) differences in MESLs are acknowledged. Upon actual deployment to another MAJCOM theater, the gaining MAJCOM has the responsibility to resource and specify the unit's requirements and resource the differences in support/mission equipment.

2.26.2. The MESL does not portray the role these "other" type missions and sorties may play. The aerospace vehicle status will be PMC if an inoperative system or subsystem is on the FSL only because of the limitation to full mission performance.

2.26.2. **(ANG)** Reading the RC-26B MESL. The RC-26B MESL is read by comparing the systems stated by work unit code (WUC) against the Full Systems List (FSL) and all applicable Basic Systems Lists (BSL) across the page. Each unit's Design Operational Capability (DOC) statement determines applicability of BSL columns. Qualifying notes are used to define aircraft expectations and help explain complex degraded mission systems such as suspension equipment.

2.26.3. MESL BSL columns show standard mission codes for specific wartime, aircrew training, and test missions assigned to a unit. Lead commands may build and use additional unique mission codes when needed as long as the codes are standardized. Standard MESL mission codes are listed in **Attachment 3**.

2.26.3. **(ANG)** The aircraft MESLs incorporate all ANG assigned aircraft; and therefore, it is important to compare only those columns listed in the MESL which are applicable to the unit's assigned aircraft. For example, units with CC (combat) coded aircraft would determine and report status using only the FSL and BSL columns related to their DOC statement. Units with TF (training) coded aircraft would determine and report status using only the FSL and TNG columns, and units with CB (test) coded aircraft would determine and report status using only the FSL and TST columns.

2.26.3.1. **(Added-ANG)** Units with multiple coded aircraft will ensure status is reported using the MESL columns appropriate to the individual aircraft assignment code. If any system or subsystem with an "X" in the FSL and all BSL columns is not working, the aircraft cannot do any mission and is status code NMC. If any BSL column does not have an "X" for the inoperative system, the status code is PMC.

2.26.4. HQ AFMC has sole responsibility and authority to develop and implement MESLs for research, development, test and evaluation missions and aerospace vehicles in support of research, development, test and evaluation. HQ AFMC will review AFI 11-2FTV3, *Flight Test Operations Procedures* and the applicable AFI 11-2 MDS series publication(s) when developing and implementing MESLs.

Table 2.1. Sample MESL.

F-15 MINIMUM ESSENTIAL SUBSYSTEMS LIST (MESL)					
			FSL	**BSL**	
NO.	**WUC**	**SYSTEM/SUBSYSTEM**		**Air Superiority (ASY)**	**Air Defense Conventional (ADC)**

1.	11	AIRFRAME	X	X	X
2.	12	COCKPIT & FUSELAGE	X	X	X
3.	13	LANDING GEAR	X	X	X
4.	14	FLIGHT CONTROLS	X	X	X
5.	23	TURBOFAN POWER PLANT	X	X	X
6.	24	AUXILIARY POWER PLANT	X	X	X
7.	41	AC/PRESSURIZATION	X	X1	X1
8.	42	ELECTRICAL POWER SUPPLY	X	X	X
9.	44A	EXTERNAL LIGHTING SYSTEM	X2	X2	X2
10.	44	INTERNAL LIGHTING SYSTEM	X	X	X
11.	45	HYDRAULIC SYSTEM	X	X	X
12.	46	FUEL SYSTEM	X	X	X
13.	47	OXYGEN SYSTEM	X	X	X
14.	49	MISCELLANEOUS UTILITIES	X	X	X
15.	51	INSTRUMENTS	X	X	X
16.	52	AUTOPILOT	X		
44.	76K	COUNTERMEASURES DISPENSER	X	X	X
45.	91	EMERGENCY EQUIPMENT	X	X	X
46.	97	EXPLOSIVE DEVICES AND COMPONENTS	X	X	X

NOTES: GENERAL: Rear cockpit systems/subsystems/components not required to be operational for BSLs.

1. Manual mode only required.

2. As required by AFI 11-202V3, *General Flight Rules*.

3. HAVE QUICK & Secure Voice capable.

4. All eight AIM-120 & four/AIM-9 stations required for FMC, any combination of six required for PMC.

Table 2.1. (ANG) RC-26B.

	ATA	System/Subsystem	FSL	BSL		BSL	
				Block 20		Block 25	
				MSN	TRN	MSN	TRN
	2100	**Air Conditioning**					

1	2121	Cockpit Fresh Air Fan	X				
2	2130	Auto Pressurization Controller	X	XI	XI	XI	XI
3	2130	Manual Pressurization Controller	X	X2	X2	X2	X2
4	2130	Air Cycle Machine (2)	X	Xl4	Xl4	Xl4	Xl4
5	2132	Cabin Rate of Climb Indicator	X				
6	2132	Cabin Altitude Annunciator	X				
7	2132	Differential Press/Cabin Alt Indicator	X	X	X	X	X
8	2133	Outflow *I* Safety Valve	X	X	X	X	X
9	2133	Cabin Dump System	X	X	X	X	X
10	2150	Air Conditioner	X	X3	X3	X3	X3
11	2160	Auto temp control system	X	X1	X1	X1	X1
12	2160	Manual Temp Control system	X	X2	X2	X2	X2
	2200	**Auto Flight**					
13	2210	Autopilot (2)	X	X14		X14	
	2300	**Communication**					
14	2310	PRC-117/F Radio with Control PRC-117/G Radio with Control				X19	X19
15	2310	ARC-231 (all components required)		X21	X21	X20	X20
16	2310	HF	X	X7		X7	
17	23ll	RMU-556 (2)	X	X14	X14	Xl4	Xl 4
18	2320	KDA-557 or COM 1 remote	X	X5	X5	X5	X5
19	2321	UHF ARC 164	X	X22			
20	2323	MSO KY-58 (Secret Service Radio)	X	X6			
21	2322	MSO 800 MHZ Converter (UHF 3)	X				
22	2332	VHF (2)	X	Xl4	Xl4	X14	X14

23	2312	MSO Wulfsberg C/XTS-5000	X				
24	2335	ICRI System	X				
25	2336	TDFM System	X				
26	2340	MSO Radio Foot Switch	X	X23	X23	X23	X23
27	2340	MSO MIC Switch	X	X24	X24	X24	X24
28	2340	Audio Control Panel Aircrew	X	X	X	X	X
29	2340	Audio Control Panel MSO	X	X	X	X	X
30	2340	Audio Control Panel LEA 1, 2, 3	X				
31	2340	Cockpit Speaker (Cockpit/MSO)	X				
32	2340	Interphone Headset Jacks	X	X	X	X	X
33	2340	Hand Microphone Aircrew	X				
34	2360	Static Discharge Wicks	X	X	X	X	X

	ATA	System/Subsystem	FSL	BSL		BSL	
				Block 20		Block 25	
				MSN	TRN	MSN	TRN
35	2370	Cockpit Voice Recorder	X				
2400		**Electrical Power**					
36	2422	Inverter (2)	X	Xl4	X14	X14	X14
37	2422	MSO 60 Hz Inverter	X	X	X	X	X
38	2425	AC Volt Meter	X	X	X	X	X
39	2425	AC Bus Fail Annunciator	X				
40	2431	Battery Fault Warning (2) Annunciator	X	X	X	X	X
41	2432	Battery 2 Each (Both Required)	X	X	X	X	X
42	2432	MSO Aux Battery	X				
43	2434	DC Generator 2 Each (Both Required)	X	X	X	X	X
44	2437	Battery Disconnect Annunciator (2)	X				
45	2437	DC Generator Fail Annunciator	X				
46	2437	DC Volt Meter	X	X	X	X	X
47	2437	DC Ammeter	X	X	X	X	X

48	2440	GPU Plug-In Annunciator	X				
49	2460	Standby Instrument Power system	X	X	X	X	X
	2500	**Cabin Equipment**					
50	2510	Cockpit Restraint Harness	X	X	X	X	X
51	2510	Seats P/CP	X	X	X	X	X
52	2520	Passenger Seat Belt	X	X	X	X	X
53	2520	MSO Restraint Harness	X	X	X	X	X
54	2520	Seats Minimum for MSO &	X				
55	2540	Lavatory	X				
56	2560	First Aid Kit	X	X	X	X	X
57	2560	Crash Axe	X	X	X	X	X
58	2560	Portable Fire Extinguisher (Both	X	X	X	X	X
59	2561	Life Jackets (every seat)	X	X7	X7	X7	X7
60	2562	Emergency Locator Transmitter	X	X	X	X	X
61	2564	Life raft	X	X7	X7	X7	X7
	2600	**Fire Protection**					
62	2610	Engine Fire Detection System	X	X	X	X	X
63	2611	Smoke Detection Annunciators Both Req	X	X	X	X	X
64	2612	Fire Protection Annunciators	X	X	X	X	X
65	2620	Engine Fire Extinguishing System	X	X	X	X	X
66	2630	Wing Overheat Warning	X	X	X	X	X

	ATA	System/Subsystem	FSL	BSL Block 20		BSL Block 25	
				MSN	TRN	MSN	TRN
	2700	**Flight Controls**					
67	2720	Yaw Damper	X				
68	2731	Pitch Trim System	X	X	X	X	X
69	2741	Stab Position Indicator	X	X	X	X	X
70	2741	Trim-in-motion Sonalert	X	X	X	X	X
71	2741	Out-of-trim Sonalert	X	X	X	X	X

72	2750	Flap System	X	X	X	X	X
73	2750	Flap Position Indicator	X	X	X	X	X
74	2770	Control Lock system	X	X	X	X	X
75	2780	SAS Fail Annunciator (2)	X	X14	Xl4	Xl4	X14
	2800	**Fuel**					
76	2821	Fuel Filter Annunciator Both Required	X	X	X	X	X
77	2822	Eng Fuel Boost Pumps Aux & Primary	X	X9	X9	X9	X9
78	2823	Fuel Shutoff Valve (Both Engines)	X	X	X	X	X
79	2823	Fuel Transfer Pump Annunciator Both Req'd	X	X	X	X	X
80	2824	Fuel Crossflow Valve	X	X	X	X	X
81	2840	Fuel Crossflow Annunciator	X	X	X	X	X
82	2841	Cockpit Fuel Quantity Indicator	X	X	X	X	X
83	2841	Fuel Consumed Indicator	X	X	X	X	X
	2900	**Hydraulic Power**					
84	2910	Hydraulic Shutoff Valve both required	X	X	X	X	X
85	2913	Hydraulic Pump both required	X	X	X	X	X
86	2923	Aux Hydraulic System	X	X	X	X	X
87	2931	Hydraulic Pump Pressure Gauge	X	X10	X10	X10	X10
88	2931	Hydraulic Low Press Warn Light Both Req	X	X	X	X	X
	3000	**Ice and Rain Protection**					
89	3010	SAS Heat System	X	X	X	X	X
90	3010	Wing and Tail De-Ice System	X	X	X	X	X
91	3010	De-Ice Pressure Gauge	X				
92	3020	Engine Intake Heat Annunciator Both Req	X	X	X	X	X
93	3020	Engine Inlet Anti-Icing	X	X	X	X	X

94	3020	Oil Cooler Inlet Anti-Icing	X	X	X	X	X
95	3020	Oil Cooler Duct Heat Cycle Lights	X	X	X	X	X
96	3030	Pitot Heat	X	X	X	X	X
97	3030	Pitot Heat Load *I* Ammeter	X	X	X	X	X
98	3040	Windshield Defog Fan	X				
99	3040	Windshield Heat System Annunciator Both Required	X	X	X	X	X
100	3040	Windshield Overheat Warning Lights	X	X25	X25	X25	X25
101	3040	Windshield Heat System	X	X	X	X	X
	ATA	System/Subsystem	FSL	BSL Block 20		BSL Block 25	
				MSN	TRN	MSN	TRN
102	3040	Windshield Wipers	X				
103	3060	Propeller De-Icing System	X	X	X	X	X
104	3060	Propeller Heat Ammeter	X	X	X	X	X
105	3080	SAS De-ice Annunciator	X	X	X	X	X
3100		**Instruments**					
106	3120	Clock	X	X14	X14	X14	X14
107	3130	Flight Data Recorder	X				
3200		**Landing Gear**					
108	3200	Landing Gear Position Indicator Lights	X	X	X	X	X
109	3200	Landing Gear Position Aural Warning	X	X	X	X	X
110	3220	Nose Wheel Steering	X				
111	3240	Parking Brake	X				
112	3260	Landing Gear Door Position Annunciators	X	X	X	X	X
113	3260	Nose Wheel Steering Annunciator	X	X	X	X	X
114	3260	Nose Wheel Steering Fail Annunciator	X	X	X	X	X
3300		**Lights**					

115	3310	Cockpit Instrument Lighting	X	X11	X11	X11	X11
116	3310	Cockpit Panel Lighting	X	X11	X11	X11	X11
117	3310	Cockpit Flood Lighting	X				
119	3320	Passenger Notice Lights	X				
120	3320	Cabin Isle Lights	X				
121	3320	Cabin Overhead Lights	X				
122	3320	MSO Station Lights	X				
123	3320	Entrance Lights	X				
124	3340	Landing Lights	X	X11	X11	X11	X11
125	3340	Position Lights	X	X11	X11	X11	X11
126	3340	Collision Avoidance Lights	X	X11	X11	X11	X11
127	3340	Collision Avoidance Lights (When I.R. beacon is installed.)	X			X4	X4
128	3340	Recognition Lights	X	X11	X11	X11	X11
129	3340	Taxi Lights	X	X11	X11	X11	X11
130	3340	Wing Ice Light	X	X11	X11	X11	X11
3400		**Navigation**					
131	3412	Outside Air Temp Indicating System	X	X	X	X	X
132	3413	Vertical Speed Indicator (2)	X				
134	3414	Air Speed Indicator (2)	X	X	X	X	X
135	3416	Altimeter (2)	X	X	X	X	X
136	3417	Air Data Computer # 1	X	X	X	X	X
137	3417	Air Data Computer # 2	X				
138	3418	Stall Avoidance	X	X	X	X	X
	ATA	System/Subsystem	FSL	BSL Block 20		BSL Block 25	
				MSN	TRN	MSN	TRN
139	3419	SAS Fail Annunciator (2)	X	X14	X14	X14	X14
140	3420	SAS Indicator (2)	X	X27	X27	X27	X27
141	3421	Attitude Indicator	X	X	X	X	X
142	3421	Standby ADI	X	X	X	X	X
143	3423	Magnetic Compass	X	X	X	X	X
144	3424	Inclinometer	X				
145	342S	Heading Indicators (2)	X	X	X	X	X

146	342S	Radio Altimeter (2)	X				
147	342S	KNS 660	X	X28	X28	X28	X28
148	342S	EFIS Both Required	X	X	X	X	X
149	342S	Flight Director (2)	X				
150	3434	Marker Beacon	X				
151	3442	Weather Radar	X				
152	3444	GPWS	X	X	X	X	X
153	344S	TCAS	X	X	X	X	X
154	34SI	DME	X	X30	X30	X30	X30
155	34SI	TACAN	X				
156	34S2	ATC/IFF Transponder	X	Xl2	X	X12	X
157	34S2	IFF MODE 4	X	Xl2		X12	
158	34S4	VOR Radio Navigation (2)	X	X29	X29	X29	X29
159	34S4	ILS Radio Navigation (2)	X	X14	X14	X14	X14
160	34 S S	ADF	X	X7	X7	X7	X7
161	34S7	Aircraft GPS	X				
	3500	**Oxygen**					
162	3SIO	Crew Oxygen System	X	X	X	X	X
163	3520	Emergency escape breathing devices (each seat without ERP)	X	X17	X17	X17	X17
164	3520	MSO Portable Oxygen Bottle w/ERP	X	X	X	X	X
165	3520	P/CP Oxygen Mask (ERP)	X	X	X	X	X
166	3520	Passenger Oxygen Masks (each seat)	X	X	X	X	X
167	3520	Passenger Oxygen -System	X	X	X	X	X
	3600	**Bleed Air**					
168	3600	Bleed Air Source (2)	X	X14	X14	X14	X14
	3700	**Vacuum**					
169	3720	Suction Gage	X	X15	X15	X15	X15
170	3720	LOW Suction Warning Annunciator	X	X	X	X	X
	5200	**Doors**					
171	5230	Cargo Door Warning Ann.	X	X	X	X	X
172	5270	Cabin Door Warning Ann.	X	X	X	X	X
			FSL	BSL		BSL	

	ATA	System/Subsystem		Block 20		Block 25	
				MSN	TRN	MSN	TRN
173	6100	NTS System	X	X	X	X	X
174	6121	Propeller Synchrophaser	X				
	7700	**Engine Indicating**					
175	7710	Fuel Flow Indicator	X	X	X	X	X
176	7720	Fuel Pressure Indicator	X	X	X	X	X
177	7730	Single Redline Limiter (SRL) Off Annunciator	X	X	X	X	X
178	7740	Single Redline Limiter (SRL) Computer	X	X26	X26	X26	X26
179	7750	Torque Indicator	X	X	X	X	X
180	7760	RPM Indicator	X	X	X	X	X
181	7770	EGT Indicator	X	X	X	X	X
182	7780	EGT Compensator	X	X	X	X	X
183	7790	BETA Annunciators Both Required	X	X	X	X	X
184	7791	Temp Limiter	X	X16	X16	X16	X16
	7900	**Engine Oil**					
185	7730	Oil Pressure Gauge	X	X	X	X	X
186	7730	Oil Pressure Annunciator	X	X	X	X	X
187	7730	Oil Temperature Indicator	X	X	X	X	X
188	7730	Chip Detector	X	X	X	X	X
	8200	**Water Injection**					
189	8200	CAWI System	X	X	X	X	X
190	8200	CAWI Quantity Gauge	X	X	X	X	X
191	8200	CAWI Pump Annunciator Both Required	X	X14	X14	X14	X14
	9700	**Image and Video**					
192	9700	MSO Starfire HD Turret	X	X31	X31		
193	9700	MSO 380 HD Turret	X			X31	X31
194	9700	MSO Mission Computer 1 (MC 1)	X			X31	X31
195	9700	MSO Mission Computer 1 (MC 2)	X			X31	X31

196	9700	MSO Mission Computer (Aerocomputer)	**X**	X31	X31		
198	9700	MSO Integrated Keyboard/Trackball	X	X31	X31	X31	X31
199	9700	MSO Removable Hard	X			X31	X31
200	9700	MSO Flat Panel Display	X	X31	X31		
201	9700	LEA HD Display (On Top of MSO Station)	X				
202	9700	RT MSO Top and Bottom Flat Panel Displays	X			X31	X31
202	9700	LT MSO Stowable Flat Panel Display	X				
204	9761	MSO Digital Video Recorder (2)	X				
205	9761	Video Select Unit	X			X31	X31
206	9761	Ethernet Switch/Router	X			X31	X31
	ATA	System/Subsystem	FSL	BSL		BSL	
				Block 20		Block 25	
				MSN	TRN	MSN	TRN
207	9761	MSO Laser Illuminator Control Panel	X	X31	X31	X31	X31
208	9761	MSO ICS Control Panel	X	X31	X31	X31	X31
209	9761	Mission Power Control Panel	X	X31	X31	X31	X31
210	9761	Cockpit Display Unit	X	X31	X31		
211	9761	INMARSAT	X				
212	9761	VORTEX	X				
213	9761	DRAGOON	X				
214	9761	Mission Tablets (3)	X				
215	9761	Counter Measures Dispenser System (SPS)	X				
216	9761	Missile Warning Sensor System (MWS)	X				

Notes:
1. NMC if manual is inoperative.
2. NMC if automatic is inoperative.
3. Warm weather ops with air conditioner inoperable may severely degrade crew/passenger performance, mission status at pilot discretion.
4. Required OCONUS.
5. PMC if both RMU 556 Control Display Units are operative
6. NMC if KY-58 is Required. (KY-58 is Maintained by Military)
7. Required for Over Water Operations.
8. Deleted / Not Used
9. Each engine required to have one operable boost pump.
10. PMC if both low hydraulic pressure warning lights are operative.
11. NMC for night. PMC for day.
12. NMC if both IFF/SIF and commercial transponder are inoperable. NMC when Mode 4 required for Military Operations.
13. NMC if gyro pitch and band indicators are inoperative on both sides.
14. PMC with 1 operative.
15. PMC if low suction annunciator is operable.
16. NMC if either bypass valve failed in open position. PMC if either or both bypass valves are failed in the closed position.
17. If installed. Military Maintained.
18. Deleted / Not Used
19. PMC with 1 operative ARC-231.
20. PMC with operative PRC-117G
21. PMC with ARC 164 radio operative.
22. PMC with ARC 231 radio operative.
23. PMC with MSO hand mic switch operative.
24. PMC with MSO foot mic switch operative.
25. PMC with opposite side light operative.
26. PMC if able to perform a manual engine start IAW AFTO 1C-26B-1 page 3-21.
27. PMC if left indicator is operative and right indicator is inoperative.
28. PMC if both VORs and DME are operative
29. PMC with 1 operative VOR and KNS 660
30. PMC if both KNS 660 and TACAN are operative
31. PMC if not required for mission.

2.27. Determining Aerospace Vehicle Maintenance Status and Capability.

2.27.1. The MESL does not determine airworthiness or "safety-of-flight": Do not use the MESL to gauge "go/no-go" decisions.

2.27.2. The maintenance status NMC flyable (Condition status codes K, L, M, N, P) will be used when an aerospace vehicle cannot accomplish the units wartime, training or test mission, but is still flyable (safe for flight). **(T-1)**.

2.27.3. A NMC flyable aerospace vehicle may be deployed as long as it can be returned to MC status (FMC or PMC) at the deployed site. **(T-1)**.

2.27.3.1. An aerospace vehicle is FMC if:

2.27.3.2. All systems, subsystems, and components having an "X" in the FSL column are functioning (the aerospace vehicle can perform all of its assigned missions).

2.27.3.3. A system, subsystem, or component having an "X" in the FSL column or any BSL column is degraded, but is still capable of full mission performance.

2.27.4. An aerospace vehicle is PMC if:

2.27.4.1. One or more systems, subsystems, or components are not functioning and have an "X" in the FSL column only (the aerospace vehicle can do all BSL missions, but is not fully equipped or capable of full mission performance).

2.27.4.2. Systems, subsystems, or components that are not functioning and are not needed for a unit's specifically assigned wartime missions, but are needed for safe aerospace vehicle operation during peacetime.

2.27.4.3. One or more systems, subsystems, or components are not functioning and have an "X" in the FSL column and in at least one, but not all, BSL columns (the aerospace vehicle can do at least one, but not all, of its BSL missions).

2.27.4.4. A system, subsystem, or component is degraded and has an "X" in the FSL column and all BSL columns, but can support some of its BSL missions.

2.27.5. An aerospace vehicle is NMC if:

2.27.5.1. One or more systems, subsystems, or components having an "X" in the FSL column and all BSL columns are not functioning (the aerospace vehicle cannot do any BSL missions).

2.27.5.2. The aerospace vehicle is "grounded" (not flyable).

2.27.5.3. The aerospace vehicle cannot fly any of the unit's BSL missions.

2.27.6. Use the Aerospace Vehicle Maintenance Status Code Flow Chart in **Table 2.2** to help determine the proper aerospace vehicle maintenance and condition status codes to report.

Table 2.2. Aerospace Vehicle Maintenance Status Code Flow Chart.

AEROSPACE VEHICLE MAINTENANCE STATUS CODE FLOW CHART		
QUESTION	**RESPONSE**	**ACTION**

AEROSPACE VEHICLE MAINTENANCE STATUS CODE FLOW CHART		
QUESTION	**RESPONSE**	**ACTION**
A. Is the aircraft RESTRICTED from use or FLYABLE?	RESTRICTED	NMC (Restricted – **Note 1**)
	FLYABLE	Go to question B
B. Does a discrepancy exist against any system/subsystem/component listed on the FSL that limits or prevents full mission performance?	YES	Go to question C
	NO	FMC
C. Is the system/subsystem/component identified on any BSLs?	YES	Go to question D
	NO	PMC
D. Is the system/subsystem/component identified on all BSLs?	YES	Go to question E
	NO	PMC
E. Is the system/subsystem/component completely inoperative or display degraded performance? (**Note 3**)	INOP	NMC (Flyable - **Note 2**)
	DEGRADED	Go to question F
F. Can the system/subsystem/component still perform at least one wartime/training/test mission?	YES	PMC
	NO	NMC (Flyable - **Note 2**) training/test mission

Notes:

1. Input maintenance status code NMCM, B or S and condition status code A through E as appropriate into the applicable maintenance information system.

2. Input maintenance status code NMCM, B or S and condition status code K, L, M, N, or P as appropriate into the applicable maintenance information system.

3. Degraded systems are those systems that are not fully operational, but function well enough to perform at least one assigned mission or part of an assigned mission.

Section 2E—Aerospace Vehicle Utilization Reporting Note: Utilization reporting is N/A to Aerial Targets/Drones (Full or Sub-Scale), flying hour documentation is still required (unless otherwise noted)

2.28. Flying Hour Program. Tracking and reconciling is the responsibility of maintenance and depot units' interaction with the Operations Flying Hour Program POC and then submission to the Director of Operations or depot-level equivalent with responsibility for reporting. However, Aircraft Maintenance Unit (AMU) debrief section/depot-level equivalent is responsible for

entering flying hours from the AFTO Form 781, *Aviation Resource Management System Aircrew/Mission Flight Data Document* into the MIS. In addition to this instruction, guidance for completing the AFTO Form 781 can be found in TO 00-20-1; AFI 21-101, *Aircraft and Equipment Maintenance Management.* Aviation Resource Management is described in AFMAN 11-421, *Aviation Resource Management*.

2.28.1. Maintenance Operations Plans, Scheduling, and Documentation (PS&D) and Operations Group (OG) Flying Hour Program POC develop and implement policies and procedures to validate sorties and hours flown daily. Additionally, MOC personnel will reconcile uncompleted sorties daily in the MIS. **(T-1)**. Operations Flying Hour Program POC validates total sorties/hours flown and total sorties/hours flown for the month to date. **(T-1)**. Units may use the daily sortie reconciliation aspect of maintenance scheduling application tool instead of the printed daily copies of the aircraft utilization report. Mobility aircraft units may use equivalent G081 screens.

2.28.2. The Maintenance Operations PS&D will make available a daily electronic copy of the Maintenance Scheduling Application Tool product or the aircraft utilization report to the AMU debrief section, and Operations Squadron monitors. **(T-1)**.

2.28.2.1. Debrief sections and Operations Squadron Monitors will reconcile sorties and hours flown on the aircraft utilization report. **(T-1)**. If a disparity exists, the debriefer/ Operations Squadron monitor will annotate the difference on the aircraft utilization report with the debriefer correcting the MIS. **(T-1)**. If an agreement cannot be made on the disparity, Maintenance Operations PS&D will coordinate with the Operations Flying Hour Program POC for appropriate action. **(T-1)**. A signed copy of the agreed upon daily aircraft utilization report (signed by debrief) will be maintained by the Operations Squadron Monitor for two years IAW AFRIMS Series 21, Table 01, Rule 14.00. **(T-1)**. Operations Squadron monitors will send the final aircraft utilization report to the Operations Flying Hour Program POC and AVDO upon closing out the month. **(T-1)**.

2.28.2.2. The Flying Hour Program POC and AVDO will compare the flying hours in the MIS, REMIS or Global Combat Support System AF Data Services with flying hours in the MAJCOM sanctioned flying hour program database monthly to ensure the data in the MIS represents hours flown. **(T-1)**. MIS flying hour data is the official reporting source, completeness and accuracy of flying hours is a joint endeavor.

2.28.2.2.1. The monthly flying hour report will only include those hours that were reported and reconciled in the MIS as of 2400 on the 4th calendar day of the following month. **(T-1)**. Any hours or changes reported after that will be included as late time in the following months report. **(T-1)**.

2.28.2.2.2. MAJCOM Flying Hour Program POC should review and clear REMIS utilization errors.

2.29. Aerospace Vehicle Utilization Reporting Overview. The reporting requirements in this section are exempt from licensing IAW AFI 33-324.

2.29.1. Possessing units including depots report flying hours and sorties by program element code and mission symbol for each possessed aerospace vehicle. **(T-1)**. This data helps determine future inspection and modification requirements including the Aircraft Structural Integrity Program and Reliability and Maintainability programs.

2.29.2. MIS data is input no later than midnight on the fourth calendar day of the following month and any flying time reported after the 4th calendar day will be reported in the next month's data in the MIS. **(T-1)**. The reporting period is based on Greenwich Mean Time (GMT). The first day of the new GMT month, the flying hours are reported for the new month. MAJCOM utilization data automatically updates in REMIS.

2.29.3. If the base or MAJCOM is reporting flying hours on aerospace vehicles at locations other than where the aerospace vehicles are possessed, the base or MAJCOM prescribes how hours will be forwarded to the MIS reporting location. The base or MAJCOM may use interim reporting means such as phone, fax, or message via email and provides the oversight necessary to ensure there is no duplicate reporting when the aerospace vehicle returns to its possessed location and process the original AFTO Form 781. The MAJCOM Flying Hour Program POC provides instructions on how to get the hours to the possessed location.

2.29.4. When an AFMC contractor or depot field team possesses an aerospace vehicle and an AFMC aircrew will fly the functional check flight, the reporting base submits utilization data using:

2.29.4.1. A "DR" possession purpose identifier code. **(T-1)**.

2.29.4.2. Program Element Code 0708211F. **(T-1)**.

2.29.4.3. Program Element Identification "I" (INDIA). **(T-1)**.

2.29.4.4. Command code "MTC" for the field team. **(T-1)**.

2.29.4.5. Field team organization. **(T-1)**.

2.29.5. In aerospace vehicle movements such as rotations and deployments, the MAJCOM AVDO considers ease of reporting and flying hour accountability in making the determination whether to transfer possession to the operating location.

2.29.6. If the movement involves more than one MAJCOM, MAJCOM AVDOs collaborate to gain consensus on the inventory reporting changes to make sure utilization is reported to the desired MAJCOM. MAJCOM AVDOs provide inventory reporting instructions before aerospace vehicle movement unless the movement is urgent. The MAJCOM Flying Hour Program POC coordinates with the applicable MAJCOM AVDOs to make this determination.

2.30. What to Report. Utilization reporting is required for all aerospace vehicles except those in purpose identifier code "NY".

2.31. Multiple Utilization Reporting. This capability is only currently available in the REMIS and G081 MIS.

2.31.1. Multiple utilization reporting allows sorties to be divided in segments or legs. A leg is a portion of a sortie that may have a different mission number or program element code/utilization purpose code/type utilization code combination.

2.31.2. Time overlaps or gaps between sortie legs are not allowed and all flying time will be entered in Zulu time.

2.31.3. The International Civil Aviation Organization code may be used to designate from/to locations on each sortie leg. International Civil Aviation Organization codes will be edited against the International Civil Aviation Organization code table.

Section 2F—Accountability, Termination, and Delivery Procedures

2.32. Aerospace Vehicle Accountability.

2.32.1. The AF-AVDO assigns voucher numbers for terminated aerospace vehicles and records it on AF Form 3131, *General Purpose* (used as a manual register of all assigned voucher numbers).

2.32.2. Accountability begins when Invoicing, Receipt, Acceptance and Property Transfer or DD Form 250, *Material Inspection and Receiving Report,* is signed by the responsible government representative.

2.32.3. Account for aerospace vehicles as long as assets are assigned to a USAF, ANG, or USAF Reserve activity. Accountability ends on receipt of a termination message, DD Form 1348-1A *DoD Single Line Item Release/Receipt Document* and/or DD Form 1149 with termination transactions input to the appropriate MIS.

2.32.4. AF-AVDO will maintain an electronic continuity book.

2.33. Final Termination Accountability.

2.33.1. The possessing unit AVDO initiates termination of accountability with a termination message and inputs the termination into the appropriate MIS if:

2.33.1.1. Loss or disposition is due to crash damage or major maintenance beyond economical repair. **(T-1)**.

2.33.1.2. Aerospace vehicles in inactive storage at AMARG will be terminated upon receipt of signed destruction certificate from Defense Logistics Agency, Disposition Services. **(T-1)**.

2.33.1.3. All excess aerospace vehicles are considered for reclamation. Excess serviceable or economically repairable aerospace vehicles are screened IAW AFI 16-402 and Department of Defense Manual (DoDM) 4160.21 V4, *Defense Materiel Disposition Manual*. AF/A4LM will issue disposition instructions using an AF Form 913 prior to execution of a reclamation action. Save lists are part of a reclamation and will be completed IAW AFI 23-101. **(T-1)**.

2.33.2. For aerospace vehicles requiring SIB or AIB, the possessing unit AVDO initiates and sends a termination message once the SIB/AIB releases the aircraft back to maintenance.

2.33.2.1. For crash damaged aerospace vehicles that do not undergo SIB/AIB, the possessing unit AVDO initiates and sends a termination message after the Maintenance Group Commander (MXG/CC), or equivalent, with PM coordination determines the aerospace vehicle is completely beyond repair. If the decision is beyond the MXG/CC's capability, refer to the PM for engineering determination. **NOTE:** See AFI 16-402 for retire/repair decision processes. The unit AVDO terminates possession upon receipt of determination via message. The possessing unit AVDO terminates possession, citing the MXG/CC's decision with PM coordination or the PM's engineering determination

message and reports using Aerospace Vehicle Termination Report, along with MIS input. Prior to terminating an aerospace vehicle from the MIS, the AVDO will archive all records. **(T-1)**. **NOTE:** For aerospace vehicles not declared a total loss see AFI 16-402. Report abandoned aerospace vehicle wreckage to the nearest Defense Logistics Agency Disposition Services for sale or formal abandonment. **(T-1)**. **NOTE:** See **http://www.dla.mil/DispositionServices.aspx** for additional information.

2.33.2.2. Crashed aerospace vehicles considered for termination will be placed in possession code "XW" until the MXG/CC, equivalent, or PM determines the appropriate termination code. **(T-1)**.

2.33.3. The unit AVDO sends a copy of the termination message to the unit engine manager with responsibility for the engines. This message gives the engine manager the authority to dispose of the engines IAW applicable TOs. **(T-1)**. Once the engine manager has disposed of or terminated the engines, the unit AVDO terminates the aerospace vehicle using the applicable termination code. **(T-1)**. **Note:** See **Attachment 4** for aerospace vehicle and trainer termination codes.

2.33.4. AF/A8PE authorizes the termination of aerospace vehicles that cannot be terminated using standard procedures. In such cases, the possessing unit processes the termination citing the HQ USAF notification as the authority.

2.33.5. Disposition of aerospace vehicle historical records. After release of an aerospace vehicle's historical records by the accident investigating board and/or termination from the AF Inventory, retain the records IAW the AF Records Disposition Schedule in AFRIMS, accessible through the AF Portal.

2.34. Delivering Aerospace Vehicles to Agencies outside the AF.

2.34.1. Start these assignments according to AFI 16-402. Complete DD Form 1149, IAW AFI 24-602V2. See **Attachment 9** for filling out the DD Form 1149 manually.

2.34.2. Use of AFTO Form 290, see **paragraph 2.35** for further guidance.

2.34.3. Have the recipient sign the completed DD Form 1149 as soon as the aerospace vehicle is picked up/delivered. Distribute the DD Form 1149 copies within 10 calendar days. For aerospace vehicles going to foreign countries and non-AF activities route signed original DD Form 1149 to HQ AFMC/AF-AVDO, 4375 Childlaw Rd., Area A, Bldg 262, Room N114, Wright-Patterson AFB OH 45433-5006. The additional 4 copies of the DD Form 1149 are placed in the aerospace vehicle forms binder.

2.35. Using AFTO Form 290.

2.35.1. Use AFTO Form 290 as a record of selected equipment to be transferred with the aerospace vehicle. This form:

2.35.1.1. Is not required if aerospace vehicles are moved by airlift or surface transportation.

2.35.1.2. Gives the delivery pilot, transporter, or recipient organizations a complete list of items that are mandatory to check.

2.35.2. Use AFTO Form 290 as:

2.35.2.1. An aerospace vehicle receipt for delivery pilots or transporters.

2.35.2.2. A receipt for selected aerospace vehicle equipment and as a paperwork checklist.

2.35.3. The releasing organization (such as the AVDO or AF Plant Representative Office at factories, depots, modification centers, and bases) or the delivery control officer at the base where the delivery started fills out the form, including:

2.35.3.1. The aerospace vehicle or missile model and serial number.

2.35.3.2. Account or contract number.

2.35.3.3. Project and priority.

2.35.3.4. Flight Transportation Order Number when known.

2.35.3.5. Receiving organization (organization to which the aerospace vehicle will be delivered).

2.35.3.6. Released by (the releasing organization's unit, base, and command).

2.35.3.7. Delivery Point (point and date of release).

2.35.3.8. Numbers placed on aerospace vehicle or missile by releasing organization, column B (the numbers of listed items placed on each aerospace vehicle). **Note:** List all confidential, secret, and/or nuclear weapon related materiel equipment installed on the aerospace vehicle in the space provided. Enter "none" in the "classified material installed on aircraft" block of the AFTO Form 290 if the aerospace vehicle has no classified material/ nuclear weapon related materiel installed.

2.35.3.9. The authorized representative at the delivering organization will accept the aerospace vehicle for delivery and will accept responsibility for the paperwork and equipment listed in column B of the form by signing the delivery receipt in the space provided. The representative will check each item received in column C. When the check is complete, the representative will initial at the bottom of the column.

2.35.3.10. The delivery organization will not accept the aerospace vehicle until all the items listed in column B match those on the aerospace vehicle.

2.35.3.11. If the authorized representative of the delivering organization is the pilot or transporter, fill out the AFTO Form 290 just before the aerospace vehicle actually departs.

2.35.3.12. Delivery control or transportation officers at the factory or modification center will check the items listed and sign AFTO Form 290.

2.35.4. At the factory or modification center, the delivery control or transportation officer may not have guards to keep close watch over received aerospace vehicle. Instead, a contractor, or other agency will provide these services.

2.35.4.1. In these cases, the delivery control transportation office is not responsible for items listed on AFTO Form 290.

2.35.4.2. The delivery pilot or transporter of the delivery control or transportation officer will personally check all items and promptly sign a receipt for them on AFTO Form 290

in the "Transportation/Ferrying Organization Receipt" section before the aerospace vehicle departs.

2.35.5. AFTO Form 290 provides space in columns D through I for up to three intermediate stops. Use this space when the pilot or transporter is not staying with the aerospace vehicle and does not want to be responsible for the items on the checklist.

2.35.5.1. If the aerospace vehicle makes more than three intermediate stops, the pilot or transporter will use an additional set of AFTO Form 290 and attach them to the first form.

2.35.5.2. At these intermediate activities, the commander authorized representative will take responsibility for the items after check-in.

2.35.5.3. The authorized activity representative and the pilot or transporter will check the items immediately after the aerospace vehicle arrives.

2.35.5.4. If all items in column B match those on the aerospace vehicle, the activity representative will check the first open intermediate activity check-in column and initial the bottom of the column.

2.35.5.5. If an item is missing, the representative will enter the correct figure in the check-in column. The pilot or transporter will initial the corrected figure and explain any discrepancies in the remarks section of the form. After all items are checked, the activity commander is responsible for the equipment and papers.

2.35.5.6. The pilot or transporter will check the items in the checklist before the aerospace vehicle leaves. The pilot or transporter will check the proper intermediate activity checkout column and initial the bottom of the checkout column. The activity representative will also initial the column. The activity representative will explain any discrepancies in the remarks section of the form, giving his or her grade and signature.

2.35.6. When the aerospace vehicle arrives, if the items in column B match those on the aerospace vehicle, the authorized representative of the recipient organization checks column J and will initial at the bottom of the column.

2.35.6.1. If an item is missing, the representative enters the corrected figure in column J and the pilot or transporter will initial the corrected figure and explain the discrepancy in the remarks section of the form.

2.35.6.2. The authorized representative of the recipient organization will then sign the receipt in the space provided on the form.

2.35.7. The releasing organization makes copies and sends them as follows:

2.35.7.1. Copy 1 -- Home station.

2.35.7.2. Copy 2 -- Pilot or transporter.

2.35.7.3. Copy 3 -- Recipient.

2.35.7.4. Copy 4 -- Releasing organization.

2.35.7.5. Copy 5 -- Defense plant representative office where the contractor facility is located/marked for the property administrator (if aerospace vehicles are delivered to the contractor facility).

2.35.8. The commands should coordinate with each other to reduce the number of copies needed.

Section 2G—Valuation of Aerospace Assets

2.36. Aircraft, Aerial Targets/Drones (Full or Sub-Scale) and Remotely Piloted Aircraft Asset Values.

2.36.1. Weapon System PMs are responsible for establishing the CFO reporting data elements (full cost and useful life) in REMIS for each delivered aircraft and remotely piloted aircraft asset. Aerial targets/drones (full or sub-scale) assets will provide (full cost) data only IAW DoD 7000.14-RV4.

2.36.1.1. The value must include all installed subcomponents purchased on a separate contract and all government furnished material.

2.36.1.2. The PM records both full cost and useful life data for aircraft and remotely piloted aircraft assets and full cost data only for aerial targets/drones (full or sub-scale) in REMIS not more than 5 workdays after the AF-AVDO notifies the PM that the asset record has been established in REMIS.

2.36.1.3. Since the full-scale drone costs are determined in phases, the Weapon System PM enters the initial cost (fly away cost from AMARG) and then updates the cost as the other costs are reported to that office. AMARG and any other organic or commercial organization involved in creating the drones must provide this information to the Weapon System PM in a timely manner.

2.36.2. A copy of the documentation, for example, invoice, receipt, acceptance, and property transfer receiving report or DD Form 250 supporting the CFO reporting data elements (full cost and useful life) shall be maintained in the Weapon System Program Manager for the life of the weapon system plus 5 years. This documentation can be stored electronically but the program office must ensure that there are copies of this information stored at a backup site (other than the location of the Weapon System Program Managers).

2.37. Aircraft and Remotely Piloted Aircraft Asset Modification Value.

2.37.1. Weapon System Program Managers are responsible for establishing CFO modification records including determining the value of the modification on each asset and documenting when the modification was completed on each asset.

2.37.1.1. This CFO requirement applies to aircraft and remotely piloted aircraft assets only. The aerial targets/drones (full or sub-scale) do not have to record modifications for CFO reporting.

2.37.1.2. Capitalize only those modifications that meet the DoD capitalization threshold as defined in DoD 7000.14-RV4, and add capability to the weapon system or extend the useful life of the weapon system beyond its originally planned useful life.

2.37.1.3. Establish the applicable modification records with the modification cost once the contract is awarded or when the contract price is known and add the completion date once the modification is completed on each asset.

2.37.1.4. The modification records shall be established in REMIS not more than 5 workdays after the qualified modification contract was awarded or when the contract price is known. In addition, the modification completion date should be entered in REMIS not more than 5 workdays after the modification was completed on the specific asset.

2.37.2. A copy of the documentation supporting the modification information should be maintained by the Weapon System Program Manager for the life of the weapon system plus 5 years. This documentation can be stored electronically but the program office must ensure that there are copies of this information stored at a backup site (other than the location of the Weapon System Program Managers).

Chapter 3

INVENTORY AND STATUS REPORTING OF INTERCONTINENTAL BALLISTIC MISSILES AND AIR LAUNCHED CRUISE MISSILES

Section 3A—Reporting System Overview

3.1. Concepts.

3.1.1. Specific type of missiles are always possessed by a designated AF reporting organization at either the organizational or depot level. The possessing organization or depot will report:

3.1.1.1. The hours it possesses the missile. **(T-0)**.

3.1.1.2. Changes in missile possession. **(T-0)**.

3.1.1.3. Status conditions that affect missile's ability to perform assigned missions. **(T-1)**.

3.1.2. If a contractor controls or maintains uninstalled ICBM missile motors, assembled ICBM downstages, or Propulsion System Rocket Engines (PSRE) that requires inventory, status, and utilization reporting, the contractor submits the needed reports or information to the agency that requests them, unless the applicable contract states otherwise. Use these reports whenever it is in the best interest of the Government. **Note:** Uninstalled first stage ICBM motors are considered accountable items under the New Strategic Arms Reduction Treaty.

3.2. Security Classification. Missile inventory, status, and utilization data reported under this instruction is unclassified. **Note:** Do not enter classified data into the MIS, Integrated Missile Database (IMDB) or REMIS.

Section 3B—Reporting Responsibilities

3.3. Base and Depot Level Activities. Reporting starts at base or depot-level.

3.3.1. Group Commanders or depot maintenance directorate responsibilities:

3.3.1.1. Ensure personnel maintain, correct, and report all data using the procedures in AFI 16-402 and this instruction. **(T-1)**.

3.3.1.2. Appoint a primary and alternate AVDO to report inventory status for the unit or depot to comply with the reporting requirements of **paragraph 2.6** of this instruction. **(T-1)**.

3.3.2. Unit and Depot AVDO appointees:

3.3.2.1. Perform duties as the primary POCs for ICBM inventory and status reporting within their organization. **(T-1)**.

3.3.2.2. Monitor and/or input data in the MIS daily. **(T-1)**.

3.3.2.3. Resolve any data reporting problems. **(T-2)**.

3.3.2.4. Ensure equipment loads to MIS for aerospace vehicles contain correct current operating time prior to performing gain transactions. **(T-1)**.

3.3.2.5. Initiate inventory transactions and movement reports as required. **(T-1)**.

3.3.2.6. Send messages as required by this instruction and MAJCOM supplements. **(T-1)**.

3.3.2.7. Emails are the standard format to transmit messages. Users will transmit email messages IAW AFMAN 17-1301 to ensure the required level of security is applied to the transmission of the email messages. **(T-1)**.

3.3.2.8. Follow procedures in AFI 16-402. **(T-1)**.

3.3.2.9. Ensure DD Form 1149 is completed IAW AFI 24-602V2 and sent as required (See **Attachment 9**). **(T-1)**.

3.3.2.10. Distribute assigned ICBMs as required. **(T-1)**.

3.3.2.11. Prior to processing MIS data and sending gain/loss messages, verify inventory transaction dates and times (Zulu) with corresponding units, depots or contractors to ensure they match. **(T-1)**.

Section 3C—Reporting ICBMs

3.4. Types of Reporting.

3.4.1. Physical accountability and valuation. AF reports accountability of the ICBM All Up Round as military equipment through the MIS and REMIS. An ICBM is classified as an All Up Round when in the launch facility, with Missile Guidance System, PSRE and Re-entry System, and possessed in PIC"CC". The AF reports accountability of all other missile motors/engines, to include uninstalled ICBM missile motors, assembled ICBM downstages (both within a launch facility and uninstalled), and the PSRE as Operating Material and Supplies through the IMDB. While the MIS, IMDB and REMIS maintain information on all aspects of the ICBM inventory, it is critical that the ICBM Program Office communicate ownership and location to the 309th Missile Maintenance Group (MMXG) to update IMDB. The operational missile wings/576th Flight Test Squadron in possession of assembled ICBM downstages/ PSRE updates the MIS. **(T-1)**. In addition, the ICBM Program Office must ensure that the MIS, IMDB and REMIS are reconciled to the actual ICBM inventory as follows:

3.4.1.1. Movement of all ICBM assets must be reconciled monthly with the ICBM Program Office provided IMDB documents. In addition, movement of any operational missile wings/576 Flight Test Squadron assets must be reconciled monthly with REMIS/MIS (movement of PSRE must be reconciled monthly with the MIS). **(T-1)**.

3.4.1.2. Launch of an ICBM All Up Rounds is to be reconciled with the MIS/REMIS and ICBM Program Office provided IMDB documents monthly. **(T-1)**.

3.4.1.3. Destruction of any PSRE or uninstalled ICBM missile motor must be reconciled monthly with ICBM Program Office provided IMDB documents. **(T-1)**.

3.4.1.4. The ICBM Program Office must reconcile ownership and asset condition codes as follows:

3.4.1.4.1. ICBM All Up Rounds and operational assets listed in **paragraph 3.4.1** must be reconciled quarterly with the MIS/REMIS. **(T-1)**.

3.4.1.4.2. Assembled ICBM downstages, PSRE and uninstalled ICBM missile motors must be reconciled quarterly with ICBM Program Office provided IMDB documents. **(T-1)**.

3.4.1.5. Complete physical accountability (such as, actual assets compared to ICBM Program Office provided IMDB documents and IMDB documents to actual assets) of all assets not installed in a launch facility must be conducted annually (date of report will be NLT 31 August). **(T-1)**.

3.4.1.5.1. A complete physical accountability of uninstalled but assembled ICBM downstages must also be conducted against the MIS/REMIS information. **(T-1)**. ICBM All Up Rounds physical accountability will be performed during Re-entry system installation. **(T-1)**.

3.4.1.5.2. Part number/serial number information from each missile stage, the missile tail number, Missile Guidance Set and PSRE will be recorded using a MIS generated work order and submitted to the unit AVDO for reconciliation with the MIS.

3.4.1.5.3. The retention of specific key supporting documents used to verify inventory will be uploaded into IMDB to support audit inquires. **(T-1)**. **Note:** Additional inspections may be directed IAW international treaties, for example, the New Strategic Arms Reduction Treaty requirements for reporting/complete physical accountability of non-deployed Minuteman III first stage rocket motors, IAW AFI 16-608, *Implementation of, and Compliance with, Treaties Involving Weapons of Mass Destruction.*

3.4.1.6. The ICBM All Up Rounds financial information is maintained in REMIS. Uninstalled ICBM missile motors/downstages and PSRE financial information is maintained in IMDB. The ICBM Program Office is responsible for establishing and maintaining the CFO reporting data elements (full cost and useful life) of an ICBM All Up Rounds, uninstalled ICBM missile motors (both individual and when configured as an assembled ICBM downstage) and PSRE (See **Section 3E**). In addition, the ICBM Program Office must establish and maintain qualified modification records against an ICBM All Up Rounds. **(T-1)**. The ICBM Program Office will reconcile the valuation of the ICBM All Up Rounds, uninstalled ICBM missile motors, assembled ICBM downstages and PSRE at least annually. **(T-1)**.

3.4.2. Inventory and Status Reporting. ICBM reporting includes inventory and status reporting on ICBM All Up Rounds, uninstalled ICBM missile motors, assembled ICBM downstages and PSRE at all depot level locations (including contractors) and assigned to units by HQ USAF and MAJCOMs for specific missions.

3.4.2.1. The unit AVDO records this information and sends it to the MAJCOM, and 309th MMXG ICBM AVDO who updates IMDB.

3.4.2.2. Reporting begins when: The uninstalled ICBM missile motor in IMDB, the assembled ICBM downstage, and/or PSRE are accepted by a (field or depot level) unit in the MIS and REMIS. **(T-1)**.

3.4.3. Possession Reporting. Possession is the actual acceptance or designation of responsibility for an uninstalled ICBM missile motor, assembled ICBM downstage, PSRE or ICBM All Up Rounds. When the unit takes possession of an ICBM, the unit starts reporting according to this instruction and applicable systems instructions. **(T-1)**.

3.4.3.1. Units and depot level locations report all uninstalled ICBM missile motors and PSRE gains, losses and relocations to the 309th MMXG ICBM AVDO to update IMDB. **(T-1)**. Units input all assembled ICBM downstage gains, losses and relocations into the MIS with confirmation notification to the 309th MMXG ICBM AVDO. **(T-1)**. Depot sends assembled ICBM downstage gains, losses and relocations to the 309th MMXG ICBM AVDO.

3.4.3.2. The unit or depot-level location (including contractors) possessing ICBM assets report the gain or loss as it occurs. **(T-1)**.

3.5. Possession Gain, Loss, Termination, Relocation and Storage Criteria.

3.5.1. An organization gains possession of an uninstalled ICBM missile motor assembled ICBM downstage or PSRE when the gaining organization accepts the asset.

3.5.2. Possession terminates when the missile motor case or PSRE is destroyed (such as, demilled, launched), or is transferred to another responsible organization. Terminate the ICBM asset in IMDB which will cease reporting if the asset has permanently transferred to non-AF activities.

3.5.3. For uninstalled ICBM missile motors, assembled ICBM downstages or PSRE moved in "PJ" code, possession changes when the Traffic Management Flight of the gaining field unit accepts the vehicle or when the Missile Maintenance Support Flight 581 MMXS/MXDPB accepts the asset at the depot or a contractor accepts the asset at their facility (for repair or use).

3.5.3.1. This is accomplished when the Traffic Management Flight of the gaining organization, 581 MMXS/MXDPB or the authorized contractor accepts the uninstalled ICBM missile motor or assembled ICBM downstage at the gaining station location code.

3.5.3.2. The 309 MMXG ICBM AVDO will also be informed by the gaining unit of the gain to maintain proper accountability in IMDB. **(T-1)**.

3.5.4. Possession terminates when an uninstalled ICBM missile motor, assembled ICBM downstage or PSRE is transferred to the National Museum of the USAF or at the time the aerospace vehicle meets the termination requirements of this instruction and AFI 16-402. For accountability purposes, uninstalled ICBM missile motor fired cases, ground test missiles, hot-fired PSRE and other training assets at the depot are tracked in IMDB, but are not included on directed uninstalled ICBM missile motor inventories. Terminate the ICBM asset and cease reporting if the asset has permanently transferred to non-AF activities.

3.5.5. Depot relocates an uninstalled ICBM missile motor, assembled ICBM downstage or PSRE when the asset is moved between buildings or to a contracted organization location supporting depot functions/programs. An organization relocates an assembled ICBM

downstage or PSRE when the asset is moved from the support base or another Launch Facility and the asset is installed at a new Launch Facility. An organization relocates an assembled ICBM downstage or PSRE when the asset is returned from the Launch Facility to the support base. The shipping organization must provide to the 309th MMXG ICBM AVDO all shipping documents for relocation/movement of assets within 5 business days. **(T-1)**.

3.5.6. Uninstalled ICBM missile motors possessed at a storage facility. Uninstalled ICBM missile motors in long term storage, PIC "XS", "XV", or "XX". Since uninstalled ICBM missile motors are serially tracked in IMDB, condition codes tags are not required. Refer to Air Force Joint Manual (AFJMAN) 23-210, *Joint Service Manual for Storage and Materials Handling* for further guidance.

3.6. Notification Procedures. Accurate reporting of possession changes is essential in order for the AF to accurately account for the location and use of the uninstalled ICBM missile motors, assembled ICBM downstages, PSRE and ICBM All Up Rounds. Possession change messages are required on all ICBM asset transfers between locations. Both reporting organizations use the same Zulu time and date.

3.6.1. Gain Message, ICBM Asset Possession Change Report. AVDO of the organization gaining the uninstalled ICBM missile motor, assembled ICBM downstage or PSRE sends a priority gain email message no later than the 5 workdays after the possession changes. **(T-1)**. See **Attachment 18** for a sample gain message and instructions for preparing the message. Continue reporting during emergency conditions, priority precedence. **(T-1)**. Submit data requirements assigned this category as prescribed or by any means to ensure arrival. **(T-1)**. **Note:** An ICBM will not be gained in the MIS/REMIS when the asset has been disassembled (three uninstalled missile motors) for depot input.

3.6.2. Loss Message ICBM Asset Possession Change Report. The AVDO of the organization losing possession of an uninstalled ICBM missile motor, assembled ICBM downstage or PSRE sends a priority loss email message no later than the first workday after the possession change takes place. **(T-1)**. See **Attachment 19** for a sample loss message and instructions for preparing the message. Continue reporting during emergency conditions, priority precedence. **(T-1)**. Submit data requirements assigned this category as prescribed or by any means to ensure arrival. **(T-1)**.

3.6.3. Termination Message ICBM Asset Termination Report. The unit or depot where the ICBM asset was destroyed or sent to Defense Logistics Agency Disposition Services sends a priority termination email message no later than 5 working days after the action has occurred. **(T-1)**. The unit provides a signed termination letter or equivalent containing how, when, where, serial number and the date the asset was destroyed. **(T-1)**. The 309th MMXG ICBM AVDO files the termination letter and updates IMDB accordingly. See **Attachment 20** for a sample termination message and instructions for preparing the message. Continue reporting during emergency conditions, priority precedence. **(T-1)**. Submit data requirements assigned this category as prescribed or by any means to ensure arrival. **(T-1)**.

3.6.4. Possession PIC Change Message, ICBM Asset Possession PIC Change Report. When changing a possession PIC, the AVDO sends a priority email message no later than the first workday after the change. **(T-1)**. See **Attachment 21** for a sample possession PIC change message and instructions for preparing the message. Continue reporting during emergency

conditions, priority precedence. **(T-1)**. Submit data requirements assigned this category as prescribed or by any means to ensure arrival. **(T-1)**.

3.6.5. Configuration Identifier Change Report. The AVDO of the organization changing the configuration identifier of an uninstalled ICBM missile motor, assembled ICBM downstage, PSRE or ICBM All Up Rounds sends a configuration identifier change email message. **(T-1)**. Obtain proper authorization from the MAJCOM AVDO before making the change, and sends a priority message no later than the first workday after the change. **(T-1)**. See **Attachment 22** for a sample MDS/Configuration identifier change message and instructions for preparing the message. Continue reporting during emergency conditions, normal precedence. **(T-1)**. Submit data requirements in this category as prescribed, or as soon as possible after submission of priority reports. **(T-1)**.

3.6.6. Relocation Message, ICBM Asset Location Change Report. The AVDO of the organization relocating an uninstalled ICBM missile motor, assembled ICBM downstage or PSRE sends a priority relocation email message to the depot AVDO no later than the first workday after the asset's location changed. **(T-1)**. The relocation message is also required to be sent to the MAJCOM AVDO and the Transportation Management Specialist (for an IMDB update). **(T-1)**. See **Attachment 23** for a sample relocation message and instructions for preparing the message. Continue reporting during emergency conditions, priority precedence. **(T-1)**. Submit data requirements assigned this category as prescribed or by any means to ensure arrival on published due dates. **(T-1)**.

3.6.7. Change in Asset Condition Code. The ICBM Program Office is responsible for authorizing changes to the condition code of the uninstalled ICBM missile motor, assembled ICBM downstage, PSRE or ICBM All Up Rounds. The Program Office sends a priority asset condition code change email message no later than the first workday after the change. This priority message is sent to the 309th MMXG ICBM AVDO to update IMDB. See **Attachment 24** for a sample condition code message and instructions for preparing the message.

3.6.8. How to Determine Status Codes. **Attachment 2** lists the references used in inventory reporting under this instruction.

3.7. ICBM Accountability.

3.7.1. The AF-AVDO maintains accountability for ICBMs in REMIS. The AF-AVDO assigns voucher numbers for terminated ICBMs and records them on AF Form 3131 (used as a manual register of all assigned voucher numbers).

3.7.2. For all assembled ICBM downstages or PSRE assigned to an AF activity, accountability begins when the DD Form 250 or Invoicing, Receipt, Acceptance and Property Transfer is signed.

3.7.3. Accountability ends upon receipt of a termination message and DD Form 1348-1A, when applicable.

Section 3D—Air Launched Cruise Missiles

3.8. Air Launched Cruise Missile Reporting. Units report all missile inventory gains, losses and terminations (using the same procedures for aerospace vehicles outlined in **paragraph 2.8 thru 2.21** and **paragraph 2.32 thru 2.34.3** of this instruction).

3.8.1. Unit and Depot AVDO appointees possessing air launched cruise missiles will:

3.8.1.1. Perform a semi-annual reconciliation of all assigned/possessed cruise missile inventories with MIS and REMIS products. **(T-1)**.

3.8.1.2. Accomplish a 100 percent physical inventory/verification by tail number of all cruise missile bodies assigned. **(T-1)**. **Note:** This inventory is accomplished once annually each FY.

3.8.1.2.1. Missile airframe inventory is physically validated and compared to the data contained in source document(s) from the appropriate MIS(s).

3.8.1.2.2. Individual performing the inventory will ensure all errors/discrepancies noted are corrected on the document and in the MIS. **(T-1)**.

3.8.1.2.3. After completion of inventory. The individual validating the inventory will sign/date inventory completion. **(T-1)**. Units, as a minimum, will maintain the current and previous signed inventories. **(T-1)**.

Section 3E—Valuation

3.9. Operating Material & Supplies Asset Value–Uninstalled ICBM Missile Motors, Assembled ICBM Down Stages and PSRE.

3.9.1. The Weapon System Program Managers are responsible for establishing the CFO reporting data elements (full cost and useful life) of the uninstalled ICBM missile motor and PSRE. This data is normally derived from the acquisition/procurement contracts, however, in the absence of these contracts (for the older weapon systems); the cost may be derived from other means (such as, like items).

3.9.2. The cost data of the assembled ICBM downstage is the sum of the ICBM missile motors used in the assembly.

3.9.3. A copy of the documentation supporting the CFO reporting data elements (full cost and useful life) should be maintained with the Weapon System Program Manager for the life of the weapon system plus 5 years. This documentation can be stored electronically but the program office must ensure that there are copies of this information stored at a backup site (other than the location of the Weapon System Program Managers).

3.10. ICBM All Up Rounds and Cruise Missile Asset Value.

3.10.1. Weapon System Program Managers are responsible for establishing the complete CFO reporting data elements (full cost and useful life) in REMIS for each delivered ICBM All Up Rounds and cruise missile.

3.10.1.1. The value includes all installed subcomponents purchased on a separate contract and all government furnished material.

3.10.1.2. The PM records full cost and useful life data in REMIS not more than 5 workdays after the AF-AVDO notifies the PM that the asset record was established in REMIS.

3.10.2. A copy of the documentation supporting the CFO reporting data elements (full cost and useful life) should be maintained by the Weapon System Program Manager for the life of the weapon system plus 5 years. This documentation can be stored electronically but the program office must ensure that there are copies of this information stored at a backup site (other than the location of the Weapon System Program Managers).

3.11. ICBM All Up Rounds Modification Value.

3.11.1. Weapon System Program Managers are responsible for establishing CFO modification records including determining the value of the modification on each asset and documenting when the modification was completed on each asset.

3.11.1.1. This CFO requirement applies to ICBM All Up Rounds only.

3.11.1.2. Capitalize only those modifications that meet the DoD capitalization threshold as defined in DoD 7000.14-RV4, and add capability to the weapon system or extend the useful life of the weapon system beyond its originally planned useful life.

3.11.1.3. Establish the applicable modification records with the modification cost once the contract is awarded or when the contract price is known and add the completion date once the modification is completed on each asset.

3.11.1.4. The modification records should be established in REMIS not more than 5 workdays after the qualified modification contract was awarded or when the contract price is known. In addition, the modification completion date should be entered in REMIS not more than 5 workdays after the modification was completed on the specific asset.

3.11.2. A copy of the documentation supporting the modification information should be maintained by the Weapon System Program Manager for the life of the weapon system plus 5 years. This documentation can be stored electronically, but the program office must ensure that there are copies of this information stored at a backup site (other than the location of the Weapon System Program Managers).

Chapter 4

FLIGHT SIMULATOR, MISSION SYSTEM TRAINING DEVICES, AND TRAINER DEVICE INVENTORY REPORTING (MRAP VEHICLE EGRESS TRAINER AND COMMON REMOTELY OPERATED WEAPON STATION TRAINER SYSTEMS)

4.1. Trainers Covered Under This Instruction. AF units will report on the inventory of AF owned trainers. The reporting requirements in this section are exempt from licensing (to include requisitions, material release orders, or supply status notices processed and transmitted within an operational system) IAW AFI 33-324 **(T-1)**. Report trainer inventory through the MIS.

4.2. Responsibilities.

4.2.1. Base Activities. Units that have trainers will prepare trainer information according to appropriate MIS user's manuals and this AFI. **(T-1)**. Possessing units include maintenance, operations, Air Support Operations Squadrons, Air Education Training Command Training Detachments, Regional Training Centers and AFMC organizations such as Air Force Sustainment Centers, Air Logistics Complexes and Air Force Research Laboratory. The possessing unit commander or equivalent will appoint an OPR who will:

4.2.1.1. Report inventory of trainers according to MIS user's manual guidance. **(T-0)**.

4.2.1.2. Review the data and corrects the errors. **(T-1)**.

4.2.1.3. When maintenance training devices are no longer required the owning organization will contact the applicable MAJCOM A4 maintenance trainer OPR for disposition instructions. **(T-1)**. **NOTE:** OPR coordinates with the contractor logistics support in-place team concerning training devices under contract.

4.2.2. MAJCOMs and ANG will:

4.2.2.1. Monitor the trainer device inventory and establish reporting requirements.

4.2.2.2. Appoint an OPR to manage reporting system data and validates the reported data is correct, up to date, and corrects or reports any discrepancies or problems.

4.2.2.3. Determine the method for scheduling training devices for use and process for tracking and reporting training device utilization to OPR in their supplement to this AFI.

4.2.2.4. Ensure all MAJCOM staff agencies responsible for training utilize assigned trainers IAW MAJCOM directives.

4.2.2.5. Manage reallocation and coordinate movement of un/under-utilized trainers to other units in the command with a valid need.

4.2.2.6. When the command no longer needs trainers under their control, request disposition instructions IAW AFI 36-2251, *Management of Air Force Training Systems*, and this instruction.

4.2.3. AFMC: HQ AFMC will ensure that contracting documents state the contractor will assign serial numbers to all trainers IAW AFI 23-101 and TO 43-1-1, *Maintenance, Inspection, Storage, Shipment and Serialization - Training Devices and Trainer Maintenance Parts, Maintained by Air Force Depots*.

4.3. Trainer, Equipment Designators

4.3.1. Prefix the equipment designators with a group identification code that identifies the type of trainer by group. For example, report:

4.3.1.1. The F-15A mission simulator, type A/F 37AT49, as 1BN000.

4.3.1.2. The LGM-25C missile guidance subsystem trainer, type AN/GSM-T7 as 2NV000.

4.3.2. Report trainers without a related system as "multi" (such as, report instrument trainer, type A/F37AT40, as 1MULTI). Use the appropriate group of the trainer in the first digit, as shown below:

4.3.2.1. Group 1: Aircrew trainers (instrument, flight, and mission simulators), not including cockpit procedure trainers and egress procedures trainers built by MAJCOMs other than AFMC.

4.3.2.2. Group 2: Missile trainers (ballistic and non-ballistic).

4.3.2.3. Group 3: Navigation and electronics trainers.

4.3.2.4. Group 4: Technical trainers such as mobile training sets and resident training equipment.

4.3.2.5. Group 5: Mission system training devices, for example, Battlefield Airman Mission Simulator.

4.4. Trainer Serial Number.

4.4.1. The first four digits of the serial number for all groups of trainers are the serial number prefix for the reporting equipment designators.

4.4.2. AFMC assigns the last six digits of the serial number as directed in AFI 23-101 and TO 43-1-1.

4.4.3. A cross-reference list for group-4 trainer serial numbers assigned AF identification numbers is in TO 43-1-1, Table 10-1.

4.5. Reporting Criteria. Report on base level trainers. Use the procedures outlined in the appropriate MIS user's manuals. **(T-1)**. **Note:** For the purpose of this instruction, government property including government furnished equipment, military equipment, and any AF accountable property is referred to as “government furnished property” which is delineated more specifically in AFI 23-101, AFI 23-119, *Exchange, Sale, or Temporary Custody of Non-Excess Personal Property* and AFMAN 23-122.

4.5.1. Unit OPRs will report the inventory of all groups of trainers. **(T-1)**.

4.5.2. The basic PIC for all active aircraft being utilized for ground training is "TJ". “TX” and “TA” are utilized for all inactive ground trainers (includes Aircraft Battle Damage Repair). Change the possession PIC for trainers in shipment, storage, or modification, to the applicable PIC from **Attachment 17.** For example, use "PJ" code if an aerospace vehicle/trainer is:

4.5.2.1. Being made ready for transfer.

4.5.2.2. In-transit.

4.5.2.3. Being assembled for operation.

4.5.3. The unit OPR will ensure the government furnished property is accounted for in the applicable Accountable Property System of Record IAW AFI 23-111. **(T-1)**.

4.5.3.1. The AF unit monitoring trainer modification or AF trainers provided as government furnished property or on-loan or lease will report the inventory of trainers physically located at the contractor's facilities. **(T-1)**.

4.5.3.2. The government plant representative will send a routine message to the responsible reporting unit when the contractor facility has received or shipped the trainers. Include equipment designator, nomenclature, serial number, and date the action took place in the message. **(T-1)**.

4.5.4. The assigned unit reports trainers that are:

4.5.4.1. Government furnished property.

4.5.4.2. On loan.

4.5.4.3. Located at a contractor's facility.

4.5.4.4. Located at an AF site to support contract training programs. **Note:** Report only inventory while at a contractor's facility.

4.6. Possession Gain.

4.6.1. Gain trainers, or newly reported trainers, to the AF inventory using the "GI" code and input the gain into the appropriate MIS. **(T-1)**.

4.6.2. Gain message, Aerospace Equipment Possession Change Report. Report with a gain message as described in **paragraph 2.17** **(T-1)**.

4.7. Possession Loss.

4.7.1. Lose trainers that are transferring to another unit on the applicable date and input the loss into the appropriate MIS. **(T-1)**.

4.7.2. Loss message, Aerospace Equipment Possession Change Report. Report with a loss message as described in **paragraph 2.18** **(T-1)**.

4.8. Possession Termination.

4.8.1. Terminate trainers when required and input the termination into the appropriate MIS using the correct termination code. **(T-1)**.

4.8.2. Termination message, Aerospace Equipment Termination Report. Report with a termination message as described in **paragraph 2.19** **(T-1)**.

4.9. Audit Requirements.

4.9.1. At base level, the reporting unit will review on-line audit-error reports and listings and correct errors on-line within the specified time period. **(T-1)**.

4.9.2. At command level, the command OPR will validate trainer data and monitor the reporting units to ensure that errors are corrected and accurate information is reported in the applicable MIS.

Chapter 5

MINE RESISTANT AMBUSH PROTECTED (MRAP) VEHICLE INVENTORY, STATUS, AND UTILIZATION REPORTING

Section 5A—Reporting System Overview

5.1. Concepts.

5.1.1. Each MRAP vehicle is always possessed by a designated AF reporting organization at either the organizational or depot level. The possessing organization or depot will report:

5.1.1.1. Possession and possession changes. **(T-0)**.

5.1.1.2. Status conditions that affect ability to perform assigned missions. **(T-0)**.

5.1.1.3. Configuration and configuration changes. **(T-1)**.

5.1.1.4. Utilization data. **(T-1)**.

5.1.2. Contractor reporting. For government owned contractor-controlled or maintained equipment/system(s), the possessing organizations still retains the responsibility to ensure inventory, status, utilization, and configuration reporting is accomplished. The organization owning the contract maintenance requirement or designated official shall be responsible for ensuring the contract contains the necessary requirements for the contractor to provide the required inventory and status reporting information to affected users. **(T-1)**. The organization requiring the contract controlled maintenance shall work with the contracting officer to ensure inventory and equipment status reporting requirements are accurately captured in contract documents. **(T-1)**.

5.1.3. Deployed asset reporting. Deployed units will coordinate with the appropriate MAJCOM on processes to follow for gathering applicable reporting data while minimizing impact to the warfighter. **(T-2)**.

5.1.4. Units without access to an automated MIS will work with their command headquarters to determine alternative procedures. **(T-2)**.

5.2. The Reporting System. The reporting requirements in this section are exempt from licensing IAW AFI 33-324. Units process inventory, status and utilization data using an approved MIS. **(T-0)**. HQ USAF, MAJCOMs, ANG, FOAs and other authorized users of the REMIS database monitor the data and may extract reports to control MRAP vehicle inventory, status, and utilization. Any records dispositions or Information Technology (IT) Systems that need to be updated/deleted/added in the AF Records Disposition Schedule must be accomplished by following the guidance in Chapter 11 of AFI 33-364, *Records Disposition-Procedures and Responsibilities*. Contact your local records professional for additional guidance.

5.2.1. Units collect and input the data as shown in the applicable MIS user's manual. Data is electronically transmitted at specified times to the REMIS database. **(T-1)**.

5.2.2. HQ USAF, MAJCOMs, ANG, FOAs and other authorized users may extract reports, data, and information from an automated accounting system database to monitor and control MRAP vehicle inventory, status, and utilization.

5.3. Reporting Accuracy. Inventory, status, and utilization reports are the basis for justifying and defending plans, programs, budgets, and to support the AF CFO statement. Accurate and timely reporting is critical. Errors in reporting can result in the loss of required funding, manpower authorizations, and supplies.

5.4. Security Classification. MRAP vehicle inventory, status, and utilization data reported under this instruction are unclassified. **Note:** Do not enter classified data into the MIS or REMIS or an automated accounting system database.

Section 5B—Reporting Responsibilities

5.5. Unit-Level Activities. All reporting starts at unit level.

5.5.1. The unit designated POC will ensure that MRAP vehicle inventory, status, and utilization reporting is accurate and timely. **(T-0)**.

5.5.2. The unit designated POC will:

5.5.2.1. Ensure the unit correctly maintains and reports applicable inventory, maintenance status, utilization, and configuration data on all MRAP vehicles assigned to their organization. **(T-0)**.

5.5.2.2. Coordinate with MAJCOMs, ALCs, and contractor field teams to verify inventory, status, and utilization reporting. **(T-1)**.

5.6. MAJCOMs.

5.6.1. The AF reports accountability of MRAP vehicles as military equipment through the MIS and REMIS. Follow procedures in AFI 16-402 and DoDI 5000.64. for accomplishing annual inventory/verification.

5.6.2. Coordinate with other MAJCOMs, ANG, AFR, and non-USAF organizations to move, ship, or transfer MRAP vehicles and send applicable movement reports.

5.6.3. Ensure that MRAP vehicles selected for transfer meet the specified configuration requirements and are prepared for transfer IAW TOs and other transfer inspection requirements, as applicable.

5.7. MAJCOM POCs.

5.7.1. Validate reporting units ensure MRAP vehicle inventory, status, utilization, and configuration appears in the REMIS database.

5.7.2. Ensure units take action to correct any reporting discrepancy or other problem.

5.7.3. Perform tasks in conjunction with the units as stated in **paragraph 5.5 and 5.6** of this instruction.

5.7.4. Assist other MAJCOM agencies in retrieving MRAP vehicle inventory, status, and utilization data from the REMIS database.

5.8. Program Manager (PM).

5.8.1. The PM is responsible for managing all MRAP vehicle equipment inventory, configuration and matrix tables.

5.8.2. Establish guidance and procedures for standard and non-standard units to update, status and report MRAP vehicle inventory. **(T-1)**.

Section 5C—Inventory Reporting

5.9. Assignment, Possession, and Termination Procedures. Inventory reporting starts when an MRAP vehicle is accepted into the AF inventory. Possession, changes to possession, and termination will follow procedures as outlined in **Chapter 2**, **Section 2C**, of this AFI, and associated MAJCOM supplements.

Section 5D—Status/Utilization Reporting

5.10. MRAP Vehicle Status Code Definitions.

5.10.1. FMC: Equipment/system functioning as required in TO specifications and is capable of performing all of its assigned missions.

5.10.2. PMC: System or equipment functioning in such a way that it can perform at least one, but not all of its assigned missions; functions impaired but usable. Systems with redundant capabilities will be coded PMC when redundancy is lost, even though the system is fully capable of supporting all of its assigned missions.

5.10.3. NMC: The system or equipment does not meet the TO specifications; therefore, cannot accomplish any of its assigned missions or functions.

5.11. Work Unit Codes (WUC). WUCs are an important part of the MIS status reporting. WUCs determine subsystem problems and repair actions associated with a piece of equipment or a system. A proper WUC is required to be entered into the MIS status reporting when an equipment problem is discovered or repaired. **(T-1)**. If a specific WUC is not known initially due to troubleshooting, then a system or subsystem WUC may be used until the faulty component is identified. When the equipment is returned to service or when parts are placed on order, the proper WUC should be used for the PMC or NMC status reporting period. The use of 000 and 00 will not be used when a more specific WUC is available. **(T-1)**.

5.12. MRAP Utilization Reporting Concept. Report utilization data for each possessed MRAP vehicle. **(T-1)**. This data assists in determining future inspection and modification requirements. MIS data must be input no later than midnight of the fourth calendar day of the following month. **(T-1)**. Any utilization data reported after the fourth calendar day will be reported in the next month's data in MIS. **(T-1)**.

5.13. Mission Status Reporting Tool.

5.13.1. Lead command addendums to this publication give a list of maintenance and condition status codes and the definitions which are based on DoDI 3110.05. These codes describe the capability of the MRAP vehicle to perform its assigned missions as specified in:

5.13.1.1. The unit's Designed Operational Capability Statements.

5.13.1.2. Unit training syllabuses.

5.13.1.3. Test mission requirements.

5.13.1.4. Mission Status Reporting Tool.

5.13.2. Mission Status Reporting Tools lay the groundwork for reporting the status of MRAP vehicle's capability. Mission Status Reporting Tools list the minimum systems and subsystems that must function for the MRAP vehicle to perform specifically assigned unit wartime, training, test or other missions.

5.13.2.1. The NMC lists all systems needed for full mission performance for specifically assigned wartime, training, and test missions. The systems and subsystems that must function for a unit to accomplish those missions, and if not functional, that MRAP vehicle cannot be used for any of its missions.

5.13.2.2. The PMC lists all systems and subsystems needed for partial mission performance. It lists the essential systems and subsystems that must function to do partial missions (specifically assigned unit wartime, training, or test missions). If these systems or subsystems are not functioning, the MRAP vehicle can be used to fulfill one or more of its assigned missions, but can still perform at least one of its assigned missions.

5.13.2.3. The FMC lists all systems and subsystems that are not needed to perform any assigned mission.

5.13.2.4. The Mission Status Reporting Tool allows you to compare MRAP vehicle systems, subsystems, and components, by WUC, against the NMC, PMC and FMC across the page.

5.13.2.5. Mission Status Reporting Tool will be reviewed annually for currency by the operational user, functional managers, in coordination with the lead command MRAP Vehicle Weapon System Team. **(T-1)**.

5.13.2.6. Report any MRAP vehicle that is not FMC with a status code determined by the following criteria:

5.13.2.6.1. Report an MRAP vehicle that can perform at least one, but not all of its assigned missions as PMC. **(T-1)**.

5.13.2.6.2. Report an MRAP vehicle that cannot perform any of its assigned missions as NMC. **(T-1)**.

5.13.2.6.3. Add the letter M (maintenance), S (supply), or B (both maintenance and supply) to show the reason the MRAP vehicle is PMC or NMC. **(T-1)**. **Note:** See **paragraph 2.23** for additional guidance on using status codes.

5.13.2.6.4. Operational "users" Group Commander or equivalent may down-grade NMC conditions after risk assessment is accomplished. **(T-1)**.

5.13.2.6.5. Operational "users" Group Commander or equivalent may modify Mission Status Reporting Tools as mission dictates provided risk assessment has been accomplished. **(T-1)**.

Section 5E—Financial Accountability

5.14. Asset Value. The PM records full cost and useful life data in REMIS not more than 5 workdays after the AF-AVDO notifies the PM that the asset record was established in REMIS. The PM will: Establish the CFO reporting data elements (full cost and useful life) of each asset (include the value of the government furnished material).

Chapter 6

COMMUNICATIONS, CYBERSPACE, IT, AND SPACE (CCITS) EQUIPMENT STATUS AND INVENTORY REPORTING

6.1. Terms/Status Definitions as applicable to this publication.

6.1.1. Communications equipment: As applicable to this publication is all communications systems and equipment including but not limited to ground-based radio and wireless systems used for the electrical and visual transmission and reception of information or messages in the clear or by cryptographic means; radar and radiation aids to air traffic control, navigation, enemy aircraft warning and interception; electronic weather equipment (includes ground-based space weather collection equipment), electronic countermeasure devices, and related electronic systems and equipment including infrared; radar, meteorological and navigational radiation aids used for aircraft control and landing; radiating aids for fire control; imagery, video processing equipment and intrusion detection systems, satellite, microwave and telemetry equipment; mission critical computer hardware, telecommunications switching equipment, cable and antenna systems; cryptographic equipment and communications consoles; and electronic counter-measures and related radiation, re-radiation, and electronic devices. Generally these assets are maintained by Airmen who follow TO 00-33A-1001, *General Cyberspace Support Activities Management Procedures and Practice Requirements.*

6.1.2. Cyberspace assets: Those assets that make up the global domain within the information environment consisting of the interdependent network of information technology infrastructures; including the internet, telecommunications networks, computer systems, and embedded processors and controllers and operated by Airmen to individuals who are assigned to a specific cyber weapon system and follow AFI 17-202V1, *Cybercrew Training,* AFI 17-202V2, *Cybercrew Standardization and Evaluation Program*, AFI 17-202V3, *Cyberspace Operations and Procedures.*

6.1.3. Information Technology (IT): Any equipment or interconnected system or subsystem of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by the DoD component. For the purposes of the preceding sentence, equipment is used by a DoD component if the equipment is used directly or is used by a contractor under a contract with the DoD component that:

6.1.3.1. Requires the use of such equipment, or

6.1.3.2. Requires the use to a significant extent, of such equipment in the performance of a service or the furnishing of a product. **NOTE:** The term IT includes computers, ancillary equipment, software, firmware, and similar procedures, services (including support services) and related resources. Notwithstanding the above, the term information technology does not include any equipment that is acquired by a federal contractor incidental to a federal contract. See *DoDD 8000.01, Management of the Department of Defense Information Enterprise* for additional information.

6.1.4. Space asset: Any individual part of a space system: equipment that is or can be placed in space and/or terrestrially-based equipment that directly supports space activity. Space systems-devices and organizations forming the space network of: spacecraft, mission

packages, ground stations (such as, nuclear, deployable, and fixed satellite communications) terminals, data links among spacecraft, mission or user terminals, launch systems, and directly related supporting infrastructure.

6.1.5. NC3 assets: a collection of communications terminals, radios, and direct ancillary communications support devices and communications support equipment employed to execute nuclear command and control. Refer to **Chapter 12** of this instruction for status reporting instructions.

6.2. CCITS Equipment Status Definitions

6.2.1. Green - FMC: Assets functioning as required per TO specifications or commercial manual and is capable of performing all of its assigned missions. Assets functioning as required per TO specifications, user guides, directives, manuals, MOA, instructions and commercial manuals are capable of performing all of its assigned missions.

6.2.2. Amber - PMC: Assets functioning in such a way that it can perform at least one, but not all of its assigned missions or functions; asset is impaired but usable.

6.2.2.1. Assets with redundant capabilities will be coded PMC when redundancy is lost, even though it is fully capable of supporting all missions. Update status as Amber when a part is ordered with a status of PMCS.

6.2.2.2. Assets in this category usually support minimum mission requirements with deficiencies in range, quality, and speed of service. Further loss of redundancy, spare equipment, channels, circuits, frequencies will cause the equipment to be reported as Red (NMC). Assets reported as Amber for the sole purpose of ordering parts at a higher priority is not authorized.

6.2.3. Red - NMC: The system or equipment does not meet the TO specifications; therefore, cannot accomplish any of its assigned missions or functions is unusable and/or not available for use. Report equipment red when a part or parts is on order and status is NMC for supply.

6.2.4. Condition does not apply if the asset was turned off by the user at their option. Asset "Notice to Airmen" issued out of service is considered red (NMC) until an additional "Notice to Airmen" is issued placing it back in service. Systems turned off at using organization's option shall be changed to inactive in the approved MIS.

6.2.5. Mission status: Status hours required for operation of mission set equipment. **NOTE:** Mission status reporting is optional within Integrated Maintenance Data System (IMDS); however MAJCOMs/FOAs can define mission status reporting procedures in MAJCOM/FOA supplements, if required.

6.2.6. Status Codes: These codes are used in REMIS to determine the condition status of the asset at the point in time the status is being reported and has the same meaning as downtime code in IMDS. See **Attachment 5, Figure A5.2** for a list of IMDS to REMIS Status Code Conversion Cross Reference.

6.2.7. Reason Codes: These codes are used in REMIS to help explain when equipment is placed in the Non-Mission Capable Other (NMCO) status code condition and has the same meaning as delay codes in IMDS. See **Attachment 6, Figure A6.1** for list of IMDS to REMIS Downtime to Reason Code.

6.2.8. Downtime Codes: These codes provide the cause for asset downtime and are used in reporting status. See **Attachment 5** for list of downtime codes.

6.2.9. Delay Codes: The codes list reasons for asset delay time and are used in reporting status.

6.2.10. Active Equipment: An asset installed and commissioned to perform an operational mission or requirement. **NOTE:** Does not include cold spares or off-line equipment.

6.2.11. Inactive Equipment: An asset not commissioned or installed to perform an operational mission or requirement. Includes equipment in storage, tactical and combat communications equipment not deployed or setup and operational for training, mockups, procured/identified training equipment, and equipment not being utilized to perform a specific mission.

Section 6A—Reporting System Overview

6.3. General Concepts

6.3.1. The Reporting System. Units process inventory, status and utilization data using an approved MIS. **(T-0)**. An approved MIS varies per CCITS commodity.

6.3.2. For communications and space assets, HQ USAF, MAJCOMs, ANG, FOAs and other authorized users of REMIS database verify accuracy of the data. REMIS provides managers with worldwide information and the capability to extract data on in-use AF systems. The MIS:

6.3.2.1. Helps managers identify trends and clear up problems.

6.3.2.2. Helps in developing replacement systems, spare parts, and equipment modifications.

6.3.2.3. Ensures that managers know the equipment status on critical communications, space and weather systems and equipment.

6.3.2.4. Helps produce statistical analysis for congressional committees, the Office of Management and Budget, the Department of Defense and other offices.

6.3.3. Equipment status reporting and job data documentation data will be sent to the REMIS database automatically at specified times via the approved MIS interface.

6.4. Security Classification. CCITS equipment or assets inventory, status, and utilization data reported under this instruction are unclassified. **NOTE:** Do not enter classified data into the MIS or REMIS. Report equipment or mission status information as directed by the maintaining command or as specific in the commands security classification guide.

6.5. Communications Equipment Reporting System Overview.

6.5.1. Each communications equipment asset or system is always possessed by a designated AF reporting organization at either the organizational or depot level. For purpose of this AFI, communications equipment or system is defined by type equipment code “C” or “R” per TO 00-20-2. The designated AF reporting organization retains this responsibility in instances where a CCITS is loaned, leased or in use by any organization external to the AF. This

includes Space Command and Control Systems in AFSPC. The possessing organization or depot will report:

6.5.1.1. The hours it possesses the communication asset. **(T-1)**.

6.5.1.2. Changes in communications asset possession. **(T-1)**.

6.5.1.3. Status conditions that affect a communications ability to perform assigned missions. **(T-1)**.

6.5.1.4. The asset as active or inactive as applicable. **(T-1)**.

6.5.2. If a contractor controls or maintains communications assets that require inventory, status, and utilization reporting, the AF entity and/or government representative possessing invoice, receipt, acceptance, and property transfer receiving report or DD Form 250 ownership is responsible for ensuring all reporting requirements are met. **(T-1)**. When responsibility is delegated via a contract, the administrative contracting officer will submit the needed reports and/or information to the agency that request it, unless the applicable contract states otherwise. Use these reports whenever it is in the best interest of the government.

6.5.3. For space assets only, enter the CFO modification records including determining the value of the modification on each asset and documenting when the modification was completed on each asset. Capitalize only those modifications that meet the DoD capitalization threshold as defined in DoD 7000.14-RV4, and add capability to the weapon system or extend the useful life of the weapon system beyond its originally planned useful life.

6.6. IT Equipment Reporting System Overview.

6.6.1. Each IT equipment asset or system is always possessed by a designated AF reporting organization at either the organizational or depot level will be tracked in the Defense Property Accountability System (DPAS) IAW AFMAN 17-1203, *Information Technology (IT) Asset Management*, and maintenance will be documented in applicable MIS. The processing organization or depot will report:

6.6.1.1. Changes in IT asset possession. **(T-1)**.

6.6.1.2. Status conditions that affect IT asset ability to perform assigned missions. **(T-1)**. Exception: Theater deployable equipment is IT Equipment and will be tracked in DPAS IAW AFMAN 17-1203 and maintenance will be documented in IMDS when capability is provided. See **paragraph 6.11** Communications equipment, for more details.

6.6.2. If a contractor controls or maintains IT assets that requires inventory, status, and utilization reporting, the AF entity and/or government representative possessing invoice, receipt, acceptance, and property transfer receiving report or DD Form 250 ownership is responsible for ensuring all reporting requirements are met. **(T-1)**. When responsibility is delegated via a contract, the administrative contracting officer will submit the needed reports and/or information to the agency that asks for them, unless the applicable contract states otherwise. Use these reports whenever it is in the best interest of the government.

6.7. Cyberspace Equipment Reporting System Overview. Cyberspace weapons system components will be tracked in DPAS IAW AFMAN 17-1203. **(T-1)**. **NOTE:** IAW TO 00-33A-1001 maintenance will be documented in IMDS.

6.8. Space Equipment Reporting System Overview.

6.8.1. Each space equipment asset or system is always possessed by a designated AF reporting organization at either the organizational or depot level. The designated AF reporting organization retains this responsibility in instances where a space asset, to include AFSPC and control systems, is loaned, leased or in use by an organization external to the AF. The possessing organization will report:

6.8.1.1. The hours it possesses the CCITS asset. **(T-1)**.

6.8.1.2. Changes in CCITS asset possession. **(T-1)**.

6.8.1.3. Status conditions that affect a CCITS ability to perform assigned missions. **(T-1)**.

6.8.1.4. Reporting the asset as active or inactive as applicable. **(T-1)**.

6.8.2. If a contractor controls or maintains a space asset that requires inventory, status, and utilization reporting, the AF entity and/or government representative possessing invoice, receipt, acceptance, and property transfer receiving report or DD Form 250 ownership is responsible for ensuring all reporting requirements are met. **(T-1)**. When responsibility is delegated via a contract, the administrative contracting officer will submit the needed reports and/or information to the agency that request it, unless the applicable contract states otherwise. Use these reports whenever it is in the best interest of the government.

6.8.3. The applicable Weapon System PM is responsible for ensuring CFO data elements (full cost and useful life) are properly reported in REMIS in a timely fashion. The PM or designated representative shall update REMIS with missing/inaccurate CFO reporting data elements as inventory items are added, removed, or adjusted as a result of modifications.

6.8.3.1. Enter the CFO reporting data elements (full cost and useful life) value of each asset (include the value of the government furnished material) IAW DoD 7000.14-RV4.

6.8.3.2. Enter the CFO modification records including determining the value of the modification on each asset and documenting when the modification was completed on each asset. Capitalize only those modifications that meet the DoD capitalization threshold as defined in DoD 7000.14-RV4, and add capability to the weapon system or extend the useful life of the weapon system beyond its originally planned useful life.

Section 6B—Roles and Responsibilities

6.9. Base and Depot Level Activities. Reporting starts at the base level.

6.9.1. Wing/Group Commanders responsibilities:

6.9.1.1. Ensure personnel document and report maintenance data and equipment status accurately and establish process to review and correct errors in reporting no matter the MIS used, for example IMDS, Remedy. **(T-1)**.

6.9.1.2. Appoint a primary and alternate IMDS Communications Subsystem Manager to report inventory status for the unit. By email message, provide MAJCOM Communication Coordination Center the name, grade, duty phone, email address, and office symbol of the primary and alternate Communications Equipment, IMDS subsystem manager/REMIS Communications Area Manager annually at the beginning of each fiscal year and as changes in personnel occur. MAJCOM Communication Coordination Center will forward information to ACC Cyberspace Support Squadron /Cyber Maintenance annually or as when superseded. **(T-2)**.

6.9.2. Unit POC(s) will:

6.9.2.1. Track CCITS inventory and status reporting within their organization. **(T-1)**.

6.9.2.2. Monitor and/or input data in the MIS daily. **(T-1)**.

6.9.2.3. Resolve any data reporting problems. **(T-1)**.

6.9.2.4. Ensure equipment loads to MIS for space contain correct current operating time prior to performing gain transactions. **(T-1)**.

6.9.2.5. Initiate inventory transactions and movement reports as required. **(T-1)**.

6.9.2.6. Send messages or emails as required by this instruction and MAJCOM supplements. **(T-1)**.

6.9.2.7. Ensure DD Form 1149 IAW AFI 24-602V2 and is completed and sent as required. **(T-1)**.

6.9.2.8. Distribute assigned CCITS as required. **(T-1)**.

6.9.2.9. Prior to processing MIS data and sending gain/loss messages, verify inventory transaction dates and times (Zulu) with corresponding units, depots or contractors to ensure they match to maintain data integrity. **(T-1)**.

6.9.2.10. Upon notification of a CCITS asset movement, but prior to the CCITS assets actually moving, develop a transfer schedule that is funded and approved by the MAJCOM and program office. **(T-1)**.

6.9.2.10.1. Notify the MAJCOM and applicable weapons system functional manager of the CCITS asset serial numbers and transfer dates by email message. **(T-1)**.

6.9.2.10.2. When changes occur to the transfer schedule, send an updated email message to the MAJCOM and program office with justification of change. **(T-1)**.

6.9.2.11. Verify transactional history in IMDS. **(T-1)**. Complete and report within the IMDS a physical inventory for CCITS assets that do not have transactional history in the IMDS within the previous 365 days to ensure inventory accounting of assigned aerospace vehicle assets is completed IAW DoDI 5000.64. **(T-0)**.

6.9.3. Program Management Offices/Depot:

6.9.3.1. Ensure Joint Electronic Type Designation/Joint Electronic Type Designation Automated System equipment designators are consistent with MIL-STD 196D for type “R” code equipment.

6.9.3.2. Maintain the AF master inventory of serially controlled equipment.

6.9.3.3. Notify MAJCOMs and FOAs in changes and deletions to CCITS equipment designator records.

6.9.4. Lead Commands will: Annually calculate the Operational Availability Standard for each CCITS and provide them to the applicable MIS manager.

6.9.5. Office of the Deputy Chief of Information (SAF/CN) will: Act as the AF focal point for the Communications Equipment/System portion of CCITS reporting policy and procedures in partnership with ACC/2/3/4/6.

6.9.6. MAJCOM/FOA IMDS/REMIS Functional will:

6.9.6.1. Act as the AF focal point for the Cyberspace, IT, and space portion of CCITS reporting policy and procedures.

6.9.6.1.1. Provide direction/guidance as needed to ensure correct and consistent reporting.

6.9.6.1.2. Assist MAJCOMs/FOAs to integrate their unique reporting requirements into the approved AF MIS.

6.9.6.1.3. Provide technical assistance to field units/MAJCOMs/FOA to resolve IMDS/REMIS/ Remedy reporting issues and problems.

6.9.6.2. Maintain the portion of the REMIS organization table for their command.

6.9.6.3. Maintain the AF master inventory.

6.9.6.4. Resolve REMIS errors with help of the units and Host Base Data Base Manager.

6.9.6.5. Ensure the NFS5B0 reconciliation program transactions to REMIS are accomplished and REMIS reconciliation errors are corrected.

6.9.6.6. Provide training to MAJCOM equipment managers on the information available in REMIS and how to extract that data themselves.

6.9.6.7. Provide data from REMIS for special studies or assessments as requested by MAJCOM equipment managers.

6.9.6.8. Provide MAJCOM-unique (non-centrally managed) equipment standards updates annually, as needed, or confirm no changes to Global Cyber System Support Dashboard administrators to support accurate Reliability Maintainability and Availability reporting. **EXCEPTION:** If equipment or system standards are classified, omit this requirement.

6.9.7. Wing Data Base Managers/IMDS Host Base Data Base Manager will:

6.9.7.1. Monitor the receipt acknowledgment output transmittal files from REMIS daily. **(T-1)**.

6.9.7.2. Establish "dummy" depot reporting units for local depot and contract field teams reporting within the MIS is required for maintenance data reporting. **(T-1)**.

6.9.7.3. Provide assistance and training as required. **(T-1)**.

6.9.7.4. Process NFS5B0 when required by local communications units or MAJCOM IMDS/REMIS Functional and provide NFS5B0 error output files to requestor. **(T-1)**.

6.9.8. Base-level Organization/Unit/Functions Manager will: **NOTE:** For purpose of this instruction, base-level organization/unit/function manager could be a Base Communications Squadron, Maintenance Operations Center, Maintenance Control Center, Communications Focal Point, Help Desk, Command Post.

6.9.8.1. Establish a process to ensure timely and accurate entry of equipment status reporting data into the applicable MIS(s). **(T-1)**. The section supervisor will be the primary monitor for equipment status reporting data and ensure all controllers reporting equipment status reporting data are trained on data entry, correction, and monitoring processes. **(T-1)**.

6.9.8.2. Act as the IMDS Subsystem manager to communicate between the unit, IMDS Host Base Data Base Manager and MAJCOMs/FOAs on IMDS/REMIS support issues. **(T-1)**.

6.9.8.3. Report equipment status and inventory changes as quickly as possible after each event and process changes. **(T-1)**. Reference, AFCSM 21-560V2, *Integrated Maintenance Data System (IMDS) Communications Equipment (C-E) Status and Inventory Reporting*.

6.9.8.4. Coordinate with the IMDS Host Base Data Base Manager to process NFS5B0 reconciliation program as required and review the quarterly NFS5B0 error output file for action. **(T-1)**. Be familiar with using Transaction Identification Code "STI" (IMDS 230 NFSB80, Status Inquiry) so the job status of new or existing jobs may be reviewed during the duty day for accuracy. **(T-1)**.

6.9.8.5. Perform checks and balances necessary to ensure Equipment Inventory List is current and accurate. **(T-1)**.

6.9.8.6. Coordinate with the IMDS Host Base Data Base Manager to set up contingency procedures to track equipment status while IMDS is unavailable. **(T-1)**.

6.9.8.7. Update IMDS status changes that occurred during the system outage as soon as IMDS processing capability is restored. **(T-1)**.

6.9.8.8. Provide training to each workcenter supervisor and equipment status reporting point of contact (POC). **(T-2)**.

6.9.8.9. Ensure the Host Base Data Base Manager processes the Communications Status Summary Report monthly, using formats 1 and 4 on separate IMDS products, for example, Generation Run Screens. **(T-1)**. Other formats can be produced as necessary. See AFCSM 21-560V2, for specific instructions.

6.9.8.10. Maintain and update the Equipment Inventory List with information provided from the workcenter. **(T-1)**.

6.9.8.11. Reconcile all Red/Amber jobs using the Open Incident List. **(T-1)**.

6.9.8.12. Provide workcenters an Open Incident List weekly for reconciliation of all Red/Amber jobs. **(T-1)**.

6.9.8.13. Ensure updates provided by the workcenter are entered into the Equipment Inventory List system through IMDS. **(T-1)**.

6.9.8.14. Ensure CCITS status attributed to supply is reported to the LRS POC. **(T-1)**.

6.9.9. The workcenter will:

6.9.9.1. Appoint an IMDS/ Equipment Status Reporting POC if the workcenter has Equipment Inventory List reportable equipment. **(T-1)**. The Equipment Status Reporting POC can be the workcenter supervisor or any individual within the section. The Equipment Status Reporting POC will review and provide updates/corrections to the MOC weekly. **(T-1)**.

6.9.9.2. Review the Open Incident List to ensure each job against the workcenter is current and correct. **(T-1)**. Contact the base-level organization/unit/function manager when problems are discovered and provide updates on a timely basis so the job status can be updated. **(T-1)**.

6.9.9.3. Be familiar with using Transaction Identification Code "STI" (Status Inquiry) so the job status of new or existing jobs may be reviewed during the duty day. **(T-1)**.

6.9.9.4. Units will reconcile MIS equipment records with the actual on hand equipment items annually IAW AFI 23-101, AFI 23-111, AFMAN 23-122, AFH 23-123V2, *Integrated Logistics System-Supply (ILS-S), Materiel Management Operations* and AFH 23-123V3, *Air Force Equipment Management*, AFMAN 17-1203, and MAJCOM supplements. **(T-1)**.

6.9.10. Contract Administration Activities (except contract field teams). Report all gains, losses, and terminations as stated in this instruction, MAJCOM supplements and refer to maintenance contracts.

6.9.10.1. Contractor Reporting. For contractor controlled or maintained equipment/system(s), the AF possessing organizations will retain the responsibility to ensure inventory, status, utilization, and configuration reporting is accomplished. **(T-1)**.

6.9.10.2. The organization owning the contract maintenance requirement or designated official is responsible for ensuring the contract contains the necessary requirements for the contractor to provide the required inventory and status reporting information to affected users. **(T-1)**. The organization requiring the contract controlled maintenance shall coordinate with the contracting officer to ensure inventory and equipment status reporting requirements are accurately captured in contract documents. **(T-1)**. For example, the contracting Contract Officer Representative may have to enter the inventory and equipment status reporting in IMDS.

Section 6C—Reporting Responsibilities

6.10. Cyberspace and IT Asset Reporting. Report all cyberspace and IT assets in the applicable MIS, for example, Remedy, with the exception of items listed in **paragraph 6.4** of this AFI **(T-1)**.

6.10.1. The workcenter IMDS/ Equipment Status Reporting POC will: Report inventory only for Communications Security (COMSEC) Operations equipment (Standard Reporting Designator (SRD) category U and IMDS report level P must be accounted for within IMDS). **(T-1)**. Refer to the IMDS/REMIS SRD table for additional information.

6.11. Communications and Space Asset Reporting. Report all communications and space assets (type equipment "C" or "R") that are assigned an AF SRD, as listed in the IMDS/REMIS SRD Table. **(T-1)**. This requirement exists even when bases are undergoing closure, systems will be reported until deactivated or the base is closed. **(T-1)**. Use transaction identification code "QBC", Program NFSU10, screen 127 or transaction identification code "QCC", Program NFS840, screen126 to view the SRD table. **(T-1)**.

6.11.1. The workcenter IMDS/ Equipment Status Reporting POC will:

6.11.1.1. Report equipment inventory and status in IMDS for all equipment (including in-garrison deployable equipment) assigned an SRD. **(T-1)**.

6.11.1.2. Report equipment inventory for SRD category U and IMDS report level P COMSEC equipment to ensure accurate Preventive Maintenance Inspections tracking, IAW AFI 23-101 and AFMAN 23-122. **(T-1)**.

6.11.1.3. Report equipment inventory and status information for communications and space assets (including in-garrison deployable equipment) when the REMIS SRD Table MICAP indicator is marked "Y" within the REMIS SRD Table. **(T-1)**. **NOTE:** Do not report status against embedded equipment (such as, items installed on a higher level end item, for example, GRC-171 can be used as a standalone item in a Ground to Air Transmitter-Receiver or as an embedded part of the TYQ-23. Since the GRC-171 has an SRD both will be loaded to the inventory, however when the one embedded in the TYQ-23 breaks, the status is documented against the TYQ-23 using the WUC of the embedded item. **(T-1)**.

6.11.1.4. Report classified equipment status on AF intelligence, surveillance and reconnaissance equipment (SRD category Q) as directed by 25th AF. SRD category Q will only be used by 25th AF units. **(T-1)**. MAJCOMs are not authorized to use SRD category Q unless permitted by 25th AF.

6.11.1.5. Report local status only on non-reportable equipment, provided the reporting level is set to local only (IMDS reporting level R). Status reported on equipment with IMDS report level R will remain at the local (base level IMDS) database. **(T-1)**.

6.11.2. MAJCOMs, FOAs, or higher headquarters determine what mission reporting is required (IMDS reporting level Y). MAJCOM/FOA supplements to this AFI define specific reporting and non-reporting requirements.

6.11.3. Weather meteorological equipment (includes ground-based space weather collection equipment). See **Attachment 15** and **Attachment 16** for specific guidance on status and serial number reporting of weather meteorological equipment.

6.11.4. Deployable communications and IT equipment inventory list. Deployable equipment poses a challenge for reporting purposes. Unlike its fixed base counterpart, much of the equipment is in storage (in-garrison). Even when it is being utilized, it is seldom used in close proximity to an established base. The following procedures apply:

6.11.4.1. Reporting Criteria: Report equipment status as per **paragraph 6.11.5** when the equipment is deployed. Local deployed reporting procedures will be developed no later than 14 days after deployment to ensure data is recorded on a reoccurring basis. **(T-2)**.

6.11.4.2. Requirement for real time outage reporting (when the equipment is deployed and operational) will be determined by appropriate reporting agency. **(T-2)**.

6.11.5. Equipment Inventory List status reporting procedures.

6.11.5.1. Follow the instructions for transaction identification code “COX”, screen 996, Program NFSJR0 and transaction identification code “EUC”, screen 997, Program NFSJQ0, in AFCSM 21-560V2. **(T-1)**.

6.11.5.1.1. Transaction identification code “COX” (communications status load and maintenance scheduling) will not process action/request if the start date is greater than 33 days in the past from the current date. **(T-1)**.

6.11.5.1.2. Transaction identification code “EUC” (status update and close) will not delete, or update a status or delay in which the start date/time is greater than 33 days in the past from the current date. **(T-1)**.

6.11.5.2. Unless specified in a MAJCOM supplement, do not report:

6.11.5.2.1. Outages of less than 5 minutes. **(T-1)**.

6.11.5.2.2. Frequency changes, crypto reset, or runway change outages that last less than 15 minutes. **(T-1)**.

6.11.5.2.3. Adjustments or alignments performed during scheduled maintenance such as preventive maintenance inspections, TCTOs and time change items. **(T-1)**. These actions are documented during the outage.

6.11.5.2.4. Generator run-ups that are scheduled. However, “Red” time associated with generator failures during scheduled run-ups if over 5 minutes will be reported using down time code "N". **(T-1)**.

6.11.5.3. Use the downtime codes listed in **Attachment 5** to describe the reason for the outage. **(T-1)**.

6.11.5.4. Use the delay codes listed in **Attachment 6** to describe any maintenance delay that prevents the equipment from being returned to operational status. **(T-1)**.

6.11.5.5. Use Equipment Inventory List sequence codes to upgrade or downgrade status. **(T-1)**. Do not change the condition code on the original status unless it was wrong when loaded. Change sequence codes as needed to allow more than 26 delays or comments. **(T-1)**.

6.11.6. Work Unit Codes (WUC). WUCs are an important part of Equipment Inventory List status reporting. The WUCs assist with specifying subsystem problems and repair actions associated with a piece of equipment or a system. A proper WUC is required to be entered into the equipment status when an equipment problem is discovered or repaired (except for downtime code of "U"). It is the technician's responsibility to provide MOC with the proper WUC when the equipment is returned to service, when parts are placed on order or when the source of the outage is known. Use the lowest assembly WUC when possible and do not use the highest assembly (such as, AB000) WUC. The lowest level WUC is used to identify specific components causing equipment downtime. **NOTE:** The use of **000 will not be used when a more specific WUC is available. **(T-1)**.

6.11.6.1. Always report status against the highest level end item when reporting a “Red” or “Amber” status condition against an embedded end item. Do so by using the WUC within the highest level end item's WUC table that best describes the lower level embedded end item and is the closest to the component in need of repair. Never downgrade the status of work unit coded associated equipment if maintenance is not required for higher or lower assemblies. **(T-1)**.

6.11.7. Refer to MAJCOM supplement of mission reporting requirements for associated equipment status reporting. **(T-2)**.

6.11.8. Reporting procedures. MOC will report changes in equipment status as they become aware of them. **(T-1)**. This is accomplished by user notification or from the workcenter. The following procedures apply:

6.11.8.1. Status times. Use the notification time the outage was reported. Do not backdate times to previous days. N/A to AFSPC when status of outages is considered classified. Time logged to put equipment back into service will be used to close the job. **(T-1)**.

6.11.8.2. Downtime codes. Initial downtime code of "U-Unknown" will be entered until such time as maintenance can determine the exact problem, then change the downtime code to the one best describing the reason for the outage. **(T-1)**. **NOTE:** Downtime code definitions are found in **Attachment 5** of this instruction and AFCSM 21-560V2.

6.11.8.3. Delay codes. Use delay codes when maintenance is not working on the problem. **(T-1).** Use the code which best describes the delay. Close the delays upon return of maintenance on the job, reason for the delay no longer exists, or a change in situation occurs. Researching parts is not a delay unless it exceeds 30 minutes. Delay code definitions are found in **Attachment 6** of this instruction and AFCSM 21-560V2.

6.11.8.4. Comment requirements:

6.11.8.4.1. Enter comments against the status and delay codes that require one. **(T-1)**. Do not add comments to codes not requiring them unless an adverse circumstance warrants it. Keep comments short and concise but ensure there is enough information to describe the problem or situation.

6.11.8.4.2. Comments against the status:

6.11.8.4.2.1. Initial status comments may not provide the exact reason for an outage. **(T-1)**. Use the words given by the user for the first comment. Example: 125/WSA MM3 CONSTANT ALARM.

6.11.8.4.2.2. Once maintenance has determined the problem cause, an actual reason for the outage will be entered. Example: 125/ALARMS CAUSED BY FAULTY WIRES. **(T-1)**.

6.11.8.4.2.3. When the problem is corrected, enter the corrective action. Example: 128/CE REPLACED EXTERIOR BUILDING WIRES. **(T-1)**.

6.11.8.4.2.4. Other comments pertinent to the status of the equipment can be entered as they are known.

6.11.8.4.2.5. Enter the Julian date followed by a slash and then the comment.

Example: A336/. **(T-1)**.

6.11.8.4.2.6. Initials may be used if required. If initials are used, they will be placed one space after the comment. Using an entire line for initials will be avoided. No workcenter or agency names will be used. Units using initials will develop a local format for entering requirements. Example: 11/RADIO WEAK RX NM/OP. **(T-1)**.

6.11.8.4.2.7. Abbreviations may be used if common to all levels of command. Example: 224/123.1 RX INOP. **(T-1)**.

6.11.8.4.2.8. Comment lines will only contain pertinent information pertaining to the job. Do not enter extra characters (such as, dots, dashes) to fill up the comment line. **(T-1)**.

6.11.9. Inventory records.

6.11.9.1. To load communication equipment into IMDS, follow the instructions for transaction identification code CEL, IMDS screen 800, Program NFSE20 and MCR, IMDS screen 216, Program NFSK60, in AFCSM 21-560V2. IMDS transaction identification code "EIL" (Equipment Inventory List) is used to extract equipment inventory records. IMDS transaction identification code “MCL” (Mission Correlation Listing) will be used to extract mission inventory records. **(T-1)**.

6.11.9.2. Only communications equipment which possesses an AF level or local SRD being maintained by a unit or by a contractor overseen by the communication unit or under the oversight of a PM will be entered on the Equipment Inventory List. **(T-1)**.

6.11.9.2.1. Not all equipment maintained by the unit is CCITS equipment. Items such as vehicles, tool boxes will not be listed on the Equipment Inventory List. **(T-1)**. There are trainers, support equipment, test measurement and diagnostic equipment (TMDE), which are loaded on other IMDS subsystems. These other subsystems have separate inventory lists which require different IMDS equipment loads.

6.11.9.2.2. Contractor-supplied and maintained equipment can be reported or tracked using a local SRD when required by contract and AF-level SRD are not available.

6.11.9.2.3. Gain equipment (enter it into the inventory) when a unit accepts maintenance responsibility and it has been accounted for in DPAS or applicable accountable property system of record. **(T-1)**.

6.11.9.2.4. Lose equipment (place it in "inventory loss condition") when a unit no longer has maintenance responsibility, or when it has been decommissioned and removed from DPAS or applicable accountable property system of record. **(T-1)**.

6.11.9.2.5. When adding reportable equipment and missions to the inventory, ensure the correct data elements and codes (obtained from SRD Table requested with IMDS screen 126) are used. These data elements are important for status and inventory reporting.

6.11.9.2.6. Change the equipment from active to inactive status as required. Combat communications, tactical, and stored equipment will be reported as inactive until deployed, powered up, conducting Preventive Maintenance Inspections, or

maintenance (operating time is calculated from active times as reported on possessed inventory).

6.11.9.2.7. Equipment designator: Use the equipment designator as indicated on the IMDS/REMIS SRD table (screen 126). The system will not accept equipment designators that differ from the IMDS/REMIS SRD table.

6.11.9.2.8. Serial number: Use the actual equipment serial number from the equipment data plate. If the number is longer than fifteen characters, use the last fifteen characters. If the equipment has no serial number, assign one IAW AFI 23-101. **(T-1)**. If a duplicate serial number is found, verify the number and contact the applicable MAJCOM/FOAs IMDS functional for assistance. **NOTE:** Attention-to-detail must be taken to ensure that “0”, “O" and “1”, “I” are not confused when recording the serial number.

6.11.9.2.8.1. If the equipment does not have a data plate or does not have a number in the serial number block, a message will be sent to the MAJCOM for serial number assignment to prevent duplication of serial numbers in REMIS. **(T-1)**.

6.11.9.2.8.2. A system made up of several components will use the serial number of the control unit or main component. **(T-1)**.

6.11.9.2.9. Requiring command: Enter the MAJCOM that the equipment supports. This is the command that is the customer for the equipment. Reference AFCSM 21-556V2, *IMDS DSD: G105-FS, Intro to IMDS Centralized Database* or use IMDS screen 127, for a list of command codes.

6.11.9.2.10. Overhaul/install date. When the equipment is initially loaded, use the date the equipment was accepted by the unit or equipment overhaul date. Do not change this date unless the original acceptance date was entered in error. **NOTE:** Maintenance delay codes A, C, E, and S will be eliminated and merged into other delay code "U". Other delay codes "T" and "X" will be merged into other delay code "K". The definitions in **Attachment 5** for delay codes "U" and "T" will be expanded to capture delays being merged.

6.11.10. Organization record.

6.11.10.1. The IMDS system identifies an organization by number, kind, type, geographic location and detachment number. There are two organizational fields; IMDS and AFI 21-103.

6.11.10.1.1. The AFI 21-103 organization is used for up channel reporting to REMIS of status and inventory and follows the "G" Series Special Orders.

6.11.10.1.2. The organization record must be changed or updated in REMIS and provided to IMDS. Notify IMDS/REMIS communication functionals before making the change. **(T-1)**.

6.11.10.1.3. The IMDS organization is used for local identification. In most cases the IMDS and AFI 21-103 organizations should be the same.

6.11.10.2. Assign a 4-digit organizational identification (ORG ID) only to actual units, detachments, and operating locations (OL). Organizations report equipment and missions (if required) at unmanned sites and locations under the organization that has the maintenance responsibility for the asset. To change the organization record within the same MAJCOM, the inventory will be lost and regained. **(T-1)**.

6.11.10.2.1. The first two positions of the ORG ID are the 2-digit command code which is up channel reported to REMIS (by way of IT data code) as a 3-digit command code. **(T-1)**.

6.11.10.2.2. The last two positions of the ORG ID are "00" for the basic (parent) unit; for example, use "1C00". **(T-1)**.

6.11.10.2.3. For detachments or OLs, the last two positions of the ORG ID are the detachment number or OL letter. (Example, for Detachment 2, use "1C02"; For OL "A" use "1C0A". **(T-1)**.

6.11.10.2.4. For an OL of a detachment, use the detachment and the OL letter; for example, "1C2A". **(T-1)**.

6.11.11. Organization Changes.

6.11.11.1. The organization record must be loaded correctly to ensure data flows between IMDS and REMIS. **(T-1)**. The Transaction Identification Code Organization Record will not be updated unless specifically instructed to do so. Entering the wrong codes will prevent data from being passed to REMIS and other MIS. MAJCOM/FOA or higher headquarters will provide specific instructions when a change to this record is required.

6.11.11.2. The MAJCOMs/FOAs functionals will make organization changes in REMIS prior to any AFI 21-103 organization change made in IMDS to avoid up channel reporting errors in IMDS. Notify the applicable MAJCOM/FOA functionals prior to loading or changing organizations.

6.11.11.3. Make organization changes in IMDS using Transaction Identification Code Organization Record, Program NFSD80.

6.11.11.4. Communications units will ensure any required deactivation and/or transferring of organizations within IMDS are accomplished to ensure all status and inventory of equipment is properly transferred or lost. **(T-1)**.

Chapter 7

AUTOMATIC TEST EQUIPMENT INVENTORY, STATUS, AND UTILIZATION REPORTING

Section 7A—Reporting System Overview

7.1. How and What to Report.

7.1.1. The reporting requirements in this section are exempt from licensing IAW AFI 33-324. Report automatic test equipment through the appropriate MIS (If Global Eye MIS database is in-use at the unit level, this will be the appropriate MIS). Data is maintained in REMIS. **(T-0)**.

7.1.2. For the purposes of this instruction, automatic test equipment includes:

7.1.2.1. Test stations.

7.1.2.2. Tester replaceable units.

7.1.3. Owning organizations that possess automatic test equipment systems used for calibration requirements will report the inventory and status of the automatic test equipment systems in the applicable MIS. **(T-1)**.

7.2. Basic Reporting Concept.

7.2.1. Each item of automatic test equipment is possessed by an AF training or maintenance organization (to include organizational, intermediate, or depot level).

7.2.2. The possessing unit OPR reports:

7.2.2.1. Possession and changes in possession. **(T-1)**.

7.2.2.2. Conditions that change the ability of the automatic test equipment to do its mission (condition status). **(T-1)**.

7.2.2.3. Configuration. **(T-1)**.

7.2.2.4. Daily utilization. **(T-1)**.

7.2.2.5. Test station line replaceable unit capability (Global Eye MIS only).

7.2.2.6. Open maintenance discrepancies with any applicable supply information if applicable (Global Eye MIS only). **(T-1)**.

7.3. Contractor Reporting. For contractor controlled or maintained equipment, report the inventory, status, utilization, and configuration on automatic test equipment government furnished property for contracts initiated after 1 October 1993. The administrative contracting officer sends the needed reports to the agency that asked for them, unless the contract states otherwise. **(T-1)**.

7.4. The Reporting System. Data will be processed at the unit level utilizing REMIS. **(T-0)**. HQ USAF, MAJCOMs, ANG and other authorized users of the REMIS database monitor the data.

7.4.1. Unit's collect and input the data as shown in the applicable MIS user's manual. Data will be electronically transmitted at specified times to the REMIS database. **(T-1)**.

7.4.2. HQ USAF, MAJCOMs, ANG and other authorized users may extract reports, data, and information from REMIS and/or Global Eye MIS to monitor and control automatic test equipment inventory, status, and utilization.

7.5. Security Classification. NOTE: Do not report classified data under this instruction. **(T-1)**.

Section 7B—Reporting Responsibilities

7.6. Unit-Level Activities. All reporting starts at the unit level.

7.6.1. A maintenance official (usually the automatic test equipment section NCOIC) will:

7.6.1.1. Appoint an automatic test equipment POC. The POC will:

7.6.1.1.1. Ensure that automatic test equipment inventory, status, and utilization reporting is accurate and timely. **(T-1)**. Global Eye MIS users will update all automatic test equipment status, LRU capabilities, and comments weekly. **(T-1)**.

7.6.1.1.2. Ensure the unit correctly maintains inventory, maintenance status, utilization, and configuration data. **(T-1)**. All data will be accurately reported on the Current Station Status Report under Test Station Reports in Global Eye. **(T-1)**.

7.6.1.1.3. Ensure the unit reports data on all automatic test equipment at their workcenter (using the procedures in this instruction), including:

7.6.1.1.3.1. Initial station or equipment inventory or changes. **(T-1)**.

7.6.1.1.3.2. Initial Tester Replaceable Unit inventory or changes. **(T-1)**.

7.6.1.1.3.3. Station or equipment status changes. **(T-1)**.

7.6.1.1.3.4. Station or equipment LRU capability (Global Eye only). **(T-1)**.

7.6.1.1.3.5. Station or equipment comments will reflect the maintenance status and the maintenance discrepancy (for example, AWM, INW). **(T-2)**. Awaiting Part discrepancies will include quantity WUC, wholesale requisition number, national stock number, reference designator, and corresponding shop document number (Global Eye only). **(T-2)**. **(**Example: AWP - RF Generator #2 Fails Calibration: 1 EA: CSEB0, FE480981770001, 6625-01-434-1238, A5A5, J183TS72650001).

7.6.1.1.4. Station or equipment utilization time. **(T-1)**.

7.6.1.1.5. Checks the error file daily and corrects all automatic test equipment errors with help from the unit or Host Data Base Manager as needed. **(T-1)**.

7.6.1.1.6. Coordinates monthly accuracy reviews with associated MAJCOMs, Repair Network Managers, Life Cycle Management Centers and/or contractor field teams to verify inventory, status, and utilization reporting. **(T-2)**.

7.6.1.1.7. Units without access to an automated MIS will coordinate with MAJCOM or equivalent to determine alternative procedures. **(T-2)**.

7.7. MAJCOM Support Equipment/Automatic Test Station-Program Manager.

7.7.1. The MAJCOM, ANG Support Equipment/Automatic Test Station-Program Manager will:

7.7.1.1. Coordinate with units as stated in **paragraph 7.6.1.1.1** of this instruction.

7.7.1.2. Ensure units take action to correct any reporting discrepancy or problem.

7.7.1.3. Coordinate with other MAJCOMs, ANG and non-USAF organizations to move, ship, or transfer automatic test equipment and send applicable movement reports.

7.7.1.4. Ensure that automatic test equipment chosen for transfer meets the desired configuration requirements and is made ready for transfer IAW TO 00-20-1, preventive maintenance program requirements, and other transfer inspection requirements, as applicable.

7.7.1.5. Assist other MAJCOM agencies in pulling automatic test equipment inventory, status, and utilization data from the REMIS database.

7.7.1.6. Verify unit reporting to ensure that automatic test equipment inventory, status, utilization, and configuration appear in the REMIS database.

7.8. Air Force Life Cycle Logistics Manager

7.8.1. Is responsible for managing all automatic test equipment inventory, configuration and matrix tables.

7.8.2. Ensures matrix tables is maintained in REMIS using screen ETM1660, IAW TO for each piece of test station equipment.

Chapter 8

SPACE VEHICLE (SATELLITES) INVENTORY, STATUS, AND UTILIZATION REPORTING

Section 8A—Satellite Reporting Overview

8.1. Purpose. The purpose for tracking satellites is to have a single tracking tool within the AF to show an accurate status of AF satellite assets. With the exception of asset accountability and valuation reporting the reporting requirements in this section are exempt from licensing IAW AFI 33-324.

8.2. What is Reportable: Report the existence and valuation of all AF satellite systems through REMIS. **(T-0)**. Satellite systems will include the satellite as a whole.

Section 8B—Reporting Responsibilities

8.3. Each space wing and product center owning space assets reports on their systems through IMDS and REMIS. The possessing unit reports their satellite inventory and status of those assets. **(T-0)**. Space operational unit personnel will collect and process the information. **(T-1)**.

8.4. The Satellite Weapon System PM will:

8.4.1. Ensure the information on the satellite is sent to the MAJCOM AVDO so the record can be established in REMIS when the AF takes possession a satellite (even if the specific satellite weapon system incomplete).

8.4.2. Record the full cost and useful life data of each satellite once the satellite record is established in REMIS. The full cost must include the cost to produce the satellite and the cost associated with launching the satellite.

8.4.3. Send a termination notice to the MAJCOM AVDO to terminate the satellite in REMIS once the satellite is deemed completely non-operational (cannot perform any of its missions).

8.5. Reporting Accuracy.

8.5.1. All AF owned satellites must be reported in REMIS within 5 workdays of the AF taking possession of the satellite (even if the constellation of satellites is incomplete). The CFO reporting data elements (full cost and useful life) of each satellite must be recorded in REMIS within 5 workdays of the satellite becoming operational. **NOTE:** Reports specified in this procedure are the basis for justifying and defending AFSPC plans, programs, the budget, and to support the AF's CFO statement. Accurate and timely reporting is critical, errors in reporting can result in the loss of required funding, manpower authorizations, and supplies.

8.5.2. All satellite terminations must be reported in REMIS within 5 workdays of the satellite becoming non-operational.

8.6. Security Exemption. The classified status or locations of each satellite will not be entered in unclassified data systems. However, the official serial number of each satellite will be entered and maintained in REMIS along with the satellite's status (for example, active in orbit, in storage

at location XYZ or terminated) and CFO reporting data elements (full cost and useful life). Specific data about satellite and constellation degradation is reported through secure operational means.

8.7. Status Reporting. Follow the instructions for transaction identification code "COX", screen 996, Program NFSJR0 and transaction identification code EUC, screen 997, Program NFSJQ0, in AFCSM 21-560V2. Use local time (24-hour clock) for start and stop times.

8.8. Status Definitions.

8.8.1. Green FMC: DoD owns the system and has declared the system operational.

8.8.2. Amber PMC: DoD owns the system. It has been functionally turned over (DD Form 250 or Invoicing, Receipt, Acceptance and Property Transfer) from contractor to DoD, but has not been declared operational. This is a transitional status and not indicative of satellite health (for example, pending launch or on-orbit checkout).

8.8.3. Red NMC: The system is a contractor asset. It is not under control of the AF.

8.9. Inventory Reporting. Inventory reporting begins when a satellite transfers to AF ownership (versus contractor owned). Physical accountability reporting is initially accomplished by the applicable program office at the product centers until the constellation is fielded and declared operational. At that time satellite reporting transfers to the operating space wing/unit.

8.9.1. The Program Office will establish a mission design series for each satellite program once the program is funded and provide this information to the MAJCOM AVDO. This shall be completed within 180 days of the satellite program being funded and must be in place prior to the AF taking possession of the first satellite in this program.

8.9.2. The Program Office will establish an official serial number for each satellite delivered to the AF and provide this information to the MAJCOM AVDO when the AF takes possession of each satellite.

8.9.3. The Program Office must send the first page of the DD Form 250 or Invoicing, Receipt, Acceptance and Property Transfer and a launch confirmation memo (if acceptance is at the time of launch) to the AF-AVDO. The AF-AVDO will use these documents to enter the satellite's existence information into REMIS.

8.9.3.1. The launch date will be used as the placed in service date for all satellites in orbit. The DD Form 250 or Invoicing, Receipt, Acceptance and Property Transfer date will be used for all satellites accepted by the AF and held in storage.

8.9.3.2. The Program Office will enter the total cost of the satellite (including all launch costs) within 5 workdays of the satellite entry being established by the AF-AVDO.

8.9.3.3. If an AF owned satellite (originally in storage) is put in orbit, the Program Office will enter a single modification entry in REMIS against that satellite with the cost of making the satellite functional plus the launch cost. The Program Office will use the launch date as the date of that modification.

8.9.4. The Program Office will identify a primary and alternate CFO focal point. These individuals will be responsible for reviewing CFO information in REMIS, submitting any corrections and attesting to the information in REMIS as required.

8.9.5. Gain and loss criteria. The AF gains a satellite (in REMIS) when it takes possession of it (normally at the time of launch) even if the constellation is incomplete. The AF will lose a satellite (in REMIS) when the satellite's operation transfers to an organization outside of the AF or the satellite becomes non-operational (terminated). The AF will account for all satellites for as long as they are assigned to an AF activity under AF operational control.

8.9.6. Validation documents. The program office will maintain documents that will support the existence of all of their satellites, as well as, the CFO reporting data elements (full cost and useful life) of each satellite for as long as the specific satellite program exists.

8.10. Organization Record.

8.10.1. The IMDS system identifies an organization by number, kind, type, and detachment number. There are two organizational fields; IMDS organization and AFI 21-103.

8.10.1.1. The AFI 21-103 organization is used for up channel reporting to REMIS of status and inventory and follows the "G" Series Special Orders. Notify MAJCOM or FOA Database Administrator before making the change.

8.10.1.2. The IMDS organization is used for local identification. In most cases, the IMDS and AFI 21-103 organization should be the same.

8.10.2. Satellite Operational Units will:

8.10.2.1. Assign a 4-digit ORG ID only to actual units, detachments, and OLs. Report the equipment and missions at unmanned sites and locations under the organization that has maintenance responsibility. To change the organization record, the inventory will be lost and regained. **(T-1)**.

8.10.2.1.1. The first two positions of the ORG ID are the 2-digit command code which is up channel reported to REMIS (by way of IT data code) as a 3-digit command code. **(T-1)**.

8.10.2.1.2. The last two positions of the ORG ID are "00" for the basic (parent) unit; for example, use "1C00". **(T-1)**.

8.10.2.2. For detachments or OLs, the last two positions of the ORG ID are the detachment number or OL letter. For example, for Detachment 2, use "1C02"; for OL "A" use "1C0A".

8.10.2.3. For an OL of a detachment, use the detachment and the OL letter; for example, "1C2A". **(T-1)**.

8.11. Organization Changes.

8.11.1. The MAJCOMs or FOAs will make organization changes in REMIS prior to any AFI 21-103 organization change made in IMDS to avoid up channel reporting errors in IMDS IAW **paragraph 8.10.1.1**.

8.11.2. Make organization changes in IMDS using Transaction Identification Code Organization Record, Program NFSD80.

8.12. Notification Procedures. Notification of initial possession, or change in possession will be done IAW **paragraph 2.16** Message tailoring will be IAW HQ AFSPC Supplement to this publication. **(T-1)**.

Chapter 9

AEROSPACE VEHICLE AND MISSILE EQUIPMENT ACCOUNTABILITY PROGRAM

Section 9A—General Information

9.1. Aerospace Vehicle and Missile Equipment Accountability Program (Assets listed in the -21 TO, example 1F-15A/B/C/D/E-21, *Equipment Inventory List*). The reporting requirements in this section are exempt from licensing IAW AFI 33-324.

9.1.1. The AF has delegated equipment management tasks and applicable resources to AFMC, Air Force Sustainment Center for establishment of Centralized Equipment Management Flight (CEMF) responsibilities under the 635th Supply Chain Operations Wing. The CEMF resides in the 735th Supply Chain Operations Group within the 440th Supply Chain Operations Squadron. The goal of this transfer is to improve the overall central management of the AF equipment enterprise. **NOTE:** AFR and ANG is exempt, Command Equipment Management Office (CEMO) will continue to reside at Air Force Reserve Command (AFRC) and the ANG Bureau.

9.1.2. The 440 Supply Chain Operations Squadron manages and oversees equipment processes previously assigned to the MAJCOM and is responsible for interfacing with Equipment Review Authorization Activity (ERAA) residing at the lead command.

9.1.3. The lead command ERAA in coordination with the owning MAJCOM facilitates determination of equipment requirements IAW AFI 23-101 and AFMAN 23-122.

9.1.3.1. Movement of equipment is coordinated with the Lead Command ERAA and CEMF.

9.1.3.2. The Lead Command ERAA is be responsible for forecasting, programming, assessment, disposition and readiness of support equipment. Specific responsibilities will be defined in AFI 23-101 and AFMAN 23-122.

9.1.4. MAJCOMs may supplement this instruction in order to provide guidance to the units on how to meet the Lead Commands' ERAA requirements.

9.1.5. The possessing units will inventory, status, inspect, maintain, control and account for -21 TO items to meet daily peacetime, war, and mobilization plan requirements and report status through MAJCOM to Lead Command ERAA. **(T-1)**.

9.2. Control Procedures.

9.2.1. Lead Command ERAA, MAJCOMs, AFRC/ANG CEMO, CEMF, and AFLCMC PMs will be aware of the total -21 TO inventories to better plan for replacement items and to plan intra-command and inter-command transfers of items.

9.2.2. MAJCOMs will ensure possessing units inventory, status, inspect, maintain, control and account for -21 TO equipment assets.

9.3. Aerospace Vehicle and Missile Equipment Inventory.

9.3.1. The -21 TO lists all items authorized for each aerospace vehicle or missile MDS. The manufacturer prepares the -21 TO and reviews or changes it as equipment is modified.

9.3.2. The -21 TO is divided into three sections covering the three categories of equipment:

9.3.2.1. Section I, Maintenance Safety and Protection Equipment used to protect the aerospace vehicle or missile from damage and/or to make it safe for maintenance.

9.3.2.2. Section II, Alternate Mission Equipment, used to configure an aerospace vehicle or missile for one of its operational missions. It can be installed and removed quickly.

9.3.2.3. Section III, Crew and Passenger Support Equipment, used for life support and comfort of crew and passengers.

9.3.3. At unit level, automated products are usually used to control -21 inventories which are divided into individual custody accounts. To build these accounts, units will select items listed in the -21 TO and MAJCOM supplements and consolidate the items into Allowance Standards. **(T-1)**.

9.3.4. Units will use manual records (AF Form 2691, *Aircraft/Missile Equipment Property Record*) for items, such as, prototypes or specialized equipment too few in number to be listed in automated products (See **Attachment 7**). **(T-1)**.

9.3.5. Squadron commanders that need COMSEC materials will ensure that a COMSEC Responsible Officer (CRO) is appointed IAW AFMAN 17-1302-O, *Communications Security (COMSEC) Operations*. **(T-1)**. Units without sufficient safeguards and/or storage space within the applicable area may maintain or store COMSEC equipment IAW AFMAN 17-1302-O at another approved location until sufficient safeguards/storage space is acquired within the squadron. All COMSEC equipment is accountable and units will ensure that the location and status of their COMSEC equipment is known at all times. **(T-1)**.

9.3.6. Controlled cryptographic items installed as part of a weapon system will be accounted for in the MIS for the weapon system and must identify the controlled cryptographic items by serial number for tracking purposes IAW AFMAN 17-1302-O and AFI 21-101. **(T-1)**.

9.4. Management of -21 Technical Order (TO) change requests.

9.4.1. MAJCOMs may submit TO change request IAW TO 00-5-1, *AF Technical Order System* to add weapon system unique -21 items to an MDS -21 TO, for example, specialized communications, reconnaissance, weapon delivery, and guidance systems.

9.4.1.1. Coordinate request with applicable Lead Command Weapons System Managers for changes required in -21 technical orders and command unique -21 equipment requirements. Do not change the -21 TO without Lead Command ERAA, CEMF and AFLCMC PM approval.

9.4.1.2. MAJCOMs and Lead Command ERAAs will account for installed specialized or classified equipment IAW with AFI 23-101, AFMAN 17-1302-O, and MDS -6 TO requirements.

9.4.2. Include items (other than standard configuration items) listed on MESLs in the MAJCOM supplement to the -21 TO if the items are not in the basic -21 TO. List standard

configuration items that may be removed for alternate missions in the Lead Command supplement to the -21 TO as Alternate Mission Equipment. When Alternate Mission Equipment is treated as standard configuration items, the number per aerospace vehicle authorized is the largest number that can be installed.

9.5. Equipment not included in -21 TOs. These items are not included in -21 TOs:

9.5.1. Fixed or installed components are part of the basic aerospace vehicle and needed for normal operation.

9.5.2. Consumable items other than safety items (such as publications, forms, or relief bags).

9.5.3. Maintenance and servicing equipment in the Allowance Standard or the -4 TO (for example 1F-15C/D/E-4-6, *Aerospace Ground Equipment*)

9.6. Asset Categories.

9.6.1. The -21 TO lists all assets authorized for an aerospace vehicle or missile MDS. Items are defined and coded using Expendability, Recoverability, and Reparability Category (ERRC) codes as either:

9.6.1.1. Equipment.

9.6.1.2. Reparable items.

9.6.1.3. Expendable items.

9.6.2. Lead Command ERAA, MAJCOMs, AFRC/ANG CEMO, CEMF, AFLCMC PMs, product centers, or Defense Logistics Agency with management responsibility for the item determine its definition.

9.6.3. The management and control method is different for each category of items. Maintain accountability files IAW AFI 23-101 and AFMAN 23-122.

9.6.4. Lead Command ERAA, MAJCOMs, AFRC/ANG CEMO, CEMF and AFLCMC PMs or product centers identify items managed and controlled as equipment (ERRC NF and ND).

9.6.4.1. Mark the -21 TO or MAJCOM supplement to show which Allowance Standard lists the equipment.

9.6.4.2. The maintenance activity uses the management and control methods currently prescribed in the Accountable Property System of Record DPAS.

9.6.4.3. The record vehicles are the Customer Authorization/Custody Receipt Listing (CA/CRL) and AF Form 601, *Equipment Action Request.*

9.6.5. Lead Command ERAA, MAJCOMs, AFRC/ANG CEMO, CEMF, AFLCMC PMs, or product centers identify items managed and controlled as reparables (ERRC XD and XF).

9.6.5.1. Mark the -21 TO to show which maintenance activity that will manage the asset as a reparable.

9.6.5.2. The maintenance activity uses the management and control methods of the AF Recoverable Assembly Management Process.

9.6.5.3. The Special Purpose Recoverables Authorized Maintenance (SPRAM) R25 detail record lists the number of SPRAM assets on hand in the workcenter to facilitate inventory accountability requirements (includes -21 TO assets).

9.6.5.4. SPRAM account custodian responsibilities are outlined in AFI 23-101 and AFMAN 23-122. **NOTE:** The ANG will supplement AFI 21-101 with this requirement.

9.6.5.5. The record vehicle is the DD Form 1348-1A or AF Form 2692, *Aircraft/Missile Equipment Transfer, Shipping Listing*.

9.6.5.6. Units will follow procedures listed in applicable -21 TOs to control, report, and manage air launched missile -21 assets. **(T-1)**. Units will request variances in the authorized versus on hand quantities of armament/munitions -21 equipment IAW AFI 23-101 and AFMAN 23-122, routed through the owning MAJCOM, and approved by the applicable lead command. **(T-1)**.

9.6.6. Lead Command ERAA, MAJCOMs, AFRC/ANG CEMO, CEMF, AFLCMC PMs, product centers, or Defense Logistics Agency identify items managed and controlled as expendables (XB3). Accountable individuals monitor expendable (XB3) assets identified in Sections I, II and III of the applicable -21 technical order to ensure on hand quantities are sufficient to meet unit needs.

9.6.6.1. Use AF Form 2691 to maintain visibility of these items. Maintain one AF Form 2691 for each applicable line item in the -21 TO. Accomplish and document annual inventories by placing the date in Block A and writing INV in Block E.

9.6.6.2. Adjust quantities and locations accordingly. Units may place selected expendable assets on bench stock to serve as spares if consumption data warrants. Annotate levels established for bench stock items in Block J. Actual on hand level in bench stock need not be updated. Expendable assets placed in bench stock are exchanged on a one for one basis and flagged when on-hand balance is less than or equal to 50% of authorized stock level.

9.6.6.3. -21 items locally manufactured to replace -21 technical order items reference the same line item number as listed in the technical order. Additional locally manufactured items maintained, but not listed in the -21 technical orders, reference local line item numbers, for example, L-1, L-2. Units will develop local procedures to identify all locally manufactured items, designate the accountable agency, and assign the appropriate line item number. **(T-2)**.

9.6.6.4. Mark the -21 TO to show which maintenance activity will manage the items as expendables.

9.6.6.5. As a rule, maintenance does not manage or control these items once issued.

9.6.6.6. Some items defined as expendables may require specific management procedures. For example, maintenance will have the right number of cables on hand for ejector rack operation. MAJCOMs may choose to manage these items like the end item.

9.6.6.6.1. Calculate total quantities authorized using quantities listed in applicable -21 technical orders multiplied by the number of assigned unit aerospace vehicles.

9.6.6.6.2. Units manage all weapons related -21 equipment using AF Form 2691 and supporting documentation. Variances in the authorized versus on hand quantities of armament -21 equipment will be accomplished IAW procedure outlined in **paragraph 9.6.5**

9.6.6.7. Units will coordinate disposal of excess quantities of serviceable armament and munitions -21 assets with the applicable MAJCOM and lead command for approval. **(T-1)**.

Section 9B—Responsibilities

9.7. Using Command. Each MAJCOM may supplement this instruction or the -21 TO for assigned weapon systems, or both, or issue separate command instructions. The using command:

9.7.1. Appoints an OPR to focus management attention on -21 assets and informs the Lead Command ERAA.

9.7.2. Develops a control system to make sure base level accounting of items is accurate and tailored to unique MAJCOM requirements. Authorized -21 levels will not be greater than the number of assigned aerospace vehicles without prior MAJCOM and lead command approval IAW **paragraph 9.11**

9.7.3. Reallocates -21 items within the MAJCOM.

9.7.4. Coordinates with CEMF, AFLCMC program and item managers and gaining commands to reallocate -21 items as part of inter-command aerospace vehicle transfers.

9.7.5. Identifies the base level organization responsible for overseeing daily asset management and control. Other items listed in **paragraph 9.9.2** will be managed by other specified organizations.

9.7.6. Coordinates with subordinate units and other MAJCOM Headquarters to resolve equipment shortages according to **paragraph 9.14** or to locate equipment removed from transient aerospace vehicles according to **paragraph 9.15**

9.7.7. Annually reviews -21 TOs for asset requirements of assigned weapon systems in coordination with program and item managers and redistributes or adjusts items as appropriate.

9.8. AFMC.

9.8.1. HQ AFMC:

9.8.1.1. Fulfills using command responsibilities IAW **paragraph 9.7**

9.8.1.2. Responsible for interfacing and ensuring all information involving the movement of equipment is coordinated with the Lead Command ERAA and CEMF.

9.8.1.3. Develops control procedures for items not intended for the -21 TO (such as prototypes under development, test, and evaluation).

9.8.1.4. In coordination with the gaining or using command, develops an initial -21 TO for a weapon system based on the Program Management Directive, the contractor's proposed AF Form 2692, and proposed -21 TO.

9.8.2. AFLCMC PMs use yearly reviews to:

9.8.2.1. Ensure -21 TOs are current in coordination with MAJCOMs IAW **paragraph 9.7.7**

9.8.2.2. Ensure equipment listed in aerospace vehicle and missile -21 TOs and MAJCOM supplements includes all items MAJCOMs and AFLCMC PMs will oversee.

9.8.2.3. Validate MAJCOM -21 levels and make changes as needed.

9.8.2.4. Maintain AF oversight of -21 item inventory and locations to help determine necessary replacement buys, war and mobilization planning, and war reserve materiel stock objectives.

9.8.2.5. Ensure adequate stock availability of listed equipment to fulfill daily requirements and wartime taskings.

9.8.2.6. Ensure equipment listed in the -4 TO both as basic airframe equipment and as Alternate Mission Equipment (for example, missile launch rails for F-16) is listed as Alternate Mission Equipment in the -21 TO.

9.8.2.7. Ensure the respective Product Center Program Office has the roles/responsibilities identified above in **paragraph 9.8.2** for programs that are still in the acquisition phase.

9.8.3. Program and item managers manage inter-command reallocation of items resulting from aerospace vehicle transfer or changing mission requirements.

9.8.4. Program and item managers give disposition instructions for -21 items declared excess as a result of aerospace vehicle retirement or mission changes (usually warehoused and stored as excess until disposition decision).

9.8.5. Program and item managers release excess items for sale through Defense Logistics Agency Disposition Services when approved by MAJCOMs and HQ USAF IAW **paragraph 9.11**

9.9. Base Activities.

9.9.1. Units will set up procedures and assign responsibilities to:

9.9.1.1. Provide accurate accounting, oversight, and daily control of items. **(T-0)**.

9.9.1.2. Forward unit inventory results to appropriate MAJCOM weapons system managers NLT 30 Sep annually. **(T-2)**.

9.9.1.3. Report shortages impacting unit mission via message to applicable weapon systems manager. **(T-2)**.

9.9.1.4. Hold disposition of overages pending MAJCOM reconciliation. **(T-2)**.

9.9.2. Armament Flight or equivalent as defined in AFI 21-101 will account for, manage and control weapons suspension items (ERRC XD) in Section II of applicable -21 aerospace vehicle TOs. **(T-1)**. In addition, suspension items with (ERRC XF) such as LAU-129 missile launchers will be tracked and controlled using the R25 SPRAM listing. **(T-1).**

9.9.2.1. Aircraft Maintenance Units will account for and track, chaff/flare/ALE-50 magazines and Alternate Mission Equipment items with no organizational or intermediate level repair capability. **(T-1)**.

9.9.2.2. B-1 units (Armament Flights) will account for chaff and flare magazines only (ALE-50 is managed by defensive avionics), using the R25 SPRAM listing. **(T-1)**.

9.9.2.3. Local repair activity and/or SPRAM custodians will establish a communication accounting method in an operating instruction that allows for immediate action identification of assets stored or used outside the accountable workcenter.

9.9.3. Aircraft Maintenance Squadrons will account for all aerospace vehicle travel pods through appropriate equipment management documents and serially track all aerospace vehicle travel pods in the applicable MIS. **(T-1)**.

9.9.4. Propulsion Flight or MXG/CC appointed representative "when no Propulsion Flight exists", will account for all engine trailers and adapters through appropriate equipment management documents and serially track all trailers in the applicable MIS. **(T-1)**.

9.9.5. Fuels Systems Section within the Accessories Flight will serially account for and track all removable external fuel tanks in the applicable MIS. **(T-1)**. Establish local MOA/MOU governing external fuel tanks IAW AFI 21-101. **(T-1)**. **NOTE:** N/A to permanently installed external fuel tanks only removed for depot maintenance, for example, B-52/C-130.

9.9.6. The R25 SPRAM listing will be the accountability/asset inventory document for all repairable coded XD2 assets. SPRAM account custodians will maintain a custodian file IAW AFMAN 23-122. **(T-1)**. The CA/CRL is the asset inventory for equipment coded assets (ERRC NF/ND). **NOTE:** SPRAM assets are defined as fault isolation spares, shop standard spares, training spares, -21 TO spares, alternate mission equipment, test station spares, and stand-alone spares.

9.9.6.1. Maintain AF Form 2691 to provide unit visibility over XF3 and expendable XB3 assets in sections I, II, and III of applicable aerospace vehicle -21 TOs. **(T-1)**.

9.9.6.2. Units are not required to maintain an AF Form 2691 for XF3 assets controlled on the R25 listing.

9.9.7. The LRS Equipment Accountability Element is the contact point for items controlled under DPAS and SPRAM.

9.9.8. The workcenter, designated by their MAJCOM, maintains item inventories (CA/CRL or SPRAM listing or both). **(T-1)**.

9.9.8.1. As new items arrive or are transferred, units will update the inventory listing using AF Forms 601, 2692, 2005, Issue/Turn-In Request or DD Form 1348-1A, depending on how the items were moved (See **paragraphs 9.13 through 9.18**). **(T-1)**.

9.9.8.2. The custodian will:

9.9.8.2.1. Maintain a record copy of the input documents. **(T-1)**.

9.9.8.2.2. Inventory and reconcile the account upon change of custodian. **(T-1)**.

9.9.8.2.3. Complete host MAJCOM CA/CRL account reviews when directed. **(T-2)**.

9.9.8.2.4. Perform initial (upon assumption of account), annual and periodic inventories of SPRAM assets IAW AFI 23-101 and AFMAN 23-122. **(T-1)**.

9.9.8.2.5. Create a local devised checklist to account for all SPRAM authorizations and assets. **(T-1)**.

9.9.9. The -21 Support Function:

9.9.9.1. Will monitor the movement of -21 items. **(T-1)**.

9.9.9.2. Will coordinate the gathering, packing, and shipping of -21 items when aerospace vehicles are transferred. **(T-1)**.

9.9.9.3. Will notify the designated workcenter of the number of items to be shipped. **(T-1)**.

9.9.9.4. Will reconcile shortages with gaining or losing organizations and send copies of correspondence to gaining and losing MAJCOM Headquarters. **(T-2)**.

9.9.9.5. Will forward AF Form 2692 to appropriate PS&D section. **(T-2)**.

9.9.9.6. Will ensure squadron -21 support functions maintain a letter on file that identifies the -21 SPRAM account custodian by name, grade and telephone number. **(T-1)**. Additionally, forward a copy of the letter to Maintenance Operations PS&D, and the host LRS Equipment Accountability Element. AMXS support function will consolidate AMXS-21 SPRAM custodian listings and provide a copy to all squadron -21 SPRAM accountable individuals. The applicable custodian uses this listing to notify accountable agencies of aerospace vehicle deployments, aerospace vehicle transfers, or arrival of new equipment so records can be adjusted accordingly. AMXS support function will forward a copy of the listing to the host LRS Equipment Accountability Element. **(T-1)**.

9.9.10. Accountable individuals: Will use automated, manual reports, or AF Form 1297, *Temporary Issue Receipt* to control equipment in serviceable condition, including items in extended storage. **(T-1)**. The reports will identify equipment by type, serial or field number, date issued and the accountable squadron individual. **(T-1)**.

9.9.11. The squadron POCs are accountable to the Maintenance Group for equipment problem resolution and will:

9.9.11.1. Track location of equipment deployed, installed on aerospace vehicles, in repair, or stored in support sections. **(T-1)**.

9.9.11.2. Ensure in-use equipment is monitored and scheduled for maintenance. **(T-1)**.

9.9.11.3. Acknowledge responsibility by signing the equipment control report. **(T-1)**.

Section 9C—Managing -21 Assets

9.10. Transferring Aerospace Vehicle or Missile -21 Assets.

9.10.1. MAJCOMs will reallocate aerospace vehicle or missile -21 items after transfer decisions have been made.

9.10.1.1. For intra-command reallocations, inter-command or inter-theater movements the MAJCOM:

9.10.1.1.1. Requests approval from Lead Command ERAA and CEMF.

9.10.1.1.2. Sends the transfer directives to subordinate units.

9.10.1.1.3. Coordinates the movement.

9.10.2. Transfer directives will:

9.10.2.1. Identify the base level functions to coordinate the preparation, gathering, and shipping of -21 items.

9.10.2.2. Identify which items will be transferred aboard the aerospace vehicle and which items will be shipped separately.

9.10.3. If an aerospace vehicle or missile is transferred to a depot or contractor facility and will return to the same unit, the transferring unit keeps equipment the depot does not need. **(T-2)**. The unit will use AF Form 2692 to transfer installed equipment. **(T-1)**.

9.10.4. If aerospace vehicles or missiles are transferred by way of a depot or contractor program, the losing unit ships only the needed equipment and the equipment listed in the transferring directive. **(T-2)**. The losing unit will send the remaining equipment to the gaining unit no later than 30 days before the completion date. **(T-2)**.

9.10.5. For transfers through Military Assistance Program or donations and sales to agencies outside the AF, the respective AFLCMC PMs decides what equipment to transfer.

9.10.6. Requests to remove assets from AMARG storage code XT Foreign Military Sales (FMS) aerospace vehicles are sent to Deputy Under Secretary of the Air Force for International Affairs (SAF/IA) and AF/A4L.

9.11. Disposing of Excess Assets.

9.11.1. Authorized -21 levels will not be greater than the number of assigned aerospace vehicles unless the MAJCOM with the Lead Command ERAA, CEMF and AFLCMC PMs approve the excess. **(T-1)**. The possessing unit will ensure -21 approved excess/variance letter provided by MAJCOM Headquarters is retained. **(T-1)**. In certain instances, the number of -21 items on hand may exceed authorized levels because of aerospace vehicle loss, discontinuance of a specific mission, and aerospace vehicle retirement. In these cases, the owning MAJCOM Headquarters coordinates with the Lead Command ERAA, CEMF and AFLCMC PMs to develop disposition instructions.

9.11.2. In the event of aerospace vehicle loss, the unit usually carries the -21 items as excess.

9.11.2.1. MAJCOM Headquarters may elect to reallocate these items to another unit, depending on need (See **paragraph 9.10**).

9.11.2.2. Adjust the inventory to reflect items lost with the aerospace vehicle, using DD Form 200, *Financial Liability Investigation of Property Loss*.

9.11.3. When the AF discontinues a specific mission or combat capability, the owning unit usually warehouses and manages the assets as excess until disposition decision.

9.11.3.1. Only AF/A4L issues authorization for aerospace vehicle disposition through the Defense Logistics Agency Disposition Services.

9.11.4. When aerospace vehicles are retired in other than inviolate "XS" or Excess Defense Articles "XT" storage, the respective AFLCMC PM Office reallocates items used on other aerospace vehicles (for example, racks, adapters, and cargo handling equipment).

9.11.5. When aerospace vehicle items are retired, AF/A4LM will approve, via AF Form 913, the appropriate disposition for spares, training (ground maintenance/Aircraft Battle Damage Repair), National Museum of the USAF, FMS.

9.12. Increasing Authorized Levels.

9.12.1. Unit level requirements above the number of assigned aerospace vehicles are approved only after:

9.12.1.1. The MAJCOM will coordinate -21 increase requests with the Lead Command ERAA and CEMF. Approved requests will be sent to the respective AFLCMC PM (except for XB3 asset requests). **(T-1)**. The Lead Command ERAA will approve any increase in armament expendable XB3 assets after MAJCOM approval. **(T-1)**. Further coordination/approval of armament expendable assets are not required.

9.12.1.2. The respective AFLCMC PM agrees with the MAJCOM request.

9.12.1.3. A source for the item has been identified (MAJCOM redistribution, excess, war reserve materiel, or other source).

9.12.2. Items sourced from WRM require AF/A4LM approval.

9.12.3. MAJCOM funded items (such as missile launchers) require no further approval. Units will identify funds (from either AFMC or MAJCOM) and get the approval of the appropriate program and funds programs manager for all other shortfalls requiring funding. **(T-1)**.

9.12.4. The PM approves the requirements after these criteria have been met.

9.12.5. Refer unresolved disagreements to appropriate MAJCOM for resolution.

9.13. Arrival of New Equipment.

9.13.1. MAJCOM Headquarters develop and send out directives to gaining units which specify:

9.13.1.1. Which base level organization controls the various -21 items.

9.13.1.2. Which account system (DPAS, RAMP, and SPRAM) to use.

9.13.1.3. Which expendable items the unit will manage and control.

9.13.2. Coordinate these directives with the contractor, the losing command, or the respective AFLCMC PM so the shipper knows the correct address and "mark for" information.

9.13.3. List all items installed on, delivered with, or carried onboard the aerospace vehicle or missile on AF Form 2692. PS&D will file the AF Form 2692 in Aircraft Historical Records and maintain forms disposition IAW AFRIMS. **(T-1)**.

9.13.4. In all cases, the total amount of -21 equipment will equal the Program Management Directive requirements for the weapon system. **(T-1)**.

9.13.5. List any assets delivered separately on DD Form 1149 or DD Form 1348-1A. **(T-1).**

9.13.6. The designated workcenter coordinates with the equipment accountability section to load authorized quantities into the account system. As new equipment arrives, the shipping document (AF Form 2692, DD Form 1149 or DD Form 1348-1A) will be used as the input and record copies to adjust on hand quantities. **(T-1)**.

9.13.7. PS&D will inform applicable maintenance organizations and the Aircrew Flight Equipment function when aerospace vehicles are scheduled to arrive so functional area experts can meet the aerospace vehicle and inventory items. **(T-1)**. Designated workcenter representatives will (if appropriate) remove and store items and update on hand quantities as applicable. **(T-1)**.

9.14. Adjusting for Shortages.

9.14.1. Units will report shortages found during acceptance inventories to the losing unit (or PM for new weapon systems) within 24 hours. Send a copy of the notification to the applicable MAJCOM Headquarters. **(T-1)**.

9.14.2. Shortages identified during annual reconciliation and/or inventories will be thoroughly researched, resolved, or adjusted IAW AFMAN 23-122. Report unresolved shortages or discrepancies to the MAJCOM Headquarters for assistance.

9.15. Removing Assets from Transient Aerospace Vehicles. The transient location where the aerospace vehicle is physically located unit will:

9.15.1. List equipment removed and not replaced on AF Form 1297. **(T-1)**. A designated representative of the transient activity completes and signs this form in three copies and:

9.15.1.1. Send one copy to the appropriate PS&D section or equivalent at home station. **(T-1)**.

9.15.1.2. Keep one copy and place one copy in AFTO Form 781 series binder before the aerospace vehicle leaves. **(T-1)**.

9.15.2. The MXG/CC, or equivalent of the base where the aerospace vehicle is transient will ensure the removed equipment is returned to the owning base within 30 days. **(T-1)**.

9.15.2.1. Send the Transportation Control Number to the owning unit as soon as it is known. **(T-1)**.

9.15.2.2. If the inventory is not correct, the owning unit will take action according to procedures in **paragraph 9.14** to resolve the issue. **(T-1)**.

9.16. Managing Deployed Assets.

9.16.1. The owning MAJCOM and the deployed unit retain accountability for -21 items deployed for exercises and contingencies. MAJCOM Headquarters will review base mobility plans and supported OPLANs at least once a year and when taskings change to make sure equipment lists include the proper numbers and types of -21 items.

9.16.2. MAJCOM headquarters will make sure deploying units identify:

9.16.2.1. Items deployed on or with the aerospace vehicle or missile.

9.16.2.2. Items sent through normal transportation channels.

9.16.2.3. Items deployed by dedicated support aerospace vehicles.

9.16.2.4. The account system (automated or manual) used to control assets.

9.16.2.5. The function or individual who is responsible for controlling items.

9.16.2.6. Any -21 shortages or authorization changes identified during contingencies. **NOTE**: Identify shortages or authorization changes to the deployed combat MAJCOM A4 for prioritization and resolution.

9.16.3. The senior deployed maintenance officer, senior NCO, or contract maintenance officer assumes control of deployed -21 equipment. Prior to departure, the individual appointed to assume custodial responsibility at the deployed location will sign a transfer document for the equipment. **(T-1).**

9.16.3.1. Group CCs will develop procedures to provide the deploying officer and /or senior NCO with a listing of all deployed -21 equipment. **(T-1)**. If maintenance support personnel are not available at the deployed location, the senior crew chief or crew member will assume control of deployed equipment. **(T-1)**.

9.16.3.2. Separate and identify deployed equipment into three deployed groups:

9.16.3.2.1. With aerospace vehicle or missile.

9.16.3.2.2. Through normal transportation channels.

9.16.3.2.3. By dedicated support aerospace vehicles.

9.17. Transferring Assets.

9.17.1. The appropriate PS&D or equivalent is the focal point for transferring aerospace vehicles, missiles, and associated assets. This office will notify maintenance squadrons and Aircrew Flight Equipment functions of the transfer date. **(T-1)**.

9.17.2. Each accountable workcenter will prepare their applicable items for transfer. **(T-1)**.

9.17.2.1. If shipping the item on or with the aerospace vehicle or missile, list it on AF Form 2692. **(T-1)**. See **Attachment 8** for instructions on filling out this form.

9.17.2.2. If shipping the item separately, list it on AF Form 60l, DD Form 1149, or DD Form 1348-1A. **(T-1)**. Use one copy of the form to adjust inventory records. **(T-1)**.

9.17.3. The -21 support function or equivalent compiles this information and will prepare a "master" AF Form 2692 for all items to be transferred on or with the aerospace vehicle or missile. **(T-1)**. The -21 support function or equivalent will prepare a listing of other items to be transferred (including date, mode of shipment, and transportation control numbers) and will send it to the gaining organization and send copies of these lists to MAJCOM Headquarters. **(T-1)**.

9.18. Changing the Accountable Individual.

9.18.1. New account custodians will be qualified and will have attended custodian training. **(T-1)**.

9.18.2. The new account custodian will conduct an initial inventory of the account, reconcile differences with the departing custodian, and both individuals sign a statement to the effect that the account is accurate and has been verified. **(T-1)**.

9.18.3. Appointed equipment/SPRAM custodians will complete Block III, Equipment Custodians computer based training and equipment/SPRAM training provided by the LRS. **(T-1)**. Additionally, custodians will attend locally developed workcenter training on -21/SPRAM equipment management responsibilities. **(T-1)**. Relief of account custodial responsibilities will be consistent with the requirements outlined in AFI 23-101 and AFMAN 23-122. **(T-1)**.

9.18.4. Organizational commanders or equivalent will appoint primary and alternate equipment custodians in writing for all equipment accounts in their organization IAW AFI 23-101 and AFMAN 23-122. **(T-1)**.

Chapter 10

AVIONICS POD SYSTEM INVENTORY, STATUS AND UTILIZATION REPORTING

Section 10A—Reporting System Overview

10.1. Description of Reliability, Availability, Maintainability Logistics Support System for Pods (RAMPOD). Electronic combat pods and other avionics pods are self-contained systems, designed to be externally carried, and are interchangeable among the general class of bomber, fighter, interceptor, strike, and reconnaissance aerospace vehicles.

10.1.1. Pods are modularly constructed to provide capabilities specific to aerospace vehicle mission requirements for training, self-protection against enemy radar controlled weapons threats, airborne threats, navigational and target illumination, instrumentation, and communications (telemetry and data link).

10.1.2. RAMPOD is an integrated weapons management information system that collects, reports, and maintains real-time reliability, availability, maintainability, configuration, warranty, system on-time, inventory, performance, sortie, and engineering parametric data for externally carried electronic combat pods and other avionics pods.

10.1.3. AF/A4L and Deputy Assistant Secretary of the Air Force for Financial Management & Comptroller (SAF/FM) have designated RAMPOD as the Accountable Property System of Record for all AF externally carried pods, including leased pods. Financial reporting to Defense Finance and Accounting Service for all AF externally carried pods is accomplished via RAMPOD.

10.1.4. RAMPOD tracks internal mounted pods as directed by MAJCOM or Program Office. Other systems may be reported in RAMPOD as directed by MAJCOM or Program Office and approved by AF/A4L in the capacity as Maintenance Systems Portfolio Owner. See AFI 21-101 for additional RAMPOD reporting requirements.

10.2. The Reporting System. Inventory, status, and utilization data will be reported via RAMPOD. The Program Management Office/OPR for RAMPOD is AFLCMC/HIM, 4170 Hebble Creek Rd., B280, D15, Wright-Patterson AFB, OH 45433-5655. RAMPOD Portal is accessible through the AF Portal at **https://rampod4.robins.af.mil**.

10.2.1. Data is processed at the unit level and at the RAMPOD processing site. MAJCOMs, ANG, HQ USAF and other authorized users of the RAMPOD database monitor the data.

10.2.2. Once per duty day, units shall update and/or verify status and inventory information via the RAMPOD Portal Status and Inventory Management System as detailed in the applicable user's manual. **(T-1)**. Pod Asset Reporting System software user manuals can be found under the applicable (such as, Sensor, EW) universe link.

10.2.3. MAJCOMs, ANG, HQ USAF and other authorized users may extract reports, data, and information from RAMPOD to monitor and manage pod inventory, status, and utilization while achieving an auditable financial statement of assets.

10.3. How and What to Report.

10.3.1. The reporting requirements in this section are exempt from licensing IAW AFI 33-324.

10.3.2. RAMPOD maintains accountability for all AF externally carried pods and will be used to account for all AF pod assets. **(T-1)**. Accountability begins when DD Form 250 or Invoicing, Receipt, Acceptance and Property Transfer is signed. All pod program offices are required to forward a DD Form 250 or Invoicing, Receipt, Acceptance and Property Transfer to **RAMPOD.HelpDesk@us.af.mil**. for any new pods within 5 workdays of the date title passes to the government. **(T-1)**.

10.3.2.1. Accountability ends on receipt of a termination message and/or DD Form 1149. All pod program offices are required to delete pods from the active inventory or report any in-transit actions in RAMPOD within 5 workdays. **(T-1)**.

10.3.2.2. Account for previously acquired pods and shipping containers in RAMPOD when receiving documentation is not available within 5 workdays. **(T-1)**.

10.3.3. The cost of any improvements (modifications) to pods will be reported in RAMPOD by all pod program offices. Pod program offices will ensure cost data for modifications or copies of DD Form 250 or Invoicing, Receipt, Acceptance and Property Transfer will be forwarded to **RAMPOD.HelpDesk@us.af.mil** when the improvements performed by contract exceed $100K per pod. **(T-1)**.

10.3.4. For the purpose of this instruction, the pod program offices/Product Group Managers to include warehouse locations and possessing HQ USAF, MAJCOM and ANG organizations will ensure the following data is reported in RAMPOD:

10.3.4.1. DD Form 250 or Invoicing, Receipt, Acceptance and Property Transfer for all pod acquisitions. **(T-1)**.

10.3.4.2. Source documentation showing the audit trail that results in the disposal/deletions of pods from active inventory, for example, Report of Survey or equivalent. **(T-1)**.

10.3.4.3. All in-transit actions. **(T-1)**.

10.3.4.4. All pod modification costs. **(T-1)**.

10.3.4.5. Pod MDS, model, part number and serial number. **(T-1)**.

10.3.4.6. Pod operational status. **(T-1)**.

10.3.4.7. Pod ownership (AF, ANG or AFR). **(T-1)**.

10.3.4.8. Cost data for leased pods. **(T-1)**.

10.3.4.9. All pod shipping containers by serial number, status and current location. **(T-1)**.

10.3.4.10. The Elapsed Time Indicator meter readings. The frequency of Elapsed Time Indicator capture will be determined based on configuration and maintenance philosophy of the affected pod. **(T-1)**.

10.3.4.10.1. Readings of external Elapsed Time Indicator meters for Advanced Targeting Pods will be updated weekly. **(T-1)**.

10.3.4.10.2. Low Altitude Navigation Targeting Infra-Red for Night Navigation pods will be updated upon arrival at the depot and when returned to the field from the supply system. **(T-1)**.

10.3.4.10.3. Readings of internal Elapsed Time Indicator meters will be captured on any maintenance action requiring de-paneling for maintenance and/or inspection. **(T-1)**.

10.3.4.11. Changes in avionics pod ownership between Regular AF and AFR, and changes in current and assigned pod location and support responsibility, to include all deployments, TDYs, and/or special missions. **(T-1)**.

10.3.4.12. Any changes in pod inventory, status, utilization, and configuration. **(T-1)**.

10.3.5. Additional reporting requirements: For AF range pods see AFMAN 13-212V1, *Range Planning and Operations*, for additional guidance and instructions.

10.4. Contractor Reporting. For contractor controlled or maintained avionics pod systems, report the inventory, status, utilization, configuration and location of items being maintained or sustained by contract support. The contracting officer or designated official shall be responsible for delegating the required inventory reporting authority to a local representative or individual.

10.5. Security Classification. Avionics pod inventory, status, and utilization data reported under this instruction are unclassified. **NOTE:** Do not enter classified data into RAMPOD. Consult appropriate weapon system security guides for additional guidance. **(T-1)**.

10.6. Waivers from Reporting. Waivers from reporting avionics pod inventory, status, and utilization data to RAMPOD shall be forwarded to AF/A4L for consideration. **(T-1)**.

Section 10B—Reporting Responsibilities

10.7. Unit Level Activities. All reporting starts at the unit level.

10.7.1. The possessing maintenance activity will ensure accurate and timely RAMPOD inventory, status, and utilization reporting is accomplished, IAW AFI 21-101 and this instruction. **(T-1)**.

10.7.2. The maintenance organization (such as, flightline/backshop/contractor) possessing the RAMPOD-reportable assets will:

10.7.2.1. Appoint a unit pod reporting POC and send the POCs name to: **RAMPOD.HelpDesk@us.af.mil**. or AFLCMC/HIM (RAMPOD Program Management Office), 4170 Hebble Creek Rd., B280, D15, Wright-Patterson AFB, OH 45433-5655.

10.7.2.2. Provide an updated POC list to include primary and alternate POCs to RAMPOD, biannually. **(T-1)**. Include AFETS representative, if applicable.

10.7.3. The unit pod POC will:

10.7.3.1. Maintain inventory, maintenance status, utilization, and configuration data. **(T-1)**.

10.7.3.2. Ensures data is updated and verified at least once every duty day on all RAMPOD-reportable assets at the workcenter (using the procedures in this AFI) in RAMPOD. **(T-1)**.

10.7.3.2.1. Reconcile changes that impact capability with the applicable MAJCOM as they occur to ensure timely and accurate pod availability status/data is maintained. **(T-1)**.

10.7.3.3. Coordinate with MAJCOMs, ALCs, or contractor field teams to verify inventory, status and utilization reporting. **(T-1)**.

10.7.3.4. Coordinate with MAJCOM POC to determine alternative procedures when internet connectivity does not exist. **(T-1)**.

10.8. MAJCOM Functional/POCs.

10.8.1. Validate and maintain oversight of reporting unit's pod, inventory, status, utilization, and configuration in RAMPOD and reconcile errors with units as reported to ensure timely and accurate pod availability data is maintained.

10.8.2. Maintain oversight of pod shipping containers and AF contractor supported spare part kits and coordinate resolution of supportability issues. Reference, applicable AF contractual requirement agreements.

10.8.3. Provide coordination, direction, and support necessary to ensure units achieve timely resolution of supportability issues.

10.8.4. Assist MAJCOM agencies in pulling RAMPOD-reportable asset inventory, status, utilization, and configuration data (reports) from RAMPOD.

10.9. Common Avionics Program Manager.

10.9.1. Ensure all pods and reportable assets stored at warehouse locations are inventoried, accounted for, and have the status updated in RAMPOD daily/as status changes occur.

10.9.2. Perform a monthly inventory of all possessed pods and verify the quantity, location, and status is accurately reported in RAMPOD.

10.9.3. Coordinate/perform an annual physical inventory of all possessed RAMPOD reportable assets and reconcile annual inventory outcomes with the RAMPOD reported inventory. Reconcile any missing assets following the procedures for accountability for Stock Record Assets outlined in AFI 23-101.

10.9.4. Document annual RAMPOD reconciliations

10.9.5. Ensure classified pods are stored in authorized areas IAW DoDM 5200.01-V3, *DoD Information Security Program; Protection of Classified information*, and AFI 16-1404, *Air Force Information Security Program*. **(T-0)**.

Chapter 11

INVENTORY AND STATUS REPORTING OF ROCKET SYSTEM LAUNCH PROGRAM ROCKET MOTORS

11.1. Overview. The Rocket System Launch Program utilizes retired flight-worthy ICBM motors for spacelift, target vehicles and research & development. The Rocket System Launch Program stores and transports motors and components nationwide.

11.2. Inventory and Status Reporting.

11.2.1. Reporting includes inventory and status reporting on Rocket System Launch Program Office owned uninstalled rocket motors at all locations (Depot, contractor facilities), through end of life (such as, launched, disposed/demilled, transferred ownership).

11.2.2. AF reports accountability of Rocket System Launch Program owned uninstalled rocket motors as Operating Material and Supplies through the IMDB.

11.2.3. The Rocket System Launch Program Office assigns an IMDB POC and assumes responsibility for all rocket motors in possession of the Rocket System Launch Program. It is critical that the IMDB POC annotate ownership, asset condition code and location within IMDB in a timely and accurate manner. In addition, the IMDB POC must ensure the IMDB is periodically reconciled to the actual Rocket System Launch Program inventory.

11.2.4. The Rocket System Launch Program IMDB POC is responsible to:

11.2.4.1. Update IMDB for movement of rocket motors (such as, change in physical location, receipt from contractor, transfer from other organization), no later than 5 working days after the event occurs.

11.2.4.2. Update IMDB for termination of rocket motors (such as, launch, static fire, Aging and Surveillance/motor dissection), no later than 5 working days after the action occurs.

11.2.4.3. Coordinate with receiving program office (such as, 309th MMXG ICBM AVDO), prior to transferring ownership of a rocket motor to the other program office.

11.2.4.4. The transferring organization will ensure the physical asset is properly reconciled with IMDB (location of the actual asset and IMDB record match), and the operational status is updated in IMDB prior to transferring the asset.

11.2.4.5. The gaining program office is responsible for the accountability of the rocket motor once the transfer is complete.

11.2.5. Reconcile all movements and terminations of rocket motors in IMDB monthly.

11.2.6. Reconcile ownership and asset condition codes in IMDB quarterly.

11.2.7. Units will:

11.2.7.1. Complete physical accountability (such as, actual assets to IMDB information and IMDB information to actual assets) of all rocket motors annually (Date of report will be 31 August with 30 days to inventory and reconcile reports). **(T-1)**.

11.2.7.2. Financial information is maintained in IMDB. The Rocket System Launch Program Office is responsible for establishing and maintaining the CFO reporting data elements (full cost and useful life) of each rocket motor (See **paragraph 11.5**). Valuation of all rocket motors must be reconciled at least annually.

11.2.7.3. Complete physical accountability (such as, actual assets to IMDB information and IMDB information to actual assets) of all Minuteman III Stage I within 15 days of the semi-annual data exchange per New Start Treaty requirements IAW AFI 16-608. **(T-1)**.

11.3. Possession Reporting.

11.3.1. Possession is the actual Rocket System Launch Program Office acceptance or designation of responsibility for the rocket motor. When the Rocket System Launch Program Office takes possession of the rocket motor, the IMDB POC starts reporting according to this instruction and applicable systems instructions. Rocket System Launch Program shall use the DD Form 1149 as the documentation for receipt or transfer of assets.

11.3.1.1. Rocket motor technicians, storage facility, and motor maintenance personnel will provide confirmation notification to the Transportation Management Specialist (to update IMDB) on all Rocket System Launch Program asset relocations. The Transportation Management Specialist will notify the Rocket System Launch Program Office of the relocation. Rocket System Launch Program Office will perform semi-annual reconciliation of its assets located at storage facilities, contractor facilities, and depot locations. **(T-1)**.

11.3.1.2. Possession terminates when the Rocket System Launch Program asset is destroyed (demilled, launched, destructive aging/surveillance testing), or is transferred to another responsible organization. Terminate the Rocket System Launch Program asset in IMDB which will cease reporting, if the asset has permanently transferred to non-AF activities. However, maintain documentation in IMDB showing the rocket motor history and associated transfer actions.

11.4. Notification, Termination, and Relocation Procedures.

11.4.1. Accurate reporting of possession changes is essential in order for the AF to accurately account for the location and use of the Rocket System Launch Program assets. Rocket System Launch Program Office ensures personnel maintain, correct and report all data using the procedures in AFI 16-402, and this instruction.

11.4.1.1. The IMDB POC notifies the Transportation Management Specialist of a location change of a Rocket System Launch Program asset when depot does not provide the means of transportation/ handling.

11.4.1.2. Change in Asset Condition Code. The designated individual of the organization changing the condition code (such as, serviceable, unserviceable, or obsolete) of the Rocket System Launch Program asset sends a priority asset condition code change message to the Rocket System Launch Program Office. IMDB POC notifies the Transportation Management Specialist, via Email, to update current asset status not later than 5 working days after the change.

11.4.2. Termination Message, Rocket System Launch Program Asset Termination Report. The unit or depot where the Rocket System Launch Program asset was destroyed or sent to Defense Logistics Agency Disposition Services sends a priority termination Email message not later than 5 working days after the action has occurred. Rocket System Launch Program provides a signed termination letter or equivalent containing how, when, where, serial number and the date the asset was destroyed. IMDB Rocket System Launch Program POC uploads the termination letter into IMDB, attaches it to subject asset, and notifies the Transportation Management Specialist to update current asset status in IMDB.

11.4.3. Relocation Message, Rocket System Launch Program Asset Location Change Report. The designated individual of the organization relocating Rocket System Launch Program assets sends a priority relocation message to the Rocket System Launch Program Office not later than 5 working days after the asset's location changed. When a relocation message is received by Rocket System Launch Program, the IMDB POC notifies the Transportation Management Specialist to update current asset status in IMDB and validate that the change has occurred.

11.5. Training Devices, Inert Rocket Motors, and Static Displays.

11.5.1. For accountability purposes, inert rocket motors, rocket motor fired cases, static displays, and Ground Test Missiles are tracked in IMDB but are not included on directed rocket motor inventories. Terminate the rocket motor and cease reporting if the asset has permanently transferred to non-AF activities that may include but are not limited to:

11.5.1.1. National Museum of the USAF.

11.5.1.2. Defense Logistics Agency Disposition Services.

11.6. Rocket System Launch Program Asset Valuation.

11.6.1. The Rocket System Launch Program Office is responsible for establishing the value of uninstalled Rocket System Launch Program owned rocket motors. This value is normally derived from the original weapon system CFO reporting data elements (full cost and useful life) however, in the absence of this information (for the older weapon systems), the cost may be derived from other means. For example: retired ICBM weapon system booster costs established by the ICBM Program Office.

11.6.2. A copy of the documentation supporting the CFO reporting data elements (full cost and useful life) should be maintained with the Weapon System Program Manager for the life of the weapon system plus 5 years. This documentation can be stored electronically but the program office must ensure that there are copies of this information stored at a backup site (other than the location of the Weapon System Program Managers).

11.7. Operating Material & Supplies Asset Value – Rocket System Launch Program

11.7.1. The Weapon System Program Managers are responsible for establishing the CFO reporting data elements (full cost and useful life) of Rocket System Launch Program rocket motors. This data is normally derived from the acquisition/procurement contracts however; in the absence of these contracts (for the older weapon systems) the cost may be derived from other means (such as, like items).

11.7.2. A copy of the documentation supporting the CFO reporting data elements (full cost and useful life) should be maintained with the Weapon System Program Manager for the life

of the weapon system plus 5 years. This documentation can be stored electronically but the program office must ensure that there are copies of this information stored at a backup site (other than the location of the Weapon System Program Managers).

Chapter 12

AF NUCLEAR COMMAND AND CONTROL COMMUNICATIONS (NC3) WEAPON SYSTEM (AN/USQ-225)

Status and inventory reporting

Section 12A—-Reporting System Overview

12.1. Overview

12.1.1. Description of NC3. IAW AFI 13-500, *Air Force Nuclear Mission Responsibilities* and AFI 13-550, *Air Force Nuclear Command, Control, and Communications (NC3)* this instruction establishes consolidation of the communications systems and components of AF NC3 systems into the AF NC3 Weapon System. The AF NC3 Weapon System is nomenclated and referred throughout this instruction as AN/USQ-225, under AFGSC as the lead command, IAW HQ AF Deputy Chief of Staff, Strategic Deterrence and Nuclear Integration Program Action Directive D16-01 *Centralized Management of the Nuclear Enterprise*. It is comprised of AF communications systems and components (radios, terminals, messaging, and conferencing systems that establish and function across the NC3 enterprise) through which the President of the United States exercises nuclear command and control.

12.1.2. The AN/USQ-225 is divided into twelve configuration elements under four categories: NC3 Senior Leader Communications, NC3 Control Centers and Sensors, AF Nuclear Delivery Systems, and Nuclear Support and Recovery Teams. Configuration elements are the terminals, radios, direct ancillary communications devices and support equipment that live on or within each NC3 host platform or within each NC3 mission facility employed to execute nuclear command and control. **(T-2)**.

12.1.3. Many of the configuration elements are tracked as sub-systems in aircraft MESLs or managed as communication equipment. The AN/USQ-225 drastically narrows the focus of the aircraft based system configuration elements and aggregates the equipment in ground based configuration elements (Command Post/Centers, Recovery Teams, and Mobile Consolidated Command Centers). The AN/USQ-225 is now portrayed as a warfighting element rather than individual components. This configuration drives the requirement for individual units to independently report status and utilization of NC3 assets.

12.1.3.1. Many of the communications systems used on the AN/USQ-225 are also used in non-NC3 applications. Those non-NC3 applications are not included in this chapter, these items will be managed by instructions in **Chapter 2**, Aerospace Vehicles or **Chapter 6**, Communications, Cyberspace, IT, and Space Equipment. **(T-2)**.

12.1.3.2. The AN/USQ-225 equipment on airborne configuration elements will continue to be tracked against the aircraft MESL. Additionally, the AN/USQ-225 equipment will also be tracked as a NC3 Weapon System. **(T-2)**. MAJCOMs in conjunction with the lead command will identify any additional NC3 status reporting mission requirements in supplements/addendums to this AFI. **(T-2)**.

12.1.3.3. AN/USQ-225 maintenance and status data will be documented in IMDS or G081 MIS to ensure entry into the REMIS database. **(T-2)**.

12.2. Security Classification.

12.2.1. AN/USQ-225 configuration element equipment, inventory, status and maintenance data reported under this instruction are unclassified. **(T-2)**. **NOTE:** Do not enter classified data into a MIS or REMIS. Refer to TO 00-20-2, para 4.26. for more information.

Section 12B—-Roles and Responsibilities

12.3. Base and Depot Level Activities. Reporting starts at the base level.

12.3.1. Wing/Group Commanders will:

12.3.1.1. Ensure personnel document and report maintenance and equipment status data accurately in an approved MIS. **(T-1)**.

12.3.1.2. Establish processes to review and correct errors in reporting. **(T-1)**.

12.3.1.3. Appoint a unit AVDO or equivalent IAW **Chapter 2**, IMDS Communications Subsystem Manager or equivalent IAW **Chapter 6**. (**T-2)**.

12.3.2. The Unit AVDO or IMDS Communications Subsystem Manager will:

12.3.2.1. Monitor and ensure data is input into the approved MIS daily. **(T-2)**.

12.3.2.2. Resolve any data reporting problems. **(T-2)**.

12.3.2.3. Initiate inventory transactions and movement reports as required. **(T-2)**.

12.3.2.4. Send messages or e-mails as required by this instruction and MAJCOM supplements. **(T-2)**.

12.3.2.5. Prior to processing MIS data and sending gain/loss messages, verify inventory transaction dates and times (Zulu) with corresponding units, depots or contractors to ensure the data matches and to maintain data integrity. **(T-2)**.

12.3.2.6. Upon notification of an AN/USQ-225 Command Post/Center asset movement, but prior to the assets actually moving, develop a transfer schedule that is funded and approved by the MAJCOM and program office. **(T-1)**.

12.3.2.6.1. Notify the MAJCOM Communication Coordination Center and applicable weapons system functional manager of the AN/USQ-225 asset serial numbers and transfer dates by email message IAW the classification of the information being transmitted. **(T-1)**.

12.3.2.6.2. When changes occur to the transfer schedule, send an updated e-mail message to the MAJCOM Communication Coordination Center and program office with justification of change. **(T-1)**.

12.3.2.7. The unit IMDS Data Base Manager or G081 subsystem manager will verify transactional history in MIS. **(T-1)**. Complete and report within the MIS a physical inventory for AN/USQ-225 assets that do not have transactional history in the MIS within the previous 365 days to ensure inventory accounting of assigned aerospace vehicle assets is completed IAW DoDI 5000.64. **(T-1)**.

12.3.3. Air Force Nuclear Weapons Center Nuclear C3 Integration Directorate (AFWNC/NC3) in coordination with Program Management Offices/Depots that support NC3 Constituent Systems will:

12.3.3.1. Ensure Joint Electronic Type Designation/Joint Electronic Type Designation Automated System equipment designators are consistent with MIL-STD 196D for type "R" code equipment. **(T-1)**.

12.3.3.2. Maintain the AF master inventory of serially controlled equipment. **(T-1)**.

12.3.3.3. Notify MAJCOMs and FOAs when changes and deletions occur to the AN/USQ-225 equipment designator records. **(T-1)**.

12.3.4. **Lead Command will:**

12.3.4.1. Oversee implementation of AN/USQ-225 MESL addendum. **(T-1)**.

12.3.4.2. Annually calculate the mission capability rate for the AN/USQ-225 and provide to the using Commands. **(T-1)**.

12.3.4.3. Act as the AF focal point for the AN/USQ-225 reporting policy and procedures. **(T-1).**

12.3.5. **MAJCOM/FOA IMDS/GO81/REMIS Functional will:**

12.3.5.1. Provide direction/guidance as needed to ensure correct and consistent reporting.

12.3.5.2. Assist MAJCOMs/FOAs to integrate their unique reporting requirements into the approved MIS.

12.3.5.3. Provide technical assistance to field units/MAJCOMs/FOA to resolve IMDS/GO81/REMIS reporting issues and problems.

12.3.5.4. Maintain the portion of the REMIS organization table for their command.

12.3.5.5. Maintain the AF Master Inventory.

12.3.5.6. Resolve REMIS errors with help of the units and Host Base Data Base Manager.

12.3.5.7. Ensure the NFS5B0 transactions to REMIS are accomplished and REMIS reconciliation errors are corrected.

12.3.5.8. Provide training to MAJCOM equipment managers on the information available in REMIS and how to extract that data themselves.

12.3.5.9. Provide data from REMIS for special studies or assessments as requested by MAJCOM equipment managers.

12.3.6. **Wing Data Base Managers/MIS Host Base Data Base Manager will:**

12.3.6.1. Monitor the receipt acknowledgment output transmittal files from REMIS daily. **(T-1)**.

12.3.6.2. Provide assistance and training as required. **(T-1)**.

12.3.6.3. Process NFS5B0 when required by local communications units or MAJCOM MIS Functional and provide NFS5B0 error output files to requestor. **(T-1)**.

12.3.7. **Base-level Organization/Unit/Functions Manager will:**

12.3.7.1. Establish a process to ensure timely and accurate entry of NC3 maintenance status data into the MIS. **(T-1)**. The section supervisor will be the primary monitor for maintenance status data and ensure all controllers reporting Equipment Inventory List data are trained on data entry, correction, and monitoring processes. **(T-1)**.

12.3.7.2. Act as the MIS Subsystem manager to communicate between the unit, MIS Host Base Data Base Manager and MAJCOMs/FOAs on IMDS/GO81/REMIS support issues. **(T-1)**.

12.3.7.3. Coordinate with the MIS Host Base Data Base Manager to process NFS5B0 reconciliation program as required and review the quarterly NFS5B0 error output file for action. **(T-1)**. Be familiar with using Transaction Identification Code "STI" (IMDS 230 NFSB80, Status Inquiry) so the job status of new or existing jobs may be reviewed during the duty day for accuracy. **(T-1)**.

12.3.7.4. Perform checks and balances necessary to ensure the Equipment Inventory List is current and accurate. **(T-1)**.

12.3.7.5. Coordinate with the MIS Host Base Data Base Manager to set up contingency procedures to track equipment status while MIS is unavailable. **(T-1)**.

12.3.7.6. Provide training to each workcenter supervisor and Equipment Inventory List point of contact. **(T-2)**.

12.3.7.7. Ensure the Host Base Data Base Manager processes the Communications Status Summary Report monthly.

12.3.7.8. Reconcile all open Job Control Numbers daily. **(T-1)**.

12.3.7.9. Ensure updates provided by the workcenter are entered into the Equipment Inventory List system through the approved MIS. **(T-1)**.

12.3.7.10. Ensure AN/USQ-225 status attributed to supply is reported to the LRS POC. **(T-1)**.

12.3.8. **The workcenter will:**

12.3.8.1. Appoint an IMDS/G081 Equipment Inventory List POC if the workcenter has Equipment Inventory List reportable equipment. **(T-1)**. The Equipment Inventory List POC can be the workcenter supervisor or any individual within the section. The Equipment Inventory List POC will review and provide updates/corrections to the MOC weekly. **(T-1)**.

12.3.8.2. Review open job control numbers to ensure each job against the workcenter is current and correct. **(T-1)**.

12.3.8.3. Contact the base-level organization/unit/function manager when problems are discovered and provide updates on a timely basis so the job status can be updated. **(T-1)**.

12.3.8.4. Applicable units will reconcile MIS equipment records with the actual on hand equipment items annually IAW AFI 23-101, AFI 23-111, AFMAN 23-122, AFH 23-123 V2, and V3, AFMAN 17-1203, and MAJCOM supplements. **(T-1)**.

12.4. Contract Maintenance.

12.4.1. Contract Administration Activities (Except Contract Field Teams). Report all gains, losses, and terminations as stated in this instruction, MAJCOM supplements, or IAW maintenance contracts.

12.4.2. Contractor Reporting. For NC3 contractor controlled or maintained equipment/system(s), the AF possessing organizations will retain the responsibility to ensure inventory, status, utilization, and configuration reporting is accomplished. **(T-1)**. The organization owning the NC3 contract maintenance requirement or designated official is responsible for ensuring the contract contains the necessary performance work statements for the contractor to provide the required inventory and status reporting information utilizing IMDS, IAW TO 00-33A-1001. **(T-1)**. The organization requiring the contract controlled maintenance shall coordinate with the contracting officer to ensure inventory and equipment status reporting requirements are accurately captured in the contract performance work statement. **(T-1)**. For example, the contracting Contract Officer Representative may have to enter the inventory and equipment status reporting into IMDS.

Section 12C—-Reporting Responsibilities

12.5. Status and Discrepancy Reporting.

12.5.1. Units shall process status and discrepancy data using an approved MIS. **(T-1)**. Authorized users of the REMIS database verify accuracy of the data. **(T-1)**.

12.5.2. Maintenance documentation of AN/USQ-225 shall be recorded IAW TO 00-20-2, para 4.26. “Systems on which real time reporting would divulge classified vulnerabilities will be reported only after the system has been restored to operations and the job control number has been closed, for all other systems document maintenance as required”. **(T-1)**.

12.5.3. Do not report status against embedded equipment (such as, NC3 items installed on a higher level NC3 end item, for example GSC-42 can be used as a standalone item for Military Satellite Communications or as an embedded part of the GRC-221within the fixed NC3 Support Configuration Element AN/FSC-150). **(T-2)**. Since the GSC-42 has an SRD both will be loaded to the inventory, however when the embedded part in the GRC-221 breaks, the status is documented against the AN/FSC-150 using the WUC of the embedded item GSC-42. **(T-2)**.

12.6. Possession reporting.

12.6.1. Airborne Configuration Elements: When an Aircraft is placed in depot status the corresponding Airborne NC3 configuration element will mirror the aircraft possession code, for example, Aircraft: A0005 and NC3 Platform: G0005. **(T-2)**.

12.6.2. Launch Control Center Configuration Element: When a Launch Control Center is placed in depot status the corresponding Launch Control Center NC3 configuration element will mirror the Launch Control Center possession code. **(T-2)**.

12.6.3. Command Post/Centers and Support Teams Configuration Element: Command Posts/Centers and Support Team configuration elements will not be placed in depot status. The AN/USQ-225 systems that reside in these configuration elements may be put into depot status.

12.7. Communications Equipment Reporting System Overview.

12.7.1. Each communications equipment asset or system is always possessed by a designated AF reporting organization at either the organizational or depot level. For the purpose of this instruction AN/USQ-225 communications equipment or system is defined by Type equipment code "C" or "R" IAW TO 00-20-2. The designated AF reporting organization retains this responsibility in instances where an AN/USQ-225 configuration element is loaned, leased or in use by any organization external to the AF. The possessing organization or depot will report:

12.7.1.1. The hours it possesses the communication asset. **(T-1)**.

12.7.1.2. Changes in communications asset possession. **(T-1)**.

12.7.1.3. Status conditions that affect a communications ability to perform assigned missions. **(T-1)**.

12.7.1.4. The asset as active or inactive as applicable. **(T-1)**.

12.7.2. If a contractor controls or maintains communications assets that require inventory, status, and utilization reporting, the AF entity/government representative possessing invoice, receipt, acceptance, and property transfer receiving report or DD Form 250 ownership is responsible for ensuring all reporting requirements are met. **(T-1)**. When responsibility is delegated via a contract, the administrative contracting officer will submit the needed reports/or information to the agency that asks for them, unless the applicable contract states otherwise. Use these reports whenever it is in the best interest of the Government.

12.8. Determining Maintenance Status.

12.8.1. **Attachment 2 contains a list of maintenance and condition status' and the definitions, which are based on DoDI 3110.** 05. These codes describe the capability of an aerospace vehicle to do its assigned wartime mission as specified in the units Designed Operational Capability (DOC) statement or MESL. The NC3 weapon system uses these same codes with some limitations. There are no flyable/non-flyable differences for NC3. When a NMC condition exists it will be recorded using the non-flyable NMC status code choices. **(T-1)**. Streamlining of the MESL on airborne configuration elements down to a single mission limits the use of PMC to very few instances for aircraft based configuration elements. Launch Control Centers and ground based configuration elements will have more opportunities to be PMC due to multiple communications systems.

12.8.2. A status change will be reported when a maintenance discrepancy that impacts mission performance is identified. **(T-1)**. The maintenance status code is determined by the following criteria:

12.8.2.1. Units will report a configuration element that has a degraded performance in its assigned mission as PMC. **(T-1)**. Report a configuration element that cannot perform its assigned mission as NMC. **(T-1)**.

12.8.2.2. Add the letter M (maintenance), S (supply), or B (both supply and maintenance) to show the reason the configuration element is PMC or NMC. **(T-1)**.

12.8.2.3. Dual status conditions NMCB or PMCB starts when a configuration element requires maintenance for one discrepancy and supplies for a second discrepancy. **(T-1)**.

12.8.2.4. Change an existing maintenance or supply condition to the dual condition if a second problem is discovered. For example, when a configuration element is in NMCM maintenance status code and a discrepancy that results in a valid MICAP supply part is found NMCS, change the reported status to NMCB. **(T-1)**.

12.8.2.5. Supply status starts when a valid demand is made and it is determined that the part is not available on base.

12.8.2.6. Supply status ends when maintenance receives the part. If maintenance cannot accept the part the supply status time stops at the time supply attempts to deliver the part.

12.8.2.7. Maintenance status stops when maintenance is completed according to applicable technical data and all ground checks are completed.

12.8.2.8. Use the NC3 Configuration Element Maintenance Status Code Flow Chart in **Table 12.1** along with the configuration element MESL found in the AFGSC Addendum to this AFI to help determine the proper configuration element maintenance and condition status codes to report.

Table 12.1. NC3 Configuration Element Maintenance Status Code Flow Chart.

NC3 CONFIGURATION ELEMENT MAINTENANCE STATUS CODE FLOW CHART		
QUESTION	**RESPONSE**	**ACTION**
A. Does a discrepancy exist against any system/subsystem/component listed on the MESL BSL or Function list that limits or prevents full mission performance?	YES	Go to question B
	NO	FMC
B. Is the system/subsystem/component completely inoperative or display degraded performance?	INOP	NMC **(Note 1)**
	DEGRADED	PMC **(Note 2)**
NOTES: 1. Input maintenance status code NMCM, S, or B and condition status code as appropriate into the applicable MIS. Ensure the code corresponds to NMC non-flyable. 2. Input maintenance status code PMC and condition status code MG, SH, or BF as appropriate into the applicable MIS.		

12.9. Work Unit Codes (WUC)/Logistics Control Numbers (LCN)

12.9.1. Configuration Elements with established WUCs/LCNs will be input into the MIS. **(T-1)**.

12.9.1.1. WUCs/LCNs are an important part of MIS status reporting. WUCs/LCNs identify specific sub-systems during maintenance actions. A proper WUC/LCN is required to be entered into the MIS status report when a system discrepancy is discovered or repaired. **(T-1)**. A system or sub-system WUC/LCN may be entered during troubleshooting. A specific WUC/LCN will be entered when the faulty component is identified. **(T-1)**. The use of 00 or 000 will not be used when a specific WUC/LCN is available. **(T-1)**.

12.10. Minimum Essential Subsystems List (MESL)

12.10.1. MESLs are the basis for status reporting. MESLs lists the minimum essential systems and sub-systems that must operate in order for a weapon to perform a specifically assigned wartime mission. The appearance of MESLs will differ based on the configuration element.

12.10.2. MESLs for all NC3 configuration elements in which AFGSC has been designated Lead Command IAW AFPD 10-9 will be posted on the AFNC3C site: **https://cs2.eis.af.mil/sites/10963/dir/NC3_Center/SitePages/Home.aspx**.

12.10.3. The MESLs used by the airborne configuration elements will be the same format as the MESLs used on the associated aircraft. The MESL will list only the sub-systems included in the NC3 weapon system along with the FSL and the BSL associated with NC3. The narrow focus makes the MESL very short in comparison with the associated aircraft MESL. A sample airborne configuration element MESL is shown in **Table 12.2**.

Table 12.2. Sample Airborne Configuration Element MESL.

B-52 CE MESL			
WUC	**SYSTEM/SUBSYSTEM**	**FSL**	**ASN***
60	MRT, (ARR-85)	X	X
61	High Frequency (HF) Communications, (ARC-190)	X	X
62	Very High Frequency (VHF)/Ultra High (UHF) Communications, (ARC-210)	X	X2
63	UHF Communications, (ARC-164, ARC-171, ASC-19)	X	X1, X3

NOTES:

*TCTO 957 configured aircraft are not applicable for ASN

1. AN/ARC-164 radio must be operational. If inoperative NMC.

2. Minimum of one V/UHF radio must be operational (when CONECT equipped).

3. AN/ARC-171 with full AFSATCOM capability required for ASN

12.10.4. The MESL used by the Launch Control Center configuration elements will be the same format as the MESL in AFMAN 21-202, *Missile Maintenance Management* and used on the associated Launch Control Center and Launch Facility. The MESL will list only sub-systems included in the NC3 weapon system.

12.10.5. The MESLs used by the ground based systems will consist of a function column and three requirements columns defining functionality needed for FMC, PMC, or NMC. The ground based configuration elements did not previously have a MESL table. The aggregation of communication systems into a warfighting element led to the creation of a MESL table.

These configuration elements do not have a completed Baseline and are still maturing. A sample ground based configuration element MESL is shown in **Table 12.3**

Table 12.3. Sample Ground Based Configuration Element MESL.

FIXED SUPPORT CONFIGURATION ELEMENT MESL			
FUNCTION	**FMC**	**PMC**	**NMC**
HF/UHF/VHF (Voice)	Transmit and receive on all assigned NC3 channels.	Transmit or receive degraded on some channels. Redundant capabilities will be coded PMC when redundancy is lost.	Unable to transmit or receive on assigned channels.
HF/UHF/VHF (Data)	Transmit and receive on all assigned NC3 channels.	Degraded transmit and receive on Emergency Action Message channels; Transmit or receive degraded on other assigned channels. Redundant capabilities will be coded PMC when redundancy is lost.	Unable to transmit or receive on Emergency Action Message channel. Unable to transmit or receive on assigned channels.
Extremely High Frequency (Data and Voice)	Transmit and receive on all assigned NC3 channels.	Degraded transmit or receive on any channel. Redundant capabilities will be coded PMC when redundancy is lost.	Unable to transmit or receive on Emergency Action Message network.
Crew Alerting	Receive messages and transmit to klaxons and Tactical Aircrew Alerting Network.	Degraded receive or transmit capabilities. Redundant capabilities will be coded PMC when redundancy is lost.	Unable to receive or transmit.
Telecom and Landlines	Transmit and receive on all lines.	Degraded receive or transmit capabilities. Redundant capabilities will be coded PMC when redundancy is lost.	Unable to receive or transmit.

NOTES:
1. Do not report on any function areas that are not required at Command Post location.
2. Do not document in MIS during outage.
3. Document maintenance in MIS within 24 hours of system restoration.

WARREN D. BERRY, Lieutenant General, USAF
DCS/Logistics, Engineering, & Force Protection

(ANG)

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Commander, Air National Guard Readiness Center

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

DoDD 8000.01, *Management of the Department of Defense Information Enterprise* (DoD IE), 17 Mar 2016

DoDI 3110.05, *Readiness-Based Materiel Condition Reporting for Mission - Essential Systems and Equipment*, 31 Aug 2018

DoDI 5000.64, *Accountability and Management of DoD Equipment and Other Accountable Property*, 27 Apr 2017

DoDI 7000.14-RV4, *Department of Defense Financial Management Regulation*, 3 Mar 2006

DoDM 4120.15-L, *Model Designation of Military Aerospace Vehicles*, 31 Aug 2018

DoDM 4160.21V4, *Defense Materiel Disposition: Instructions for Hazardous Property and Other Special Processing Materiel*, 22 Oct 2015

DoDM 5200.01V3, *DoD Information Security Program; Protection of Classified information*, 24 Feb 2012

A10 PAD D16-01, *Centralized Management of the Nuclear Enterprise*

AFCSM 21-560V2, *Integrated Maintenance Data System (IMDS) Communications Equipment (C-E) Status and Inventory Reporting*, 1 Oct 2018

AFCSM 25-524V4, *Reliability & Maintainability Information Systems (REMIS)*, 28 Jun 2013

AFH 23-123V2, *Integrated Logistics System-Supply (ILS-S), Materiel Management Operations*, 8 Aug 2013

AFH 23-123V3, *Air Force Equipment Management*, 8 Aug 2013

AFI 11-101, *Management Reports on the Flying Hour Program*, 22 Jun 2015

AFI 11-2FTV3, *Flight Test Operations Procedures*, 1 Mar 2017

AFI 11-202V3, *General Flight Rules*, 10 Aug 2016

AFI 13-500, *Air Force Nuclear Mission Responsibilities*, 14 Nov 2018

AFI 13-550, *Air Force Nuclear Command, Control, and Communications*, 16 April 2019

AFI 16-401, *Designating and Naming Defense Military Aerospace Vehicles*, 16 May 2014

AFI 16-402, *Aerospace Vehicle Programming, Assignment, Distribution, Accounting, and Termination*, 27 Sep 2019

AFI 16-608, *Implementation of, and Compliance with, Treaties Involving Weapons of Mass Destruction*, 7 Sep 2018

AFI 16-1404, *Air force Information Security Program*, 29 May 2015

AFI 17-202V1, *Cybercrew Training*, 2 Apr 2014

AFI 17-202V2, *Cybercrew Standardization and Evaluation Program*, 15 Oct 2014

AFI 17-202V3, *Cyberspace Operations and Procedures*, 6 May 2015

AFI 21-101, *Aircraft and Equipment Maintenance Management*, 21 May 2015

AFI 20-110, *Nuclear Weapons-Related Materiel Management*, 4 Jun 2018

(Added-ANG) AFI 21-103, *Equipment Inventory, Status and Utilization Reporting*, 30 Apr 20

AFI 23-101, *Air Force Materiel Management*, 16 Jan 2020

AFI 23-111, *Management of Government Property in Possession of the Air Force*, 19 Nov 2018

AFI 23-119, *Exchange, Sale, or Temporary Custody of Non-Excess Personal Property*, 5 Jun 2001

AFI 24-602V2, *Cargo Movement*, 12 Jun 2019

AFI 33-324, *The Air Force Information Collections and Reports Management Program*, 22 July 2019

AFI 33-360, *Publications and Forms Management*, 1 Dec 2015

AFI 33-364, *Records Disposition-Procedures and Responsibilities*, 22 Dec 2006

AFI 36-2651, *Management of Air Force Training Systems*, 5 Jun 2009

AFI 91-204, *Safety Investigations and Reports*, 27 Apr 2018

AFJMAN 23-210, *Joint Service Manual for Storage and Materials Handling*, 12 Apr 1994

AFMAN 11-421, *Aviation Resource Management*, 12 Sep 2018

AFMAN 13-212V1, *Range Planning and Operations*, 22 Jun 2018

AFMAN 17-1203, *Information Technology Asset Management (ITAM)*, 18 May 2018

AFMAN 17-1301, *Computer Security (COMPUSEC)*, 10 Feb 2017

AFMAN 17-1302-O, *Communications Security (COMSEC) Operations*, 3 Feb 2017

AFMAN 21-202, *Missile Maintenance Management*, 29 Aug 2019

AFMAN 23-122, *Materiel Management Procedures*, 14 Dec 2016

AFMAN 33-363, *Management of Records*, 1 Mar 2008

AFPD 10-9, *Lead Command Designation and Responsibilities for Weapon Systems*, 8 Mar 2007
AFPD 13-5, *Air Force Nuclear Mission*, 17 Jul 2018

AFPD 21-1, *Maintenance of Military Materiel*, 1 Aug 2018

TO 00-5-1, *Air Force Technical Order System*, 15 Feb 2019

TO 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policies, and Procedures*, 6 Sep 2019

TO 00-20-2, *Maintenance Data Documentation*, 5 Sep 2019

TO 00-25-107, *Maintenance Assistance*, 1 Oct 2015

TO 00-25-254-1, *Comprehensive Engine Management System Engine Configuration, Status and TCTO Reporting Procedures*, 15 May 2019

TO 00-33A-1001, *General Cyberspace Support Activities Management Procedures and Practice Requirements*, 2 Jul 2018

TO 1-1-300, *Maintenance Operational Checks and Check Flights*, 15 Mar 2012

TO 1F-15A/B/C/D/E-21, *Equipment Inventory List*, 15 Oct 2005

TO 1F-15C/D/E-4-6, *Aerospace Ground Equipment*, 15 Feb 1999

TO 43-1-1, *Maintenance, Inspection, Storage, Shipment and Serialization -- Training Devices and Trainer Maintenance Parts, Maintained by Air Force Depots, Change 10*, 22 Nov 1994

Prescribed Forms

AF Form 2691, *Aircraft/Missile Equipment Property Record*

AF Form 2692, *Aircraft/Missile Equipment Transfer, Shipping Listing*

Adopted Forms

DD Form 200, *Financial Liability Investigation of Property Loss*

DD Form 250, *Material Inspection and Receiving Report*

DD Form 1149, *Requisition and Invoice/Shipping Document*

DD Form 1348-1A, *Issue Release/Receipt Document*

AF Form 126, *Custodian Request Log*

AF Form 601, *Equipment Action Request*

AF Form 679, *Air Force Publication Compliance Item Waiver Request/Approval*

AF Form 847, *Recommendation for Change of Publication*

AF Form 913, *Aerospace Vehicle Project Action*

AF Form 1297, *Temporary Issue Receipt*

AF Form 3131, *General Purpose*

AFTO Form 290, *Aerospace Vehicle Delivery Receipt*

AFTO Form 781, *Aviation Resource Management System Aircrew/Mission Flight Data Document*

Abbreviations and Acronyms

ACC—Air Combat Command

AF—Air Force

AFCSM—Air Force Computer Systems Manual

AFGSC—Air Force Global Strike Command

AFI—Air Force Instruction

AFLCMC—Air Force Life Cycle Management Center

AFMAN—Air Force Manual

AFMC—Air Force Materiel Command

AFPD—Air Force Policy Directive

AFR—Air Force Reserve

AFRC—Air Force Reserve Command

AFRIMS—Air Force Records Information Management System

AFSPC—Air Force Space Command

AFTO—Air Force Technical Order

AIB—Accident Investigation Board

AMARG—Aerospace Maintenance and Regeneration Group

AMC—Air Mobility Command

ANG—Air National Guard

ASD—Average Sortie Duration / Air to Surface Dual

AVDO—Aerospace Vehicle Distribution Officer

BSL—Basic Systems List

CA/CRL—Customer Authorization/Custody Receipt Listing

CANN—Cannibalization

CCITS—Communications, Cyberspace, IT, and Space

CEMF—Centralized Equipment Management Flight

CEMO—Command Equipment Management Office

CEMS—Comprehensive Engine Management System

CFO—Chief Financial Officer

COMSEC—Communications Security

DD—Department of Defense

DEV—Deviation

(Added-ANG) DOC—Design Operational Capability

DoD—Department of Defense

DoDI—Department of Defense Instruction

DoDM—Department of Defense Manual

DPAS—Defense Property Accountability System

ERAA—Equipment Review Authorization Activity

ERRC—Expendability, Recoverability, Reparability Category

FMC—Full Mission Capable

(Added-ANG) FMC—Fully Mission Capable

FMS—Foreign Military Sales

FOA—Field Operating Agency

FSL—Full Systems List

FY—Fiscal Year

HF—High Frequency

HQ—Headquarters

IAW—In Accordance With

ICBM—Intercontinental Ballistic Missile

IMDB—Integrated Missile Data Base

IMDS—Integrated Maintenance Data System

(Added-ANG) ISR—Intelligence, Surveillance, and Reconnaissance

IT—Information Technology

LCN—Logistics Control Number

LRS—Logistics Readiness Squadron

MAJCOM—Major Command

MAL—Minimum Acceptable Level

MC—Mission Capable

MDS—Mission Design Series

MESL—Minimum Essential Subsystems List (or MDS equivalent)

(Added-ANG) MESL—Minimum Essential Subsystem List

MICAP—Mission In-Capable

MIS—Maintenance Information System

MMXG—Missile Maintenance Group

MOA—Memorandum of Agreement

(Added-ANG) MRA—Mission Ready Available

MRAP—Mine Resistant Ambush Protected

MOC—Maintenance Operations Center

N/A—Not Applicable

NC3—Nuclear Command and Control Communications

(Added-ANG) NGB—National Guard Bureau

NMC—Non-Mission Capable

(Added-ANG) NMC—Not Mission Capable

NMCA—Non-Mission Capable Aircraft (Flyable)

NMCB—Non-Mission Capable Both Maintenance and Supply

NMCBA—Non-Mission Capable Both Maintenance and Supply Aircraft (Flyable)

NMCBS—Non-Mission Capable Both Maintenance and Supply Scheduled

NMCBU—Non-Mission Capable Both Maintenance and Supply Unscheduled

NMCBSA—Non-Mission Capable Both Maintenance and Supply Scheduled Aircraft (Flyable)

NMCBUA—Non-Mission Capable Both Maintenance and Supply Unscheduled Aircraft (Flyable)

NMCM—Non-Mission Capable Maintenance

NMCMA—Non-Mission Capable Maintenance Aircraft (Flyable)

NMCMS—Non-Mission Capable Maintenance Scheduled

NMCMU—Non-Mission Capable Maintenance Unscheduled

NMCMSA—Non-Mission Capable Maintenance Scheduled Aircraft (Flyable)

NMCMUA—Non-Mission Capable Maintenance Unscheduled Aircraft (Flyable)

NMCO—Non-Mission Capable Other

NMCS—Non-Mission Capable Supply

NMCSA—Non-Mission Capable Supply Aircraft (Flyable)

OL—Operating Locations

OPLAN—Operation Plan

OPR—Office of Primary Responsibility

ORG ID—Organizational Identification

PIC—Purpose Identifier Code

PM—Program Manager

PMC—Partial Mission Capable

PMCB—Partial Mission Capable Both Maintenance and Supply

PMCM—Partial Mission Capable Maintenance

PMCMS—Partial Mission Capable Maintenance Scheduled

PMCMU—Partial Mission Capable Maintenance Unscheduled

PMCS—Partial Mission Capable Supply

POC—Point of Contact

PS&D—Plans, Scheduling, and Documentation

PSRE—Propulsion System Rocket Engine

RAMPOD—Reliability, Availability, Maintainability for Pods

REMIS—Reliability and Maintainability Information System

SIB—Safety Investigation Board

(Added-ANG) SORT—Status of Resources and Training System

SPRAM—Special Purpose Recoverables Authorized Maintenance

SRD—Standard Reporting Designator

TCTO—Time Compliance Technical Order

(Added-ANG) TNG—Training

TNMC—Total Non-Mission Capable

TNMCF—Total Non-Mission Capable Flyable

TNMCM—Total Non-Mission Capable Maintenance

TNMCS—Total Non-Mission Capable Supply

TO—Technical Order

TPMCM—Total Partial Mission Capable Maintenance

TPMCS—Total Partial Mission Capable Supply

(Added-ANG) TST—Test

UHF—Ultra High Frequency

USAF—United States Air Force

VHF—Very High Frequency

WUC—Work Unit Code

Terms

Accountable Property—Property that meets accountability requirements and is recorded in the Accountable Property System of Record. Accountable property is referenced in DoDI 5000.64.

Accountable Property System of Record—The Government system used to control and manage accountable property records; a subset of existing organizational processes related to the lifecycle management of property; the system that is integrated with the core financial system.

Active Aircraft Inventory—Aircraft assigned to operating forces for mission, training, test, or maintenance functions.

Active Equipment—Equipment installed and commissioned to perform an operational mission or requirement. (Does not include cold spares or off-line equipment).

Aerospace Vehicle—Defined in AFI 16-402, an aerospace vehicle includes all aircraft, gliders, remotely piloted aircraft, drones, missiles (specific types), space systems, MRAP vehicles and

Ground Control Stations. MRAP vehicles and Ground Control Stations are treated like aerospace vehicles in order to utilize REMIS as its official inventory reporting system.

Aerospace Vehicle Termination—Aerospace vehicles that have been removed from the AF active or inactive inventory (crashed, not economically feasible to repair, reclaimed, disposed of, transferred to another service or DoD activity, or donated to the AF Museum).

Aircraft Availability—The number of MC aircraft that were available for a specified time period.

Aircraft Availability Rate—The percentage of TAI that was available for a specified time period.

Aircraft Availability Standard—An enterprise level-metric which provides a repeatable, logical, defendable method to calculate an AF enterprise Aircraft Availability Standard for each MDS. It merges aircraft availability with operational requirements to provide AF leaders the fleet visibility necessary to make enterprise wide decisions. Aircraft Availability Standard represents the number of MC aircraft (or the percentage of TAI) needed to fly the required annual FHP.

Aircraft Inventory Categories—Inventory is divided into two distinct and separate areas: assignment and possession. Assignment and possession are further identified by PICs.

All Up Round—An ICBM is classified as an All Up Round when in the launch facility, with Missile Guidance System, PSRE and Reentry System, and assigned in possession PIC "CC".

Assignment—Assignment is the allocation of an aerospace vehicle by HQ USAF to MAJCOMs for the purpose of carrying out assigned wartime, training, and/or test missions. Specific PICs are used for assignment.

Automatic Test Equipment—Computer controlled equipment that performs test measurements and evaluates the results on a unit or device under test.

Cannibalization—The authorized removal of a specific assembly, subassembly, or part from one weapon system, system, support system, or equipment end item for installation on another end item to satisfy an existing supply requisition and to meet priority mission requirements with an obligation to replace the removed item. Refer to TO 00-20-2.

Cannibalization Maximum Acceptable Level (CANN MAL)—CANN MAL is synonymous with CANN Metric. CANN MAL is measured against the most current and prior three fiscal quarters of the CANN rate. CANN rate = CANNs/Sorties flown x 100, IAW TO 00-20-2.

Condition Status—A term describing an aerospace vehicle, ICBM and CCITS ability to perform its assigned missions.

Contingency—A situation requiring military operations in response to natural disasters, terrorists, subversives, or as otherwise directed by appropriate authority to protect United States interests.

Delay Code—Alpha code used to indicate why a piece of communications equipment has not been returned to an operational status.

Downtime Code—Alpha code used to indicate why a piece of communications equipment is not operational.

Field Operating Agency (FOA)—A subdivision of the AF, directly subordinate to a HQ USAF. A FOA performs field activities beyond the scope of any of the commands. The activities are specialized or associated with an AF-wide mission, and do not include functions performed in management headquarters, unless specifically directed by a DoD authority.

Gain—The assumption of possession and responsibility for an item by a unit.

G081—WebG081/Mobility Air Force Logistics Command & Control System is used to manage and document maintenance activities and processes exclusively for MAF assets. Maintenance information on C-5, C-17, C-40 C-130, HH-60, KC-10, KC-46A and KC-135 aircraft is fed to AFMC via WebG081 to aid in making fleet management decisions. The system is currently used by over 30,000 Air Force personnel & contractors worldwide.

Integrated Maintenance Data System (IMDS)—IMDS is the standard AF maintenance information system for collection, storage and dissemination of maintenance data for repair and improvement of AF weapon systems and equipment. IMDS operates in a centralized and decentralized type function; which allows unit-level daily operations to function and higher-level IT interface with other databases such as REMIS.

Inactive Aircraft Inventory—Aircraft in storage, bailment, loan or lease outside the defense establishment, used as Government Furnished Property, or otherwise not available for military service.

Inactive Equipment—Equipment not commissioned or installed to perform an operational mission or requirement. Includes equipment in storage, tactical and combat communications equipment not deployed, mockups, training equipment, and equipment not being utilized to perform a mission.

Inter-Command—Existing between or relating to two (2) or more MAJCOMs.

Inter-Service—Existing between or relating to two (2) or more of the armed services.

Intra-Command—Within a MAJCOM.

Lead Command—A type of MAJCOM that consolidates responsibilities for a particular function in a single MAJCOM, supporting the entire AF as applicable. For example, Air Education and Training Command is the Lead Command for education and training.

Loss—The release of possession and responsibility for an item by a unit.

Mission Design Series (MDS)—Refers to the system of identifying various weapon systems as described in DoD Manual 4120.15-L, *Model Designation of Military Aerospace Vehicles*. For example, an F-22A is a fighter (mission), designated 22 (design), and the first, or "A" in the series. AFI 16-401, *Designating and Naming Defense Military Aerospace Vehicles*, contains the procedures for requesting/changing an MDS.

Mission Capable (MC)—A system's ability to perform at least one of its assigned peacetime or wartime missions. If no wartime mission is assigned, the system will be capable of performing any one assigned peacetime mission.

Mission Number—A twelve character code identifying the type of mission being flown. It consists of single and multiple characters identifying who is supported, what type mission is being flown (training, channel, contingency) and various other elements of the mission assigned

by the command, unit and FM and the last three characters are the Julian date the mission was scheduled.

Operation Plan (OPLAN)—1. Any plan for the conduct of military operations prepared in response to actual and potential contingencies. 2. A complete and detailed joint plan containing a full description of the concept of operations, all annexes applicable to the plan, and a time-phased force and deployment data.

Possession—Possession is the actual acceptance, operational use (utilization), or designation of responsibility agreed to via a MOU/MOA for an aerospace vehicle. Data collection is described in the appropriate user's manual. **NOTE:** Responsibility for status and utilization reporting is retained by the owning entity.

Requiring Command—The command with most of the requirements for use of the equipment under consideration.

Storage Aircraft—Aircraft removed from the active inventory and held in a preserved condition. Purpose Identifier Codes XS, XT, XV, and XX.

Trainer—Equipment designed and procured specifically for formal training programs. For this regulation, trainers are reportable.

Attachment 2

MAINTENANCE STATUS CODES AND CONDITION STATUS CODES-(REFERENCE TO 00-20-2 APPENDIX L FOR STATUS AND CONDITION CODE ALGORITHMS)

A2.1. FMC - Full Mission Capable. The aerospace vehicle/ICBM is capable of doing all of its assigned missions. The formula for FMC rate is FMC hours/Possessed hours. **NOTE:** These codes are reported through the MIS to REMIS and are available to all REMIS users.

A2.2. MC - Mission Capable. Is a computed status that includes FMC and PMC time. The formula for MC hours = FMC hours + PMCM hours + PMCB hours + PMCS hours. The MC rate is determined by (FMC hours + PMCM hours + PMCB hours + PMCS hours)/Possessed hours.

A2.3. PMC - Partial Mission Capable. Material condition of an aerospace vehicle or training device indicating it can perform at least one, but not all, of its assigned missions. Or a material condition of an ICBM indicating mission performance is degraded (PMCB, PMCM, PMCS, Total Partial Mission Capable Maintenance (TPMCM) and Total Partial Mission Capable Supply (TPMCS) descriptive reasoning applies).

A2.3.1. PMCB - Partial Mission Capable Both Maintenance and Supply (Condition Status Code A). The aerospace vehicle can do at least one, but not all, of its assigned missions because of maintenance and supply. The formula for PMCB rate is PMCB hours/Possessed hours.

A2.3.2. PMCM - Partial Mission Capable Maintenance (Condition Status Code G). Material condition of an aerospace vehicle or training device indicating it can perform at least one, but not all, of its assigned missions because of maintenance requirements existing on the inoperable subsystem(s). The formula for PMCM rate is PMCM hours/Possessed hours.

A2.3.3. PMCS - Partial Mission Capable Supply (Condition Status Code H). Material condition of an aerospace vehicle or training device indicating it can perform at least one, but not all, of its assigned missions because maintenance required to clear the discrepancy cannot continue due to a supply shortage. The formula for PMCS rate is PMCS hours/Possessed hours.

A2.4. NMC - Non-Mission Capable. The aerospace vehicle/ICBM cannot do any of its assigned missions.

A2.4.1. NMCA - Non-Mission Capable Aircraft (Flyable). The aerospace vehicle cannot do any of its assigned missions. The aerospace vehicle can fly (not restricted from use).

A2.4.2. NMCB - Non-Mission Capable Both Maintenance and Supply. The aerospace vehicle/ICBM cannot do any of its assigned missions because of maintenance and supply. The aerospace vehicle cannot fly (restricted from use). The formula for NMCB rate is (NMCBA hours + NMCBS hours + NMCBU hours)/Possessed hours.

A2.4.2.1. NMCBA - Non-Mission Capable Both Maintenance and Supply Aircraft (Flyable). The aerospace vehicle cannot do any of its assigned missions because of maintenance and supply. The aerospace vehicle can fly (not restricted from use).

A2.4.2.2. NMCBS - Non-Mission Capable Both Maintenance and Supply Scheduled (Condition Status Code B). The aerospace vehicle/ICBM cannot do any of its assigned missions because of supply and scheduled maintenance. The aerospace vehicle/ICBM cannot fly (restricted from use).

A2.4.2.3. NMCBU - Non-Mission Capable Both Maintenance and Supply Unscheduled (Condition Status Code A). The aerospace vehicle/ICBM cannot do any of its assigned missions because of supply and unscheduled maintenance. The aerospace vehicle/ICBM cannot fly (restricted from use).

A2.4.2.4. NMCBSA - Non-Mission Capable Both Maintenance and Supply Scheduled Aircraft (Flyable) (Condition Status Code L). The aerospace vehicle cannot do any of its assigned missions because of supply and scheduled maintenance. The aerospace vehicle can fly (not restricted from use).

A2.4.2.5. NMCBUA - Non-Mission Capable Both Maintenance and Supply Unscheduled Aircraft (Flyable) (Condition Status Code K). The aerospace vehicle cannot do any of its assigned missions because of supply and unscheduled maintenance. The aerospace vehicle can fly (not restricted from use).

A2.4.3. NMCM - Non-Mission Capable Maintenance. The aerospace vehicle/ICBM cannot do any of its assigned missions because of maintenance. The aerospace vehicle cannot fly (restricted from use). The formula for NMCM rate is (NMCMA hours + NMCMS hours + NMCMU hours)/possessed hours.

A2.4.3.1. NMCMA - Non-Mission Capable Maintenance Aircraft (Flyable). The aerospace vehicle cannot do any of its assigned missions because of maintenance. The aerospace vehicle can fly (not restricted from use).

A2.4.3.2. NMCMS - Non-Mission Capable Maintenance Scheduled (Condition Status Code D). The aerospace vehicle/ICBM cannot do any of its assigned missions because of scheduled maintenance. The aerospace vehicle/ICBM cannot fly (restricted from use).

A2.4.3.3. NMCMU - Non-Mission Capable Maintenance Unscheduled (Condition Status Code C). The aerospace vehicle/ICBM cannot do any of its assigned missions because of unscheduled maintenance. The aerospace vehicle cannot fly (restricted from use).

A2.4.3.4. NMCMSA - Non-Mission Capable Maintenance Scheduled Aircraft (Flyable) (Condition Status Code N). The aerospace vehicle cannot do any of its assigned missions because of scheduled maintenance. The aerospace vehicle can fly (not restricted from use).

A2.4.3.5. NMCMUA - Non-Mission Capable Maintenance Unscheduled Aircraft (Flyable) (Condition Status Code M). The aerospace vehicle cannot do any of its assigned missions because of unscheduled maintenance. The aerospace vehicle can fly (not restricted from use).

A2.4.4. NMCS - Non-Mission Capable Supply (Condition Status Code E). The aerospace vehicle/ICBM cannot do any of its assigned missions because of supply. The aerospace vehicle cannot fly (restricted from use). The formula for NMCS rate is (NMCS hours + NMCSA hours)/possessed hours.

A2.4.4.1. NMCSA - Non-Mission Capable Supply Aircraft (Flyable) (Condition Status Code P). The aerospace vehicle cannot do any of its assigned missions because of supply. The aerospace vehicle can fly (not restricted from use).

A2.5. TNMC - Total Non-Mission Capable. All NMCB + all NMCM + all NMCS added together equals TNMC. The aerospace vehicle/ICBM cannot do any of its assigned missions. Same as NMC.

A2.5.1. TNMCF - Total Non-Mission Capable Flyable. NMCBA, NMCMA, NMCMSA, NMCBUA, NMCBSA, NMCMUA, and NMCSA added together equals TNMCF. Same as NMCA.

A2.5.2. TNMCS - Total Non-Mission Capable Supply. NMCS, NMCBU, NMCBS, NMCSA, NMCBUA, and NMCBSA added together equals TNMCS. The aerospace vehicle/ICBM cannot do any of its assigned missions because of supply. The formula for TNMCS rate is (NMCB hours + NMCS hours)/Possessed hours.

A2.5.3. TNMCM - Total Non-Mission Capable Maintenance. NMCMU, NMCMS, NMCBU, NMCBS, NMCMUA, NMCMSA, NMCBUA, and NMCBSA added together equals TNMCM. The aerospace vehicle/ICBM cannot do any of its assigned missions because of maintenance. The formula for TNMCM rate is (NMCB hours + NMCM hours)/Possessed hours.

A2.5.4. TPMCS - Total Partial Mission Capable Supply. PMCS and PMCB added together equals TPMCS. The aerospace vehicle can do at least one, but not all, of its assigned missions because of supply.

A2.5.5. TPMCM - Total Partial Mission Capable Maintenance. PMCM and PMCB added together equals TPMCM. The aerospace vehicle can do at least one, but not all, of its assigned missions because of maintenance.

A2.5.6. Total Flyable. FMC, PMC and NMCA added together equals Total Flyable. The aerospace vehicle can fly.

Attachment 3

STANDARD MESL MISSION CODES

Figure A3.1. Standard MESL Mission Codes.

AAC - Air to Air Conventional
ACP - Airborne Command and Control (Command Post)
ACT - Airborne Command and Control (Tactical)
ACW - Airborne Command and Control (Early Warning)
ADC - Air Defense, Conventional
ADD - Air Defense, Dual
ADN - Air Defense, Nuclear
ALA - Airlift, Airland
ALE - Airlift, Evacuation
ALT - Airlift, Tactical
AMN - Administrative Support
AR - Air Refueling
ASC - Air to Surface, Conventional
ASD - Air to Surface, Dual
ASN - Air to Surface, Nuclear
ASY - Air Superiority
BFT - Basic Flying Training
CAS - Close Air Support
DSP - Defense Suppression
DTE - Developmental Test and Evaluation
DTS - Developmental Test Support
EC - Electronic Countermeasures
FAC - Forward Air Control
FC - Facility Checking
MSP - Missile Site Support
NT - Navigation Training
RS - Reconnaissance, Strategic
RT - Reconnaissance, Tactical
SAR - Search and Rescue
SAY - Surface to Air Recovery
SO - Special Operations
SOA - Special Operations, Airland
SOD - Special Operations, Airdrop
TR - Transition
TT - Tactical Training
WAS - Weather, Air Sampling
WR - Weather, Reconnaissance

Attachment 4

AEROSPACE VEHICLE AND TRAINER TERMINATION CODES

Figure A4.1. Aerospace Vehicle and Trainer Termination Codes.

T1	Hostile Foreign Armed Action - On combat support mission (**see Note 1**) - Aircraft/missile losses known to be the result of encountering hostile foreign armed opposition; for example, losses on combat support mission due to weapons or devices whether or not the specific type of weapon is known.
T2	Flying Accident - On combat support mission (**see Note 1**) - Aircraft/missile losses resulting from flying accidents while on combat support mission whether or not the cause of the accident is known. *This includes losses during takeoff or landing while on combat support missions.*
T3	Cause Unknown - On combat support mission (**see Note 1**) - Aircraft missing on combat support mission as a result of unexplained phenomena. *Place in this category only those aircraft that fail to return from combat support missions in which the loss cannot be attributed to codes T1 or T2 above.*
T4	Hostile Foreign Armed Action - Not on combat support mission (**see Note 1**) - Losses resulting from hostile foreign action (such as, aircraft/missiles/drones strafed and destroyed by raiding hostile foreign aircraft/missile or aircraft/ drone losses due to hostile foreign aircraft/missiles or anti-aircraft fire while on other than combat support missions).
T5	Flying Accident - Include all aircraft on the ground involved in a flying accident. Aerospace vehicle residue has been turned in to the Defense Property Disposal Office. *Exclude those aircraft more appropriately covered in code N and P and those drones more appropriately covered in codes TT, TU, TV, TY, and TZ*. Refer to AFI 91-204, *Safety Investigations and Reports.*
T6	Flying Accident - Aerospace vehicle lost as a result of a flying accident. Aerospace vehicle residue has been abandoned due to crash in an unknown location. *Exclude those aircraft more appropriately covered in codes N and P and those drones more appropriately covered in codes TT, TU, TV, TY, and TZ*. Refer to AFI 91-204.
T7	Flying Accident - Aerospace vehicle lost as a result of a flying accident. Aircraft residue was referred to the Defense Property Disposal Office and determined inaccessible for economical retrieval. Residue has been abandoned. *Exclude those aircraft more appropriately covered in codes N and P and those drones more appropriately covered in codes TT, TU, TV, TY, and TZ*. Refer to AFI 91-204.
TB	Ground Accident - Aircraft/missile/drones/trainers/Support Equipment lost as a result of a ground accident, such as collision of a vehicle with a parked aircraft/ missile/drone/trainer, ground maneuvering, accident not involving intent for flight or launch preparation, fire, or explosion as a result of servicing or maintenance or fire of unknown origin (excluding missile servicing during count down).
TC	Natural Phenomena - Aircraft/Missile/Drone/Support Equipment lost as a result of windstorm, hail, lightning, flood when T5, T6, T7 and TB above do not apply.
TD	Tested to Destruction - (**see Note 3)** Aircraft/missile/drone lost as a result of planned test involving ultimate destruction of the aircraft/missile/drones. *This includes drones destroyed as a result of programmed weapons fire.*

TE	Fair Wear and Tear - Aircraft/Missile/Drone/support equipment lost as a result of general deterioration in use.
TF	Abnormal Deterioration in Use - Aircraft/Missile/Drone/Trainers/Support Equipment lost as a result of inadequate maintenance or maintenance facilities or shortages in personnel, parts, or funds.
TG	Abnormal Storage Deterioration - Aircraft/Missile/Trainers/Support Equipment lost as a result of improper or inadequate storage.
TH	Normal Storage Deterioration - Aircraft/Missile/Drone/Trainers/Support Equipment lost as a result of deterioration while properly stored.
TI	Obsolete - Obsolete - Aircraft/Missile/Drone/Trainers wholly serviceable or reparable. The AF will use the Repair or Retire Decision Process IAW AFI 16-402 to evaluate aerospace vehicles that meet this criteria. Refer to AFI 16-402 for additional guidance.
TJ	Reclamation Cannibalization Salvage or Survey - Aircraft/Missile/Drone/Trainers (1) wholly serviceable or reparable and (2) disposed of through complete reclamation, cannibalization, salvage, or survey. *Do not include those that are more appropriately included in code TI.* The AF will use the Repair or Retire Decision Process IAW AFI 16-402 to evaluate aerospace vehicles that meet this criteria. Refer to AFI 16-402 for additional guidance.
TK	Conversion of Aerospace Vehicle/Trainer Serial Number and/or Trainer Reporting Designator/Support Equipment - An aerospace vehicle/trainer terminated from the inventory as a result of assignment (change) of a new serial number identification or new reporting designator (trainers only) in conjunction with a major modification or re-identification.
TL	Transfer and Diversions - Aircraft/Missile/Drone/Trainers/ Support Equipment that (1) is wholly serviceable or reparable and (2) transferred to non-AF agencies, such as National Guard Bureau (Army Division), Army, Navy, Mutual Assistance Program (MAP). Normally the projects effecting transfers to these agencies indicate the receiving agency (such as, Army (USA 8L-225), MAP (MDA 5H-825). The AF will use the Repair or Retire Decision Process IAW AFI 16-402 to evaluate aerospace vehicles that meet this criteria. Refer to AFI 16-402 for additional guidance. **Note:** The use of this termination code is authorized for Support Equipment.
TM	Enemy Action - On combat mission **(see Note 3)** - Aircraft/Missile losses known to be the result of direct enemy action (such as, losses on combat missions due to weapons or devices whether or not the specific type of weapon is known).
TN	Flying Accident - On combat mission - Aircraft/Missile losses resulting from flying accidents while on combat missions whether or not the cause of the accident is known. *This includes losses during takeoff or landing while on combat missions.*
TP	Cause Unknown - On combat mission **(see Note 3)** - Aircraft missing on combat mission as a result of unexplained phenomena. Place in this category only those aircraft that fail to return from combat missions in which the loss cannot be attributed to codes TM or TN above.
TQ	Enemy Action - Not on combat mission - Losses resulting from enemy action that is aircraft/missile drones strafed and destroyed by raiding enemy aircraft/missile or aircraft/drone losses due to enemy aircraft/missiles or anti-aircraft fire while on

	other than combat missions.
TR	Abandonment Due to Enemy Action - **(see Note 3)** Aircraft/Missile/Drone/Support Equipment that could not be evacuated and was abandoned or destroyed as the result of approaching enemy ground (surface) forces.
TS	Destroyed or Impounded - Aircraft/missile/drone destroyed by or impounded in a foreign country. *Do not use this code in reporting losses that should more appropriately be reflected as codes TM, TN, TP, TQ, or TR.*
TT	Operational Loss - Before Mission is Completed - Missile or drone losses that occur after launch and before the mission is completed.
TU	Operational Loss - After Mission is Completed - Missile or drone losses that occur after launch and after the mission is completed.
TV	Operational Loss - Before launch is performed - Missile or drone losses for any reason after preparation for launch is initiated and before launch is performed. This code defines those losses that result from operational failure. *Do not include missiles or drone losses that should more appropriately be included in other applicable codes, especially those covered by code TB.*
TW	Museum or Schools - Aircraft/missiles/drones/trainers/Support Equipment transferred to schools (FSC-coded items) or National Museum of the USAF.
TX	Commercial Sale - Aircraft/Missiles/Drones/Trainers that exceed all AF requirements and are sold.
TY	Operational Loss - Failure to Retrieve **(see Note 3)** - Missiles or drones that have become airborne in free flight where the recovery system (parachute or equivalent) performed as required but are expended because of failure to retrieve the missile or drone. This code applies only to those missiles and drones that have a recovery capability. *Do not include drones not retrieved due to complete destruction.*
TZ	Operational Loss - Failure to Recovery System **(see Note 3)** - Missile and drones that become airborne in free flight and are expended as a result of failure of the recovery system. This code applies only to those missiles and drones that have a recovery capability (parachute or equivalent). *Do not include missiles and drones that have been recovered but not retrieved.*
NOTE: For use as both assignment/possession reporting identifiers. 1. Possession reporting identifiers only 2. Assignment reporting identifiers only 3. Does not require an AF Form 913 to remove affected aerospace vehicle from the active/inactive inventory. Termination message is required **IAW paragraph 2.19.** Contact the assigned MAJCOM AVDO for additional guidance	

Attachment 5

DOWNTIME AND STATUS CODES FOR COMMUNICATIONS EQUIPMENT

A5.1. Maintenance Scheduled. NOTE: The codes listed here give the reasons for communications equipment downtime, for use in reporting status and inventory. See **Chapter 6** of this instruction. These codes will gradually be converted to status codes shown in parentheses after the downtime code.

A5.1.1. A - Retrofit or Modification. NMCMS or Partial Mission Capable Maintenance Scheduled (PMCMS). Use when removing an active equipment item from its assigned mission for the field or depot to perform a modification such as a TCTO, Time Change Items, Class I modification, or antenna change out. State the TCTO number, modification performed, antenna replaced, and performing activity in a comment.

A5.1.2. B - Depot Maintenance Scheduled. NMCMS or PMCMS. Use for scheduled Air Logistics Complex overhaul, radome painting and other such operations. Includes scheduled maintenance done by engineering installation units, centralized repair activities, mobile depot maintenance teams, and contractors. State the type of maintenance and performing activity in a comment.

A5.1.3. C - Test (Orientation or Other). NMCMS or PMCMS. Use for all scheduled tests or evaluations except preventive maintenance inspections. Use downtime code "F" for deficiencies discovered as a result of the test. Indicate the type of test or evaluation in a comment.

A5.1.4. D - Reserved for (Scheduled Maintenance). NMCMS or PMCMS.

A5.1.5. E - Preventive Maintenance. NMCMS or PMCMS. Use when the communications equipment or channel is Red or Amber in its assigned mission because of scheduled Preventive Maintenance Inspections required by AF, MAJCOM, or FOA directives. Comments are not required for deferred or incomplete Preventive Maintenance Inspections, See downtime code "V". For discrepancies discovered during a Preventive Maintenance Inspections use downtime code "M". Comments are not required.

A5.1.6. I - Scheduled Maintenance. NMCMS or PMCMS. Use for scheduled maintenance not covered by other downtime codes includes pre and post deployment inspections. Add a comment to state the type of scheduled maintenance.

A5.2. Maintenance Unscheduled.

A5.2.1. F - Failed Flight Check or Operational Systems Check. Non-Mission Capable Maintenance Unscheduled (NMCMU) or Partial Mission Capable Maintenance Unscheduled (PMCMU). Use to record the time active equipment is not capable of performing its assigned mission due to inability to pass flight inspection or periodic operational system checks. Also for all Equipment Status Reports opened as a result of deficiencies discovered during test, orientation, or other procedure (downtime code "C"). Enter the work unit code of the failed component.

A5.2.2. M - Equipment Malfunction. NMCMU or PMCMU. Use for equipment or component failure. Applies to components and equipment listed in the work unit code

manual for reportable equipment. Enter the work unit code of the failed component. Add a brief description of the problem in a comment.

A5.2.3. R - Emergency Maintenance. NMCMU or PMCMU. Use when equipment does not meet TO standards and outside assistance is requested. Use a delay code until maintenance is actually being performed. Enter the WUC of the affected component or subsystem. State the type of assistance required in a comment.

A5.2.4. U - Unknown. NMCMU or PMCMU. Use for initial reporting of suspected equipment failure or malfunction. Change to a more specific code when the nature of the outage is determined. Use this code also for equipment failure or malfunctions that cannot be duplicated or cleared while checking. Add comments to describe the reported symptoms or events. WUC is not required for this code.

A5.2.5. S - Software/Program Errors. Use when the equipment is down due to error in the operational program (software or firmware). Use this code only after it has been confirmed that deficiencies in the operational program are causing the problem.

A5.3. Maintenance Other.

A5.3.1. G - Vehicle Out of Commission. Use when a vehicle that is an integral part of a communications system is out of commission.

A5.3.2. H - Host Base Action. Use for reasons such as runway construction, building repair, and snow removal. State the specific action in a comment.

A5.3.3. J - Damage or Deterioration. Use for uncontrollable equipment damage caused by events other than weather or jamming (downtime codes "W" or "X"), such as natural disasters, vandalism, or riot. State the type and cause of the damage in a comment.

A5.3.4. K - Relocating/Resetting. Use for relocating or resetting of equipment for any reason except deployment and for runway changes of longer than 15 minutes. Describe the circumstances in a comment.

A5.3.5. L - Associated Equipment Malfunction. Use when associated or ancillary equipment that is not work unit coded under the reportable equipment causes downtime. Does not apply to generators, air conditioners, or cables (See downtime codes "N", "P", and "Q"). Identify the equipment causing the outage in the comments.

A5.3.6. N - Power Failure. Use when downtime occurs due to loss of commercial, local, or backup power. Includes downtime due to unstable power and any recovery time.

A5.3.7. O - Scheduled Software Maintenance. Use for scheduled downtime for software change, update patches, maintenance, or testing.

A5.3.8. P - Environmental Control. Use for failure of temperature, humidity, and dust control equipment (air conditioning) that is not part of the end item.

A5.3.9. Q - Cable Out. Use for downtime due to defective or cut cable. For a cable cut, use comments to describe the incident.

A5.3.10. T - Training. Use for downtime due to on the job training as approved by the Systems Flight Commander or equivalent representative.

A5.3.11. V - Military Priority. Use when equipment will be shut down due to safety hazard, interference with other equipment, or direction from HQ (MAJCOM, Air Staff). Does not apply to jamming (See downtime code "X"). Also, use for Red or Amber conditions that result from a deferred or incomplete Preventive Maintenance Inspections. Add comments to cite the authority for the outage.

A5.3.12. W - Atmospheric Disturbance or Weather. Use for downtime caused by severe weather or atmospheric conditions, such as anomalous propagation, high winds, heavy snow, or icing. Indicate the specific type of disturbance or weather condition in a comment.

A5.3.13. X - Jamming - Intentional/Unintentional. Use for downtime due to interfering electrical signals. **NOTE:** Report only unclassified information in the comments.

A5.3.14. Y - Personnel Error. Use for downtime caused by operator error, such as incorrect switch or button activation or failure to follow established operations or maintenance procedures. Explain the error in a comment.

A5.3.15. Z - Frequency Change. Use for downtime due to a frequency change of more than 15 minutes.

Figure A5.1. IMDS Current Downtime/Delay Code Summary to REMIS Status Conversion.

--Total Downtime Codes: A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z	NMC / PMC
--Maintenance Downtime: A, B, C, D, E, F, I, J, L, M, O, R, S, T, U, Y (no delays)	NMCM / PMCM
--Scheduled Maintenance: A, B, C, D, E, I, O, T (no delays)	NMCMS / PMCMS
--Unscheduled Maintenance: F, J, L, M, R, S, U, Y (no delays)	NMCMU / PMCMU
--Other Downtime: A, B, C, D, E, F, G, H, I, J, K, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z (with delays)	NMCO / PMCO
--Scheduled Other Maintenance: A, B, C, D, E, H, I, K, O, T, V, Z (with delays) **Note:** H, K, V, Z do not require delay codes	NMCOS / PMCOS
--Unscheduled Other Maintenance: F, G, J, L, M, N, P, Q, R, S, U, W, X, Y (with delays) **Note:** L, N, P, Q, W, X do not require delay codes	NMCOU / PMCOU
--Total Delay Codes: A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z	
--Maintenance Delay: A, C, E, S (merged into other delay code "U")	
--Other Delay: B, D, F, G, H, I, K, O, T, U, V, W, X, Z	NMCO / PMCO
(T & X merged into other delay code K)	

--Supply Delay: D, J, L, M, N, P, Q, R, T, Y (with maintenance downtime codes)	NMCS / PMCS
---Backorder:	
L, M, N	
---Local:	
J, P, Y	
---Other:	
D, Q, R, T	

Figure A5.2. IMDS to REMIS Status Code Conversion Cross Reference.

REMIS NEW STATUS CODE	NEW STATUS NARRATIVE	NEW REASON CODE	CURRENT CAPABILITY IMPACT	IMDS CURRENT D/T CODE	CURRENT DELAY CODE
E	NMCS	N/A	R	A, B, C, D, E, F, I, J, M, O, P, Q, R, S, T and U	Include if one of the following exist: D, I, J, L, M, N, P, Q, R, or Y
C	NMCMU	N/A	R	F, J, L, M, R, S, U, and Y	Do not include if one of the following exist: A through Z
D	NMCMS	N/A	R	A, B, C, D, E, I, O, and T	Do not include if one of the following exist: A through Z
	NMCOU	See **Attachment 6, Figure A6.4.**	R	F, G, J, L, M, N, P, Q, R, S, U, W, X, and Y	If Downtime Code = F, J, M, R, S, U, or Y then apply the following edits to delay code: Include only if one of the following exist: B, F, G, H, K, O, U, V, W, or Z Do not include if one of the following exist:

					D, I, J, L, M, N, P, Q, R, or Y If Downtime Code = G, L, N, P, Q, W, or X then convert inbound and historical data as follows: If no related delay record is found, insert status reason code using default reason code listed in **Figure A5.6.** If a related delay record is found, convert delay code into reason code using **Figure A5.6.** cross reference. After implementation, reason code will be required.
J	NMCOS	See **Attachment 6, Figure A6.4.**	R	A, B, C, D, E, H, I, K,O, T V, and Z	For Downtime Codes of A, B, C, D, E, H, I, K, O, or T apply the following rules: Include only if one of the following exist: B, F, G, H, K, O, U, V, W, or Z Do not include

					if one of the following exist: D, I, J, L, M, N, P, Q, R, or Y If Downtime Code = H, K, V, or Z then convert inbound and historical data as follows: If no related delay record is found, insert status reason code using default reason code listed in **Figure A5.6.** If a related delay record is found, convert delay code into reason code using **Figure A5.6.** cross reference. After implementation, reason code will be required.
H	PMCS	N/A	A	A, B, C, D, E, F, I, J, M, O, P, Q, R, S, and U	Include if one of the following exist: D, I, J, L, M, N, P, Q, R, or Y
G	PMCMU	N/A	A	F, J, L, M, R, S, U, and Y	Do not include if one of the following exist: A through Z
Q	PMCMS	N/A	A	A, B, C, D, E, I, O, and T	Do not include if one of the following exist:

					A through Z
R	PMCOU	See **Attachment 6, Figure A6.4.**	A	F, G, J, L, M, N, P, Q, R, S, U, W, X, and Y	If Downtime Code = F, J, M, R, S, U, or Y then apply the following edits to delay code: Include only if one of the following exist: B, F, G, H, K, O, U, V, W, or Z Do not include if one of the following exist: D, I, J, L, M, N, P, Q, R, or Y If Downtime Code = G, L, N, P, Q, W, or X then convert inbound and historical data as follows: If no related delay record is found, insert status reason code using default reason code listed in **Figure A5.6.** If a related delay record is found, convert delay code into reason code using **Figure A5.6.** cross reference. After

					implementation, reason code will be required.
S	PMCOS	See **Attachment 6, Figure A6.4.**	A	A, B, C, D, E, H, I, K, O, T, V, and Z	For Downtime Codes of A, B, C, D, E, H, I, K, O, and T apply the following rules: Include only if one of the following exist: B, F, G, H, K, O, U, V, W, or Z Do not include if one of the following exist: D, I, J, L, M, N, P, Q, R, or Y If Downtime Code = H, K, V, Z then convert inbound and historical data as follows: If no related delay record is found, insert status reason code using default reason code listed in **Figure A5.6.** If a related delay record is found, convert delay code into reason code using **Figure A5.6.** cross reference.

					After implementation, reason code will be required.

Figure A5.3. IMDS to REMIS Downtime to Reason Code.

IMDS OLD DOWNTIME CODE	OLD NARRATIVE	REMIS NEW REASON CODE	NEW NARRATIVE
A	Retrofit or Modification	N/A	
B	Depot Maintenance Schedule	N/A	
C	Test (Orientation or Other)	N/A	
D	Reserved for (Scheduled Maintenance)	N/A	
E	Preventive Maintenance	N/A	
F	Failed Flight Check or Operational Systems Check	N/A	
G	Vehicle Out of Commission	1	Vehicle Out of Commission
H	Host Base Action	2	Host Base Action
I	Scheduled Maintenance	N/A	
J	Damage or Deterioration	N/A	
K	Relocating/Reset	3	Relocating/Reset
L	Associated Equipment Malfunction	4	Associated Equipment Malfunction
M	Equipment Malfunction	N/A	
N	Power Failure	5	Power Failure
O	Scheduled Software Maintenance	N/A	
P	Environmental Control	6	Environmental Control
Q	Cable Out	7	Cable Out
R	Emergency Maintenance	N/A	
S	Software/Program Errors	N/A	
T	Training	N/A	
U	Unknown	N/A	

IMDS OLD DOWNTIME CODE	OLD NARRATIVE	REMIS NEW REASON CODE	NEW NARRATIVE
V	Military Priority	V	Military Priority
W	Atmospheric Disturbance or Weather	W	Atmospheric Disturbance or Weather
X	Jamming - Intentional/Unintentional	8	Jamming - Intentional/Unintentional
Y	Personnel Error	N/A	
Z	Frequency Change	9	Frequency Change

Attachment 6

DELAY AND DOWNTIME CODES FOR COMMUNICATIONS EQUIPMENT

A6.1. Maintenance Unscheduled. NOTE: The codes listed here give the reasons for communications equipment delay time, for use in reporting status and inventory. See **Chapter 6** of this instruction.

A6.1.1. A - Single Shift Maintenance. Use when equipment or channel has malfunctioned and personnel are not available to correct the problem. Stops when on-call technicians arrive or the next duty day begins. Does not apply when the maintenance function is staffed for 24-hour operations.

A6.1.2. C - Awaiting Technical Assistance from MAJCOM, FOA, depot, and contractor support. Used when technical assistance has been requested from an activity. Stops when the assistance arrives at the site. Indicate the type of assistance in a comment.

A6.1.3. E - Shift Change. Use when work stops due to shift changes that exceed 30 minutes.
A6.1.4. S - Skill Not Available. Use when qualified maintenance personnel are not available to perform the required maintenance. Do not use this code when delay code "A" or "C" applies. Indicate in a comment why the required personnel are not available.

A6.2. Other Delay.

A6.2.1. B - Awaiting Flight Check. Use when an official flight check has been requested. Stops when an official certification flight check starts (See delay code "F"). Indicate the date and time of the scheduled flight check in a comment.

A6.2.2. D - Lack of Funds. Use when there is a lack of organizational funds to order parts.

A6.2.3. F - Flight Check. Use to record the time required to perform an official certification flight check.

A6.2.4. G - Awaiting System Check. Use when awaiting quality control check, pre or post-deployment inspection, or initial checkout (other than a flight check). Use to report a delay for a systems check by other than maintenance. Indicate the type of system check required in a comment.

A6.2.5. H - Parts Awaiting Transportation. Use when parts are awaiting transportation from maintenance control or are enroute to a remote maintenance detachment or location.

A6.2.6. I - Parts Research. Use when work stops due to research exceeding 30 minutes. (valid for use until discontinued in IMDS).

A6.2.7. K - Off-Site Maintenance. Use when a part goes to off-base maintenance activities for repair or fabrication. Also use this code when an activity other than the owning or using activity repairs or fabricates equipment on-base. Identify the type of repair and activity in a comment.

A6.2.8. O - Host Base Support. Use when support from an on-base activity has been requested, such as civil engineers. Includes off base support activities when on base activities cannot support requirements. Stops when the assistance arrives at the site. Indicate the type of support in a comment.

A6.2.9. T - Travel Time. Use when maintenance delay is caused by travel of longer than 15 minutes between the maintenance organization and remote facility where the malfunction occurred.

A6.2.10. U - Tools, Test Equipment, and Technical Data Not Available. Use when maintenance does not have the tools, test equipment, or technical data needed to perform maintenance. State the tool, test equipment, or publications needed in a comment.

A6.2.11. V - Military Priority. Use when restoration of equipment to operational status is prevented by a directive of higher military priority. Enter the directing authority in the "remarks" section.

A6.2.12. W - Delay For Weather. Use when equipment cannot be restored due to weather conditions. Specify the weather conditions in a comment.

A6.2.13. X - Awaiting Transportation. Use when maintenance is delayed due to lack of transportation to the maintenance job location for tools, test equipment, technical data, and personnel.

A6.2.14. Z - Other. Use when delays are encountered that are not covered by any other delay code. State the cause of the delay in a comment.

A6.3. Supply (Logistics) Delay.

A6.3.1. J - Supply Processing. Use for on-base supply processing time. Starts when the workcenter or MOC establishes the requisition in the Integrated Logistics Systems-Supply and stops when supply issues the parts or LRS notifies the unit representative that the base does not have the parts. Also use this code when components are in the Reparable Processing Center and are needed to clear an equipment malfunction.

A6.3.2. L - Reserved for Backorder Supply.

A6.3.3. M - Supply, MICAP Backorders. Use when base supply notifies maintenance of the need to go to the depot or lateral support for parts identified as MICAP requirements. Stops when the part arrives at base supply. Indicate in comments the due-in, national stock number or part number, part name, supply status code, estimated shipping date, whether it was ordered NMC or PMC, and whether it went to depot or lateral.

A6.3.4. N - Supply, Other Backorders. Use when supply notifies maintenance of the need to go to the depot or lateral support for parts on non-MICAP requirements. Stops when the part arrives at base supply. Indicate in comments the due-in, national stock number or part number, part name, supply status code, estimated shipping date, and whether it went to depot or lateral.

A6.3.5. P - Supply, Local Purchase. Use when parts are obtained through local off-base channels. Starts when the condition is declared and stops when the parts arrive at the site. Indicate the part required and source in a comment.

A6.3.6. Q - Supply, Non-DoD. Use when a non-DoD activity, such as Federal Aviation Administration (FAA), or a foreign government or military establishment, supplies parts for the equipment. Indicate part number, message or requisition number, and estimated delivery date in a comment.

A6.3.7. R - Supply, Contractor Support. Use when a contractor supplies the parts for the equipment. Indicate part number, message or requisition number, and estimated delivery date in a comment.

A6.3.8. Y - Supply, Delivery Time. Use when there is significant delay in delivery of parts from LRS to maintenance.

Figure A6.1. IMDS to REMIS Delay to Reason Code Conversion Cross Reference.

IMDS OLD DELAY CODE	OLD NARRATIVE	REMIS NEW REASON CODE	NEW NARRATIVE
A	Single Shift Maintenance	U	Tools, Test Equipment, and Technical Data Not Available
B	Awaiting Flight Check	B	Awaiting Flight Check
C	Awaiting Technical Assistance from MAJCOM or FOA, AFMC, AF Cryptologic Support Center, or Contractor	U	Tools, Test Equipment, and Technical Data Not Available
D	Lack of Funds	N/A	
E	Shift Change	U	Tools, Test Equipment, and Technical Data Not Available
F	Flight Check	F	
G	Awaiting System Check	G	
H	Parts Awaiting Transportation	H	
K	Off-Site Maintenance	K	
O	Host Base Support	O	
S	Skill Not Available	U	Tools, Test Equipment, and Technical Data Not Available
T	Travel Time	K	
U	Tools, Test Equipment, and Technical Data Not Available	U	Tools, Test Equipment, and Technical Data Not Available
V	Military Priority	V	
W	Delay For Weather	W	
X	Awaiting Transportation	K	
Z	Other	Z	
D, I, J, L, M, N, P, Q, R,	(Various Supply delays)	N/A	Supply

IMDS OLD DELAY CODE	OLD NARRATIVE	REMIS NEW REASON CODE	NEW NARRATIVE
and Y			

Attachment 7

HOW TO USE AF FORM 2691, AIRCRAFT/MISSILE EQUIPMENT PROPERTY RECORD

A7.1. Column A. Enter the Julian date when the transaction is posted.

A7.2. Column B. Enter the supply account number followed by the request number from the custodian request log.

A7.3. Column C. Enter the quantity authorized, calculated by multiplying the quantity authorized by the number of aerospace vehicle or missiles.

A7.4. Column D. Enter the quantity due-in. Make due-in postings from the suspense copy of DD Form 1348-1A. Put a check mark in column D opposite the quantity originally due-in to indicate receipt or partial receipt of the items. **NOTE:** When due-ins are cancelled, enter the quantity cancelled in column D preceded by the abbreviation "Canx", and adjust the balance in column E.

A7.5. Column E. Enter the total quantity due-in. This entry represents the total quantity of due-ins recorded in Column D. Bring it up to date as changes occur.

A7.6. Column F. Enter the quantity received from any source.

A7.7. Column G. Enter the quantity turned-in or transferred.

A7.8. Column H. Enter the quantity on hand. Enter a zero if there is none on hand. Make changes to this column when equipment is received, turned-in, transferred, or accountability is terminated with relief adjustment documents. Support changes to this column with a source document or relief documents prepared to end accountability for equipment signed out on AF Form 1297.

A7.9. Column I. Enter data required to show the location. In the next column, enter the quantity at that location. When equipment is signed for on AF Form 1297, enter the quantity in this column.

A7.10. Block 1. Enter the part number.

A7.11. Block 2. Optional. Enter the Expendability, Reparability, Recoverability and Category (ERRC) code or leave blank.

A7.12. Block 3. When two or more possessed weapons systems are authorized common equipment items in the -21 TO, enter the MDS that applies in this block.

A7.13. Block 4. These numbers correspond with -21 line numbers.

A7.14. Block 5. Enter the stock number of the item.

A7.15. Block 6. Enter a descriptive nomenclature to identify the item. If the item is classified, enter the word "Classified" after the nomenclature.

A7.16. Block 7. Enter the unit of issue (such as, "pair", "set", or "each").

A7.17. Block 8. Optional. Enter the unit price or leave blank.

A7.18. Block 9. Enter the weapon system that applies. For equipment common to two or more weapon systems, refer to instructions for block 3. Enter the MDS for the largest number of weapon systems possessed in this block. (such as, if 18 F-16As and 36 F-16Cs are possessed, enter F-16C in this block and F-16A in block 3).

Attachment 8

HOW TO USE AF FORM 2692, *AIRCRAFT/MISSILE EQUIPMENT TRANSFER/ SHIPPING LISTING*

Section A8A—Parts of the Form

A8.1. Box 1. Enter the organization title and the address of the activity initiating the transfer.

A8.2. Box 2. Leave blank.

A8.3. Box 3. Enter the MDS.

A8.4. Box 4. Leave blank.

A8.5. Box 5. Enter the organization title of the receiving activity. Also enter this **NOTE:** Aircraft /Missile Equipment for (MDS and serial numbers).

A8.6. Box 6. Enter the authority for transfer.

A8.7. Box 7. Enter request number from AF Form 126, *Custodian Request Log*.

A8.7.1. Column A. Enter the item number (1, 2, 3, and so forth).

A8.7.2. Column B. Enter stock or part number and nomenclature.

A8.7.3. Column C. Enter quantity authorized in the -21 TO per aerospace vehicle or missile.

A8.7.4. Column D. Enter the quantity installed or aboard the aerospace vehicle.

A8.7.5. Column E. Enter quantity shipped separately through transportation.

A8.7.6. Column F. The organization receiving the equipment enters the quantity received.

A8.7.7. Column G. Enter the reason or authority for shortages, if required (See **paragraph 9.14**).

A8.8. Box 8. Signature of official tasked to perform the final verification before the aerospace vehicle departs.

A8.9. Box 9. Enter the date of verification.

A8.10. Box 10. Signature of the official tasked to perform the acceptance inventory.

A8.11. Box 11. Enter the date of the acceptance inventory.

A8.12. Box 12. The receiving organization enters the request number from AF Form 126. **NOTE:** After the last entry, the accountable officer preparing the form completes the certification at the bottom of the form.

Section A8B—Steps in Preparing and Processing AF Form 2692

A8.13. Accountable -21 Support Function:

A8.13.1. Prepare five copies of AF Form 2692.

A8.13.2. Keep copy 5 in suspense file and destroy it when PS&D returns copy one.

A8.13.3. Send copy 1 through 4 to appropriate PS&D.

A8.14. -21 Support Function Project Personnel:

A8.14.1. Verify all equipment authorized in the -21 TO, or all equipment specified in the transfer directive, is listed on AF Form 2692.

A8.14.2. Task the maintenance officers of accountable functions to make an inventory at least 1 day before the scheduled departure of the aerospace vehicle. The maintenance officer will:

A8.14.3. Verify all equipment on AF Form 2692 is installed or aboard.

A8.14.4. After verifying the equipment being transferred is installed or aboard, signs all four copies.

A8.14.5. Return copy 1 to the accountable function.

A8.14.6. Mail copy 2 to the PS&D of the gaining organization.

A8.14.7. Place copy 3 in the aerospace vehicle records binder for the aerospace vehicle being transferred.

A8.14.8. Hold copy 4 for 30 days in case the gaining organization needs to resolve discrepancies found during the acceptance inventory.

A8.15. Gaining Organization:

A8.15.1. Use copy 2 or 3 of AF Form 2692 to conduct the acceptance inventory.

A8.15.2. If there are shortages, review AFTO 781 series forms to determine if the missing equipment was removed enroute.

A8.15.3. If the equipment was removed at an enroute base (the transferring organization did not ship the item), requests assistance from MAJCOM to resolve the shortage.

A8.15.4. Adjust AF Form 2691 to show the equipment gained in the transfer.

Attachment 9

HOW TO USE DD FORM 1149, *REQUISITION AND INVOICE/SHIPPING DOCUMENT*

Section A9A—Parts of the Form

A9.1. NOTE: AFI 24-602V2 requires users to fill out the DD Form 1149 through the Logistics Tool Suite.

A9.2. Box 1. Enter organization, for example, MAJCOM and base, Defense Plant Representative Office possessing the aerospace vehicle.

A9.3. Box 2. Enter HQ AFMC AF-AVDO, Wright Patterson AFB, OH 45433.

A9.4. Box 3. Enter the name and address of the recipient indicated in the assignment directive.

A9.5. Box 4. Enter the FMS case designator, grant aid Reports Control Number, if known.

A9.6. Box 5, 6, 7 and 8. Leave blank.

A9.7. Box 9. Enter HQ USAF project number, for example, FMS 9F-35 or MAP9T-47 and the assignment directive number, for example, 79-635.

A9.8. Box 10. If shipment is by airlift or surface, make sure the person shipping the aerospace vehicle signs. Otherwise leave blank.

A9.9. Box 11a. Leave blank.

A9.10. Box 11b. Leave blank.

A9.11. Box 12. For shipment by airlift or surface, enter the date of shipment. Otherwise leave blank.

A9.12. Box 13. Indicate airlift or surface. Otherwise leave blank.

A9.13. Box 14. For shipment by airlift or surface, enter the initial bill of lading or manifest number.

A9.14. Box (a). Leave blank.

A9.15. Box (b). Enter MDS and serial number. If being ferried, enter the signature block of the ferry pilot and date of signature.

A9.16. Box (c) - (i). Leave blank.

A9.17. Box 15 - 17. Leave blank.

A9.18. Box 18. Self-Explanatory. Use is optional.

A9.19. Box 19. Leave blank.

Section A9B—Preparing and Processing DD Form 1149

A9.20. Accountable Officer:

A9.20.1. Make enough copies of DD Form 1149 to complete all steps.

A9.20.2. Sends all copies to the transportation office with the items being shipped.

A9.21. Transportation Officer:

A9.21.1. Assigns Transportation Control Number and signs all copies of DD Form 1149.

A9.21.2. Sends appropriate copies to the gaining traffic management office with the equipment being shipped.

A9.21.3. Returns three copies to the accountable officer.

A9.22. Accountable Officer:

A9.22.1. Sends two copies to the appropriate PS&D.

A9.22.2. Keeps one copy in suspense.

A9.23. PS&D:

A9.23.1. Sends one copy to the PS&D of the gaining unit.

A9.23.2. Holds one copy for 60 Days in case the gaining unit needs help finding the equipment within transportation channels.

Attachment 10

SAMPLE AEROSPACE VEHICLE GAIN MESSAGE UNCLASSIFIED

Figure A10.1. Sample Aerospace Vehicle Gain Message Unclassified (See paragraph 2.17.).

TO: Losing Organization
CC: Losing MAJCOM and intermediate MAJCOM
Gaining MAJCOM and intermediate MAJCOM
Appropriate AFLCMC PM
AFMC/AF-AVDO
SUBJECT: AFI 21-103 Aerospace Equipment Possession Change Report, GAIN
Required Information:
1. Serial number of the aerospace vehicle.
2. Date of gain (last two digits of year plus consecutive Julian date) and local time of change, (followed by date and Zulu time) Date and Zulu time of change shown in the loss and gain messages will agree.
3. MDS and configuration identifier (if applicable).
4. Assigned MAJCOM.
5. Assignment PIC.
6. Gaining organization.
7. Gaining organization station location code.
8. Gaining organization possession PIC.
9. Type action code (GB for a gain).
10. Losing organization station location code and MAJCOM.
11. MAJCOM gaining aerospace vehicle.
12. Date of next major scheduled inspection due (time/date and type, for example, phase, periodic, major or minor isochronal), (MAJCOM option, leave blank if not used).
13. Reason for movement (for example, assignment change, Programmed Depot Maintenance, Analytical Condition Inspection).
14. Current Condition Status Code of Asset.
15. Name and DSN telephone number of AVDO initiating message.

Attachment 11

SAMPLE AEROSPACE VEHICLE LOSS MESSAGE UNCLASSIFIED

Figure A11.1. Sample Aerospace Vehicle Loss Message Unclassified (See paragraph 2.18.).

TO: Gaining organization.
CC: Gaining MAJCOM and intermediate MAJCOM
Losing MAJCOM and intermediate MAJCOM
Appropriate AFLCMC PM
AFMC/AF-AVDO
SUBJECT: AFI 21-103, Aerospace Equipment Possession Change Report, LOSS
Required Information:
1. Serial number of the aerospace vehicle.
2. Date of loss (last two digits of year plus Julian date) and local time of change (followed by date and Zulu time). Dates and Zulu times of change shown in the loss and gain messages will agree.
3. MDS and configuration identifier (if applicable).
4. Assigned MAJCOM.
5. Assignment PIC.
6. Losing organization.
7. Losing organization station location code.
8. Losing organization possession PIC.
9. Type action code (LB for a loss).
10. Gaining organization station location code and MAJCOM.
11. MAJCOM losing aerospace vehicle.
12. Date of next major scheduled inspection due (time/date and type, for example, phase, periodic, major or minor isochronal, HSC), (MAJCOM option, leave blank if not used).
13. Reason for movement (assignment change, Programmed Depot Maintenance, Analytical Condition Inspection, and so on).
14. Current Condition Status Code of Asset.
15. Name and DSN telephone number of AVDO who is initiating the message.

Attachment 12

SAMPLE AEROSPACE VEHICLE TERMINATION MESSAGE UNCLASSIFIED

Figure A12.1. Sample Aerospace Vehicle Termination Message Unclassified (See paragraph 2.19.).

TO: AFMC/AF-AVDO
CC: Possessing and assigned MAJCOM AVDO
CEMS PM (AFLCMC/LPZ)
AF/A4LM Aerospace Vehicle Disposition Manager
Appropriate AFLCMC PM
SUBJECT: AFI 21-103, Aerospace Equipment Termination Report
Required information:
1. Serial number of the aerospace vehicle.
2. Date of termination (last two digits of year plus consecutive Julian date) and local time of change (followed by date and Zulu time).
3. MDS and configuration identifier (if applicable).
4. Assigned MAJCOM.
5. Assignment purpose identifier.
6. Assigned Organization and Department of Defense Activity Code (DoDAAC) or Stock Record Account Number (SRAN).
7. Possessing organization.
8. Possessing organization station location code.
9. Possession PIC.
10. Type termination code for ADN message.
11. Possessing MAJCOM.
12. Serial number(s) of primary propulsion engine(s) installed on terminated aerospace vehicle.
13. Is the SIB closed: Yes? Or No?
14. If applicable, Is the AIB closed: Yes?, No?, N/A?
15. Is the legal review complete: Yes? or No?
16. Name and rank of Maintenance Group Commander or designated representative.
17. If applicable, include name and organization of individual processing the termination with Defense Logistics Agency Disposition Services2.

Attachment 13

SAMPLE POSSESSION PIC CHANGE MESSAGE UNCLASSIFIED

Figure A13.1. Sample Possession PIC Change Message Unclassified (See paragraph 2.20.).

TO: MAJCOM/AF-AVDO
CC: Intermediate MAJCOM
Appropriate AFLCMC PM
AFMC/AF-AVDO
SUBJECT: AFI 21-103, Aerospace Equipment Possession PICs Change Report
Required information:
1. Serial number of the aerospace vehicle.
2. Date of possession PIC change (last two digits of the year plus consecutive Julian date) and local time of change (followed by date and Zulu time).
3. MDS and configuration identifier (if applicable).
4. Assigned MAJCOM.
5. Assignment PIC.
6. Possessing organization.
7. Station location code.
8. Possession PIC from which the aerospace vehicle is changing
9. Type action code (LF).
10. Possessing PIC to which aerospace vehicle is changing.
11. Possessing MAJCOM
12. Remarks: Reason for change.
13. Name and DSN telephone number of AVDO initiating change and message.

Attachment 14

SAMPLE MDS/CONFIGURATION IDENTIFIER CHANGE MESSAGE UNCLASSIFIED

Figure A14.1. Sample MDS/Configuration Identifier Change Message Unclassified (See paragraph 2.21).

TO: MAJCOM AVDO
CC: Intermediate MAJCOM
Appropriate AFLCMC PM
AFMC/AF-AVDO
SUBJECT: AFI 21-103, Aerospace Equipment MDS/Configuration Identifier Change Message
Required Information:
1. Serial number of the aerospace vehicle.
2. Date of possession PICs change (last two digits of the year plus consecutive Julian date) and local time of change (followed by date and Zulu time).
3. MDS and configuration identifier (if applicable).
4. Assigned MAJCOM.
5. Assignment purpose identifier.
6. Possessing organization.
7. Station location code.
8. Possession PIC from which the aerospace vehicle is changing.
9. Type action code (LF).
10. Possession PIC to which aerospace vehicle is changing.
11. Possessing MAJCOM.
12. Remarks: Reason for change.
13. Name and DSN telephone number of AVDO initiating change and message.

Attachment 15

STATUS REPORTING FOR WEATHER METEOROLOGICAL EQUIPMENT

A15.1. NOTE: Due to the information below does not include all equipment status reporting requirements for all weather equipment please consult respective system's requirements document if it's not listed below.

A15.2. All fielded fixed and tactical: Automated meteorological observing systems (for example, AN/FMQ-19/22/23 and AN/TMQ-53).

A15.2.1. If the data acquisition unit (data logger) is inoperative, report system NMC (Red).

A15.2.2. If any sensor necessary to report ceilings is inoperable, report the system as NMC (Red).

A15.2.3. If any sensor necessary to report visibility, winds, altimeter setting and/or discontinuity group sensor is inoperable, report the system as PMC (Amber).

A15.2.4. If all system meteorological sensors are inoperative such that the system is not providing any usable data, report system NMC (Red).

A15.2.5. Report FMC (Green) when system is operating normally.

A15.3. Tactical weather radars: For example, AN/TMS-2 and Next Generation Weather Radar/Weather Surveillance Radar-88D (NEXRAD)).

A15.3.1. Radar system is inoperative and unable to detect and display meteorological targets locally, report system NMC (Red).

A15.3.2. Radar system is able to detect and display current meteorological targets locally but cannot transmit imagery or data to other users (for example, Operational Weather Squadron), report system PMC (Amber).

A15.3.3. Report FMC (Green) when system is operating normally.

Attachment 16

LOADING SERIAL NUMBERS FOR WEATHER SERVICE SYSTEMS

A16.1. AN/FMH-5 Joint Environmental Toolkit (JET). - Use the Asset Part number from the Identaplate tag, for example, JETXXXXXX, as the system serial number.

A16.2. AN/FMH-5 Sensor Collection Alliance (SCA). - Use the Asset Part number from the system's Identaplate tag, for example, JETXXXXXX, as the system serial number.

A16.3. AN/FMQ-7 Solar Observing Optical Network (SOON). - Use the serial number affixed to the processor cabinet, as the system serial number.

A16.4. AN/FMQ-13V2 Wind Measuring Set. - The AN/FMQ-13 does not have a "system" serial number. Use the primary user's RO-558 Recorder serial number as the top level (AA000) system serial number.

A16.5. AN/FMQ-19 Automated Meteorological Station. - Use the system number (for example, AMS000) affixed to the upper left corner of the Terminal Data Acquisition Unit (TDAU) cabinet, as the system serial number.

A16.6. AN/FMQ-22 Fixed Base System (FBS). - Use the system number (for example, 000000FMQ220001) affixed to the base plate of the mast, as the system serial number.

A16.7. AN/FMQ-23 Fixed Base Weather Observing System (FBWOS). - Use the system number (for example, 000000FMQ230001) affixed to the CPS cabinet, on the front door threshold, left side, as the system serial number.

A16.8. AN/FRR-95 Radio Solar Telescope Network (RSTN). - Use the serial number affixed to the processor cabinet, as the system serial number.

A16.9. AN/TMQ-53 Tactical Meteorological Observing System. - Use the system or TAC number (for example, SYSTEM 003 or TAC 003) affixed to AN/TMQ-53 transit cases, as the system serial number.

A16.10. AN/TMS-2 Portable Doppler Radar (PDR). - Use the system number (for example, PDR003) affixed to the PDR server transit case and or bottom of the antenna base plate, as the system serial number.

A16.11. AN/UMQ-13 Meteorological Data Station. - Use the system number (for example, 00012) affixed to the server rack as the system serial number. In single server rack configurations it's located on the top of the server rack, for 3 rack systems it's located on the top of rack 2.

A16.12. WSR-88D, Next Generation Weather Radar/Weather Surveillance Radar-88D (NEXRAD). - Use the serial number from the klystron nameplate located on the klystron tube.

Attachment 17

AEROSPACE VEHICLE AND TRAINER PICS

A17.1. NOTE: PICs are used to designate assignment and possession mission activities, refer to AFI16-402 for additional information. MAJCOMs must utilize all applicable PICs in **Attachment 17** for the assigned aerospace vehicles to facilitate standardization of Reporting. Aircraft being reported in a "B" PIC are non-flyable. **NOTE:** Non-flyable "B" coded aerospace vehicles are not available for mission generation or deemed taskable to fulfill missions.

A17.1.1. **BI - Aerospace vehicle incident/mishap requiring a Safety Investigation Board or Accident Investigation Board.** Use begins when it is determined that a Safety Investigation Board/Accident Investigation Board investigation is required. Aerospace vehicle will remain in this possession PIC until the Safety Investigation Board/Accident Investigation Board releases the aircraft back to maintenance. MAJCOM AVDO approval required.

A17.2. BJ - Crash/Battle Damage Awaiting AFMC assistance or decision. Aerospace vehicles and trainers for which AFMC assistance has been requested for repair of crash or battle damage and will be effective upon submission of request to AFMC and will apply until actual transfer of possession to AFMC. **NOTE**: MAJCOMs will determine which codes are applicable for use among their units.

A17.3. BK - Command Programmed Maintenance. Aerospace vehicles being processed through a major command directed funded and operated maintenance program (for example, command central corrosion facility). Not to be used when aerospace vehicles are undergoing unscheduled maintenance, scheduled inspections or TCTOs. Use of this code will be approved by MAJCOM HQs prior to use.

A17.4. BL - Extended Transit Maintenance. Applies to aerospace vehicles when transient maintenance requires more than 7 days to repair the transient aerospace vehicle. The gain will be reported by the organization responsible for the maintenance.

A17.5. BN - Crash Damage Base. Aerospace vehicles and trainers on which AFMC assistance is not required for repair of crash damage.

A17.6. BO - Battle Damage. AFMC assistance not required. Applies to battle damaged aerospace vehicles on which AFMC assistance is not required for repair of the damage.

A17.7. BQ - Major Maintenance Awaiting Organic or Non-Organic Decision/Action. Aerospace vehicles and trainers for which Organic or Non-Organic assistance has been requested to provide repair assistance beyond the possessing command's capability. Use will begin when the aerospace vehicle or trainer is no longer usable for its intended purpose and the request for assistance is submitted. The use will continue until the decision is provided or possession transferred to Organic or Non-Organic authority. Crash damaged aerospace vehicles will not be reported as "BQ". **NOTE**: Organic repair is considered internal to the Air Force, for example, AFMC Depot Level Maintenance. Non-Organic repair is considered external to the Air Force, for example, Original Equipment Manufacturer Contract Supported.

A17.8. BR - Major Maintenance Awaiting Parts. Aerospace vehicles and trainers which require major maintenance for which the necessary major components have not been

programmed and are not available in AF stocks. Use of this code is restricted to large scale programs, for example replacement of all T-38 wings and not to single out isolated incidents. Use of the code will be agreed upon by both the operating MAJCOM and the PM. Aerospace vehicles and trainers in "BR" status are not MICAP reportable.

A17.9. BT - Aerospace Vehicle Transfer. Applies to aerospace vehicle transfers for the period of time that the aerospace vehicle is not available to accomplish its assigned mission. To be used for reporting during the period of transfer beginning with preparation for transfer and recovery after arrival at the new location. Aerospace vehicles assigned this code will not be considered available for generation during Readiness Exercises and will not be chargeable to unit NMC/PMC rates. Use, and extension of this code beyond 48 hours, will be approved by MAJCOM Headquarters.

A17.10. BU - Depot Level Maintenance or Equivalent Contract Supported/Field Team Work. Depot level or equivalent contract supported/field team work performed at unit level when AFMC or the contractor has formally acknowledged acceptance of the responsibility to repair the aerospace vehicle IAW TO 00-25-107 or equivalent contract supported technical assistance request and cognizant PM and engineering authority has authorized repair by possessing unit. Work is performed by the owning unit to expedite the repair action when the unit possesses the technical expertise support equipment and is qualified to accomplish the repair. Use of this code will be agreed upon by both the operating MAJCOM and the PM. The use of this code will continue until the repair action is complete or the possession is changed to a flyable code.

A17.11. BW - Weather/Bird Strike Damage Awaiting AFMC Assistance or Decision. Aerospace vehicle has been requested for repair of damage and will be effective upon submission of request to AFMC and will apply until actual transfer of possession to AFMC. Use of this code will be approved by MAJCOM prior to use.

A17.12. BX - Weather/Bird Strike Damage Base. Aerospace vehicles and trainers on which AFMC assistance is not required for repair of aerospace vehicle damage. Use of this code will be approved by MAJCOM Headquarters prior to use.

A17.13. CA - Combat Support. Aerospace vehicles assigned or possessed for the primary mission of direct support of units engaged in conflict. Includes: tactical and aeromedical airlift, weather reconnaissance or surveillance, intelligence and security activities, navigation, air refueling, air rescue, airborne warning and control, airborne command post, photo mapping, communications relay, and special operations missions.

A17.14. CB - Combat Tactics Development and Equipment Evaluation. Aerospace vehicles assigned or possessed for developing, improving, or evaluating operational employment ability (for example, OT&E).

A17.15. CC - Combat. Aerospace vehicles assigned or possessed for the primary mission of delivering munitions or destructive materials against or engaged in direct contact with enemy forces. Includes: ICBM, strategic or tactical bomber, strategic or tactical reconnaissance, forward air control, tactical electronic warfare, tactical fighter or attack, tactical drone/ remotely piloted aircraft or fixed wing gunship and special operations missions.

A17.16. CD - Combat Unit Missiles—Semi-Ready. Includes: Missiles possessed by missile units in process of being assembled and checked out and missiles which are assigned in excess of the number of launchers available.

A17.17. CE - Initial Alert Preparation of Ground Launched Missiles. To be used to report missiles which are mated to launchers during the period between acceptance by the using command and initially being placed on alert. When alert status is assumed the missiles will be identified as "CC".

A17.18. CF - Combat Auxiliary Support. Aerospace vehicles assigned or possessed to accomplish essential functions that cannot be performed economically in the primary aerospace vehicles of combat and combat support units. Includes: Radar site evaluation and support, target support range, support missile site support, and traffic control and landing system inspection missions.

A17.19. CR - Combat Unit Missiles--Crated. Missiles possessed by missile units that are crated or in unassembled storage.

A17.20. DJ - Depot Level Maintenance Possession--Depot Level Work. Applies to aerospace vehicles awaiting depot level work either at a depot a contract facility or the base organization location (Performed by depot field team or contract field team) or awaiting shipment to the appropriate repair facility. To be used when AFMC assistance has been requested and AFMC has formally acknowledged acceptance of the responsibility to repair the aerospace vehicle IAW TO 00-25-107.

A17.21. DK - Contract Work. Aerospace vehicles and trainers on contract to a civilian repair facility (domestic or foreign) for the performance of Programmed Depot Maintenance repair, modification, modernization, instrumentation, TO compliance, or reconditioning. Aerospace vehicles receiving maintenance as "DK" are reported as possessed by AFMC.

A17.22. DL - Depot Delivery Flight. For use by AFMC flight test activities for aerospace vehicle delivery to or from depot facilities. Includes: Training flights prior to input into the work facility.

A17.23. DM - Depot Level Maintenance Possession--Depot Level Work by depot field team or contract field team. Aerospace vehicles undergoing maintenance beyond organizational and/or intermediate level capability. Includes: Depot level work being performed at the base organization location by depot or contract field teams.

A17.24. DN - Depot Level Assignment--Depot Level Work Resulting in MDS Change. Aerospace vehicles in USAF depots (domestic or foreign) or contract facilities for the performance of maintenance modification modernization technical order compliance or reconditioning of a magnitude that results in a Mission Design Series (MDS) change. Aerospace vehicles in this category are reported as both assigned and possessed by AFMC.

A17.25. DO - Depot Level Maintenance Possession--Depot Work. Aerospace vehicles and trainers at USAF depots (domestic or foreign) undergoing programmed depot maintenance, repair, modification, modernization, time compliance technical order, instrumentation or reconditioning.

A17.26. DR - Post Depot/Contractor Maintenance. Applies to aerospace vehicles after depot work ("DO" or "DN"), contract work ("DK"), or depot field team or contract field team ("DM")

maintenance has been completed and the vehicle is in preparation for Functional Check Flight or delivery to the organization that will possess it. To be used from the time when the aerospace vehicle has been released for Functional Check Flight, during Functional Check Flight, and the maintenance required after the Functional Check Flight.

A17.27. DT - Depot Possessed Test. Aerospace vehicles provided to AFMC for government or contractor-performed ground and flight test activities for complete system evaluation of new or modified systems or subsystems to improve weapon system capabilities. This code typically applies when an AFMC test unit is collocated at a contractor depot facility.

A17.28. EB - Contractor Test/Test Support. Aerospace vehicles provided to contractors as government furnished property in support of a prime AF contract. These aerospace vehicles will be utilized for complete system evaluation testing to improve the capabilities of the designated aerospace vehicle, support of specific test programs, or production support.

A17.29. ED - Prototype Test. Unaccepted prototype experimental or preproduction aerospace vehicles procured and utilized in support of a prime AF contract when conditions of acceptance are contingent upon contractor achievement of a specified milestone. Aerospace vehicles in this category are assigned for overall inventory accounting purposes only. Assignment action does not affect contractors or program management. Reporting requirements applicable to accepted aerospace vehicles do not apply.

A17.30. EH - Test Support. Aerospace vehicles assigned or possessed for participation in test programs. Includes: PACE CHASE Test Bed Range and Test Pilot Training Support.

A17.31. EI - Test. Aerospace vehicles assigned or possessed for complete system evaluation or for testing to improve the capabilities of the aerospace vehicle designated.

A17.32. EJ - Ground Test. Aerospace vehicles assigned or possessed for non-flying ground testing and evaluation of the aerospace vehicle or systems.

A17.33. IF - Industrial Fund. Aerospace vehicles assigned to or possessed by AMC for the accomplishment of single manager operations for airlift service. Includes: Aerospace vehicle assigned to or possessed by strategic airlift, tactical airlift, domestic aeromedical, or airlift units.

A17.34. NY - Non-Appropriated Fund. Aerospace vehicles or trainers on loan to USAF non-appropriated funded activities (for example, aero clubs).

A17.35. PJ - Enroute Aerospace Vehicles or Trainers--Other Than Delivery Flight. Aerospace vehicle and trainer transfers involving the disassembly, crating, or preparation for means other than flight. To be used for reporting during the period of preparation for transfer and reassembly or check upon arrival at the new location.

A17.36. PL - Enroute Aircraft--Delivery Flight. Applies to all aerospace vehicle transfers accomplished by a neutral flight crew (Crew not under the control of the losing or receiving command). Used for reporting from the time of acceptance by the flight crew to the time of delivery to the receiving organization.

A17.37. PM - Security Assistance Program Aerospace Vehicles Temporary Diverted to USAF. Aerospace vehicles programmed for delivery and assignment to foreign countries under the Security Assistance Program which have been temporarily diverted to USAF for any purpose.

A17.38. PN - Other Than Security Assistance Program. Aerospace vehicles temporarily possessed by USAF for any purpose for delivery and assignment to recipients other than Security Assistance Program countries, for example, United States Navy (USN), United States Army (USA), Other National Agency (ONA), National Museum of the AF.

A17.39. PP - New Production. To be used only by government plant representatives to indicate aerospace vehicles which have been accepted but have not been reported/released to intended recipient.

A17.40. PR - Flyable Storage. Aerospace vehicles which are not currently used for accomplishment of any USAF mission involving flight but which are maintained in readiness for flight IAW technical orders. (**NOTE:** See **paragraph 2.11.3.6**)

A17.41. TA - Training Aid Aircraft Inactive and Aircraft Battle Damage Repair. Aerospace Vehicle permanently assigned or possessed for ground training objectives. Non-flyable aerospace vehicle that, at a minimum, utilizes the fuselage of an aircraft that was in the AF Inventory to accomplish training objectives. Minimal maintenance is required for the systems and subsystems.

A17.42. TB - Operational Readiness Training. Missiles which have been excused from Electronic Warfare Officer alert requirements for the purpose of accomplishing operational readiness training.

A17.43. TF - Training: Aerospace vehicles assigned or possessed to accomplish student training combat crew training or dissimilar air combat training or combat crew training.

A17.44. TJ - Ground Instruction Active. Trainer and temporarily possessed aerospace trainers and temporarily assigned aerospace vehicles used for ground instruction purposes.

A17.45. TX - Ground Instruction Inactive. Aerospace vehicles normally with a "G" prefix permanently assigned or possessed for ground instructional purposes.

A17.46. VJ - Contract Work (AFMC only). Aerospace vehicles or trainers on contract to a civilian contractor (domestic or foreign) for the performance of modification maintenance or instrumentation not funded by AFMC. To be reported as possessed by the contractor at the physical location of the vehicle or trainer (contractor facility or base).

A17.47. VN - Contract Work Resulting in MDS Change. Aerospace vehicles on contract to a civilian facility for the performance of vehicle modification or instrumentation resulting in Mission Design Series (MDS) change. Aerospace vehicles in this category are reported as both assigned and possessed by AFMC.

A17.48. XC Congressional Abeyance. Aerospace vehicles or trainers restricted from use due to congressional action. XC is used for situations when otherwise serviceable aerospace vehicles or trainers cannot be utilized due to the lack of funding or qualified personnel. MAJCOMS in conjunction with lead commands will request the applicable program office provide minimum sustainment requirements and compliance intervals necessary to sustain a predetermined aerospace vehicle recoverability time-line for return to service established by the SECAF unless otherwise determined by law (example: operational status within 10 days of notification). The processing vehicles are maintained in a recoverable condition and will not be cannibalized.

A17.49. XJ - Excess to Command. Aerospace vehicles or trainers which have been reported to AF/A8PE as excess to the requirements by the assigned command or vehicles designated by HQ

USAF as not currently required by a command and on which the possessing command is awaiting disposition instructions. The processing vehicles will be maintained in a serviceable condition and will not be cannibalized.

A17.50. XD – Excess Disposal. Inactive aerospace vehicles which are excess to all DoD needs with no preservation of airframe and engines (309 AMARG 4000 type storage). Aircraft are reclaimed upon designation to XD, unless programmed reclamation was previously accomplished, normally upon placement into XX or unless the AF Reclamation Program Manager waives reclamation. Weapon System PM can direct priority reclamation, as required. Components and repair parts are not excess until DoD programmed reclamation requirements have been satisfied. After programmed reclamation, the aircraft are processed for disposal.

A17.51. XK - Inactive-Standby. Trainers in a standby status until required to meet a projected training requirement. Standard modification procedures will apply while the trainer is in a standby status.

A17.52. XR - Inactive Aerospace Vehicles Awaiting Final Disposition. This code is not issued or withdrawn without an approved AF Form 913. The assigned command determines how these aerospace vehicles will be used however, no change in external configuration is authorized and disposal requires HQ USAF approval.

A17.53. XS - USAF type 1000 Storage. Aerospace vehicles stored in anticipation of specific future AF operational requirements. Parts may only be removed with approval of AF/A4L and only if serviceable replacement parts are ordered. If parts are removed, the Weapon System PM and Propulsion PM will take concurrent action to acquire serviceable replacements, which need not be reinstalled but will be earmarked for the specific aerospace vehicles from which removed (parts will be collocated at the installation the aerospace vehicle is stored). AF/A4L is the approval authority for any parts not stored at 309 AMARG. If it is not feasible to acquire replacement parts, the Weapon System PM will submit a waiver request to AF/A4L or a request to reclassify the aerospace vehicle to another storage category to AF/A4LM. Aerospace vehicles or trainers will not be moved to "XS" until all replacement parts are acquired to restore the aerospace vehicle to a flyable condition. Aerospace vehicles are under the authority of HQ USAF.

A17.54. XT - Security Assistance Program Hold Storage. Inactive aerospace vehicles or trainers stored in anticipation of specific future Security Assistance Program requirements for transfer to foreign governments either as a FMS or at no cost as Excess Defense Articles. Aerospace vehicles and trainers in this category are excess to DoD needs as flyable aerospace vehicles but may not be excess to DoD spare parts or component requirements. Aerospace vehicles in this category will normally be prepared for storage period in excess of 90 days and in a manner which will provide maximum aerospace vehicle preservation (AMARG 1000 type storage). The PM may initiate selected parts removal on input to storage and priority parts removals during storage without action to acquire or replace the removed parts. Since SAF/IA expects aerospace vehicles and trainers made available for sale will usually be whole, the PM will coordinate parts removal actions with SAF/IA through AF/A4LM. Acquisition of replacement parts will be initiated if the aerospace vehicle is reclassified to "XS" or designated for withdrawal in other than "as is" condition. Before aerospace vehicles and trainers in this category may be offered for transfer as Excess Defense Articles (Foreign Assistance Act Section 516517519). AF/A4LM shall coordinate with AF/A4L to determine if DoD spare parts or

components will be removed to support DoD needs as required by Federal Property Management Regulations (41 CFR 101-43.102 and DoDM 4160.21V4).

A17.55. XU - Contractor Other. Aerospace vehicles or trainers provided to approved USAF contractors as government furnished property for other than Research, Development, Test and Evaluation purposes.

A17.56. XV - USAF type 2000 Storage. Inactive aerospace vehicles or trainers stored to provide spare parts and components for the remaining operational mission aerospace vehicles. Aerospace vehicles and trainers in this category will normally be prepared for a storage period in excess of 90 days and preserved in a manner that will minimize expenditure of resources while maintaining components and parts in a reclaimable condition (AMARG 2000 type storage). The weapon system PM may direct selected parts removal on input to storage and priority removals during storage with no parts re-procurement or replacement action required unless the aerospace vehicle is re-categorized to "XS" or designated for withdrawal in other than “as is where is” condition. Aerospace vehicles or trainers in this category are not excess to DoD requirements.

A17.57. XW - Awaiting Determination. Aerospace vehicles lost as a result of a flying accident awaiting determination of applicable termination code (5, 6, or 7).

A17.58. XX - USAF type 4000 Storage. Inactive aerospace vehicles or trainers placed in short term economical storage with no preservation of airframe and engines (309 AMARG 4000 type storage). AF/A4LM will ensure aerospace vehicles in this category are excess to DoD operational needs and place them on a reclamation project upon transfer to this storage category. After reclamation the Weapon System PM will direct item be placed into Reclamation Insurance Type (RIT) or processed for disposal. The PM may direct selected parts removal upon input to storage and priority removals during Reclamation Insurance Type (RIT) storage with no parts procurement or replacement action required unless the aerospace vehicle is re-categorized to "XS" or designated for withdrawal in other than "as is, where is" condition. Components and repair parts are not considered as excess until DoD reclamation requirements have been satisfied. Aerospace vehicles will remain in this category until AF/A4LM or the Weapon System PM directs disposal or other disposition.

A17.59. XY - Lease Loan. Aerospace vehicles or trainers on lease to commercial agencies or loaned to other governmental agencies for accomplishment of tests or other projects.

A17.60. XZ - Lost or Missing. Aerospace vehicles missing in flight to be used when an aerospace vehicle fails to arrive at its destination due to an enroute mishap (Combat loss or other). Its location and condition may be known but physical verification cannot be made or official termination requirements have not been completed. Missiles will be reported in this category when destroyed by any means but have not been terminated from the inventory.

A17.61. YZ - National Museum of the USAF and Non-USAF (NOTE: REMIS accountability only). Aerospace vehicles assigned to the National Museum of the USAF and non-USAF agencies, for example, U.S. Army, U.S. Navy, and Foreign Military Service. Not to be used for foreign government owned aerospace vehicle under USAF operational control.

A17.62. ZA - Special Activity. Aerospace vehicles assigned or possessed to accomplish special mission. Includes: Aerial Demonstration Attaché Military Assistance Advisory Group and other special missions.

A17.63. ZB - Operational Support. Aerospace vehicles assigned or possessed to perform AF directed support airlift during peacetime contingencies and wartime. These missions include priority movement of personnel and cargo with time place or mission sensitive requirements.

Attachment 18

SAMPLE ICBM AND ROCKET SYSTEM LAUNCH PROGRAM GAIN MESSAGE UNCLASSIFIED

Figure A18.1. Sample ICBM and Rocket System Launch Program Gain Message Unclassified (See paragraph 3.6.1.).

TO: Losing Organization
INFO: Losing MAJCOM and intermediate MAJCOM
Gaining MAJCOM and intermediate MAJCOM
Appropriate AFLCMC PM
AFMC/AF-AVDO
Transportation Management Specialist (for IMDB update).
SUBJECT: ICBM or Rocket System Launch Program Asset Possession Change Report, GAIN.
Required Information:
1. Serial number of the ICBM or the Rocket System Launch Program.
2. Date of gain (last two digits of year plus consecutive Julian date) and local time of change, (followed by date and Zulu time) Date and Zulu time of change shown in the loss and gain messages must agree.
3. MDS and configuration identifier (if applicable).
4. Assigned MAJCOM.
5. Assignment PIC.
6. Gaining organization.
7. Gaining organization station location code.
8. Gaining organization possession PIC.
9. Type action code. (GB for a gain)
10. Losing organization station location code and MAJCOM.
11. MAJCOM gaining ICBM or Rocket System Launch Program.
12. Date of next major scheduled inspection due (time/date and type, for example, phase, periodic, major or minor isochronal), (MAJCOM option, leave blank if not used).
13. Reason for movement (for example, assignment change, Programmed Depot Maintenance, Analytical Condition Inspection)
14. Name and DSN telephone number of AVDO initiating message.

Attachment 19

SAMPLE ICBM AND ROCKET SYSTEM LAUNCH PROGRAM LOSS MESSAGE UNCLASSIFIED

Figure A19.1. Sample ICBM and Rocket System Launch Program Loss Message Unclassified (See paragraph 3.6.2.).

TO: Gaining organization.
INFO: Gaining MAJCOM and intermediate MAJCOM
Losing MAJCOM and intermediate MAJCOM
Appropriate AFLCMC PM
AFMC/AF-AVDO
Transportation Management Specialist (for IMDB update)
Subject: ICBM or Rocket System Launch Program Asset Possession Change Report, LOSS.
Required Information:
1. Serial number of the ICBM or Rocket System Launch Program.
2. Date of loss (last two digits of year plus Julian date) and local time of change (followed by date and Zulu time). Dates and Zulu times of change shown in the loss and gain messages must agree.
3. MDS and configuration identifier (if applicable).
4. Assigned MAJCOM.
5. Assignment PIC.
6. Losing organization.
7. Losing organization station location code.
8. Losing organization possession PIC.
9. Type action code ("LB" for a loss).
10. Gaining organization station location code and MAJCOM.
11. MAJCOM losing ICBM or Rocket System Launch Program.
12. Date of next major scheduled inspection due (time/date and type, for example, phase, periodic, major or minor isochronal), (MAJCOM option, leave blank if not used.
13. Reason for movement (assignment change, Programmed Depot Maintenance, Analytical Condition Inspection, and so on).
14. Current Condition Status Code of Asset
15. Name and DSN telephone number of AVDO who is initiating the message.

Attachment 20

SAMPLE ICBM AND ROCKET SYSTEM LAUNCH PROGRAM TERMINATION MESSAGE UNCLASSIFIED.

Figure A20.1. Sample ICBM and Rocket System Launch Program Termination Message Unclassified. (See paragraph 3.6.3.).

TO: AFMC/AF-AVDO
CC: Possessing and assigned MAJCOM, if applicable, intermediate MAJCOM
AF/A4LM
Appropriate AFLCMC PM
Transportation Management Specialist (to updated IMDB)
SUBJECT: AFI 21-103, ICBM or Rocket System Launch Program Asset Termination Report Required information:
1. Serial number of the ICBM or Rocket System Launch Program.
2. Date of termination (last two digits of year plus consecutive Julian date) and local time of change (followed by date and Zulu time).
3. MDS and configuration identifier (if applicable).
4. Assigned MAJCOM.
5. Assignment PIC.
6. Possessing organization.
7. Possessing organization station location code.
8. Possession PIC.
9. Type termination code for ADN message.
10. Possessing MAJCOM.
11. Name and rank of Operations Group Commander or designated representative.

Attachment 21

SAMPLE ICBM AND ROCKET SYSTEM LAUNCH PROGRAM POSSESSION PIC CHANGE MESSAGE UNCLASSIFIED.

Figure A21.1. Sample ICBM and Rocket System Launch Program Possession PIC Change Message Unclassified. (See paragraph 3.6.4.).

TO: MAJCOM AVDO
CC: Intermediate MAJCOM
Appropriate AFLCMC PM
AFMC/AF-AVDO
Transportation Management Specialist (to update IMDB)
SUBJECT: AFI 21-103, ICBM or Rocket System Launch Program Asset Possession PIC Change Report
Required Information:
1. Serial number of the ICBM or Rocket System Launch Program.
2. Date of possession PICs change (last two digits of the year plus consecutive Julian date) and local time of change (followed by date and Zulu time).
3. MDS and configuration identifier (if applicable).
4. Assigned MAJCOM.
5. Assignment PIC.
6. Possessing organization.
7. Station location code.
8. Possession PIC from which the ICBM or Rocket System Launch Program is changing.
9. Type action code ("LF").
10. Possession to which ICBM or Rocket System Launch Program is changing.
11. Possessing MAJCOM.
12. Current Condition Status Code of Asset
13. Remarks: Reason for change.
14. Name and DSN telephone number of AVDO initiating change and message.

Attachment 22

SAMPLE ICBM AND ROCKET SYSTEM LAUNCH PROGRAM CONFIGURATION IDENTIFIER CHANGE MESSAGE UNCLASSIFIED

Figure A22.1. Sample ICBM and Rocket System Launch Program Configuration Identifier Change Message Unclassified (See paragraph 3.6.5.).

TO: MAJCOM AVDO
CC: Intermediate MAJCOM
AFMC/AF-AVDO
Appropriate AFLCMC PM
SUBJECT: ICBM or Rocket System Launch Program Configuration Identifier Change
Report Required Information:
1. Serial number of the ICBM or Rocket System Launch Program.
2. Date of change (last two digits of the year plus consecutive Julian date) and local time of change (followed by date and Zulu time) which must equal 2400Z.
3. Old configuration identifier.
4. Assigned MAJCOM.
5. Assignment PIC.
6. Possessing organization.
7. Station location code.
8. Possession PIC.
9. Type action code (“LC”).
10. New configuration identifier.
11. Possessing MAJCOM.
12. Current Condition Status Code of Asset.
13. Name and DSN telephone number of AVDO who is initiating the message.

Attachment 23

SAMPLE ICBM AND ROCKET SYSTEM LAUNCH PROGRAM RELOCATION MESSAGE UNCLASSIFIED.

Figure A23.1. Sample ICBM and Rocket System Launch Program Relocation Message Unclassified. (See paragraph 3.6.6.).

TO: Depot AVDO
CC: Transportation Management Specialist (to update IMDB)
SUBJECT: ICBM or Rocket System Launch Program Asset Change Report, RELOCATION
Required Information:
1. Serial number of ICBM or Rocket System Launch Program booster or motor.
2. Date of relocation (last two digits of year plus consecutive Julian date) and local time of change, (followed by date and Zulu time) date and Zulu time.
3. MDS
4. Owning organization station and MAJCOM.
5. Old location (uses Missile Support Base for main base, identify launch facility (LF) by wing designator and LF Designator).
6. New location (uses Missile Support Base for main base, identify Launch Facility by wing designator and Launch Facility designator).
7. Reason for relocation (modernization program, scheduled, or unscheduled maintenance
8. Current Condition Status Code.
9. Condition Code Change (if applicable)
10. Name and DSN telephone number of AVDO initiating message.

Attachment 24

SAMPLE ICBM AND ROCKET SYSTEM LAUNCH PROGRAM CONDITION CODE MESSAGE UNCLASSIFIED

Figure A24.1. Sample ICBM and Rocket System Launch Program Condition Code Message Unclassified (See paragraph 3.6.7.).

TO: Depot AVDO
CC: Transportation Management Specialist (to update IMDB)
SUBJECT: ICBM or Rocket System Launch Program Asset Change Report, CONDITION CODE Required Information:
1. Serial number of ICBM or Rocket System Launch Program booster or motor.
2. Current Condition Status Code.
3. Previous Condition Status Code.
4. Date of condition code change (last two digits of year plus consecutive Julian date) and local time of change, (followed by date and Zulu time) date and Zulu time.
5. MDS
6. Owning organization station and MAJCOM.
7. Current location (uses Missile Support Base for main base, identify Launch Facility by wing designator and Launch Facility Designator).
8. Reason for condition code change (for example, found unserviceable, repaired-serviceable, obsolete- terminated or destroyed).
9. Name and DSN telephone number of AVDO initiating message.

Attachment 25

AIRCRAFT AVAILABILITY STANDARD CALCULATION

Figure A25.1. Aircraft Availability Standard Calculation.

MAJCOM's will create and retain an annual roll up of Aircraft Availability forecast factors as the foundation for calculating Aircraft Availability Standards for each MDS. Modification of forecasting factors (such as operational days) used for Aircraft Availability calculations will be documented and retained to provide a measure of accuracy and process applied to produce the desired outcome. Retention of calculation factors are intended to be utilized to improve accuracy of future year Aircraft Availability Standard forecasts and provide continuity during personnel rotations. The MAJCOM AVDO will retain forecast factors a minimum of 5 years. Due to differentiating mission requirements across the MAJCOMs, utilization of the unconstrained flying hour requirement (pre-President's Budget) is authorized as the MAJCOM deems applicable for each MDS. MAJCOMs will use the following equation to calculate Aircraft Availability Standard. (Equation 1 N/A to Mobility Aircraft. For Mobility Aircraft units, Mobility Capability Requirements Study requirement = Operational Requirement (OR)). MAJCOM A4s will request waivers for deviations of equation 1 from the MDS lead command. Additionally, approved deviations will be forwarded to AF/A4LM at usaf.pentagon.af-a4.mbx.a4lm-m-maintenance-policy@mail.mil

$$\left[\frac{(S_o)}{F_{do}}\right] + \left[\frac{(S_t)}{F_{dt} \times T_u \times (1-a)}\right] + G + S + A + R = OR$$

Equation 1 - Operational Requirement (OR) Equation

The following is a list of terms and the definitions:

Sorties/Missions required by Operations (contingency and training) – (S_o), (S_t). These are the number of sorties established by A3 needed to complete all aircrew contingency (S_o) and training (S_t) mission requirements for a given time period. Sortie requirements may also be alternatively calculated by dividing given Flying Hours (FH) by the established Programmed Average Sortie Duration.

Flying Hours (contingency and training) – (FH_o), (FH_t). These are the number of hours, established by A3, needed to complete all aircrew contingency and training mission requirements for a given time period.

Programmed Average Sortie Duration (contingency and training) – (ASD_o), (ASD_t). These are the average number of expected flying hours consumed during each contingency and training sortie.

Days Available to Fly (operational/contingency and training) – (Fd_o), (Fd_t). These are the number of days available during the FY to execute the operational/contingency and training mission.

Turn Rate – (T_u): calculated by dividing the total number of flying sorties for a given flying period by the number of "first go" lines on the flying schedule.

Attrition Rate – (a): expected rate of mission losses for a given year, expressed as a percentage of total flying hours/sorties.

Ground Schedule Requirement – (G): number of aircraft required for executing any ground training or static mission requirements (such as, firefighter, maintenance, weapons load training or static displays).

Spare Requirement – (S): number of aircraft required by wing level or higher plans to provide backup to the schedule mission lines for the flying window.

Alert Requirement – (A): number of aircraft required to meet any mission alerts.

ARC Requirement – (R): number of aircraft to meet the mission requirements of reserve/guard units, who fly active unit possessed aircraft.

Aircraft Tail Requirement – (AT_o), (AT_t): number of individual aircraft needed to complete all aircrew (contingency and training) mission requirements. If this variable is used in place of sorties or flying hours, the Days Available to Fly variable is set to 1 day.

The resulting AA standard would be:

$$\frac{OR}{TAI} = AA_{\text{std}}$$

Equation 2 - Aircraft Availability Requirement Equation

The OR equation is primarily derived using projected sorties (missions). Flying hours can also be used if that is the data projected by the applicable unit. The projected flying hours are converted into projected sorties by dividing by programmed average sortie duration as seen in **Equation 3** below. This is done for both projected operational and training hours.

$$\frac{FH_o}{ASD_o} = S_o \qquad \frac{FH_t}{ASD_t} = S_t$$

Equation 3 - Flying Hour to Sortie Conversion

The distribution of the variables S_o and S_t can vary, depending on the forecasted operational requirements for the given time period. Maximum or Peak Aircraft Availability requirements can be determined calculating the maximum number for S_o and S_t as defined by the A3 community.