

**BY ORDER OF THE  
SECRETARY OF THE AIR FORCE**

**DEPARTMENT OF THE AIR FORCE  
INSTRUCTION 21-103**



**1 NOVEMBER 2022**

*Incorporating Change 1, 23 JULY 2025*

***Maintenance***

***EQUIPMENT INVENTORY, STATUS  
AND UTILIZATION REPORTING***

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

---

**ACCESSIBILITY:** Publications and forms are available for downloading or ordering on the e-Publishing web site at [www.e-publishing.af.mil](http://www.e-publishing.af.mil)

**RELEASABILITY:** There are no releasability restrictions on this publication.

---

OPR: AF/A4LM

Certified by: SAF/AQD  
(Ms. Angela L. Tymofichuk)

Supersedes: AFI21-103, 30 April 2020

Pages: 181

---

This publication implements Department of the Air Force Policy Directive (DAFPD) 21-1, *Maintenance of Military Materiel*; and is consistent with AFD 13-5, *Air Force Nuclear Mission*. It is the basic Department of the Air Force Instruction (DAFI) 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 United States Air Force (USAF) and United States Space Force (USSF), Air Force Reserve (AFR), Air National Guard (ANG) and Department of the Air Force civilian personnel. Major Commands (MAJCOMs) and USSF Field Commands (FLDCOMs) may supplement this instruction. Supplements must identify required deviations (e.g., applicability, variance, and/or differences in organizational placement of responsibilities and/or processes) in the supplement with the term deviation [DEV], abbreviation “DEV”. Place the “DEV” entry after the paragraph number and directly preceding the affected text, such as “(AMC) [DEV]” (e.g., (ADDED-AMC) [DEV] Use the...). MAJCOM and FLDCOMs supplements will be submitted to the Air Force Maintenance Division (AF/A4LM) at [AF.A4LM.Maintenance.Policy@us.af.mil](mailto:AF.A4LM.Maintenance.Policy@us.af.mil) for approval. Supplements will be published in the e-Publishing website. Compliance with the attachments **2, 3, 4, 5, 6, 15, 17, and 25** in this publication is mandatory. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the Department of Air Force (DAF) Form 847, *Recommendation for Change of Publication*; route DAF Form 847 from the field through the appropriate functional chain of command. The authorities to waive Wing/Space Force equivalent/unit level requirements in this publication are identified with a Tier (“T-0, T-1, T-2, T-3”) number following the compliance statement. See DAFMAN 90-161, *Publishing*

*Processes and Procedures*, for a description of the authorities associated with the Tier numbers. Submit requests for waivers using DAF Form 679, *Department of the Air Force Publication Compliance Item Waiver Request/Approval*, through the chain of command to the appropriate tier waiver approval authority, or alternately, to the requestor's commander for non-tiered compliance items. All approved waivers will be sent to the AF/A4LM Maintenance Policy org box: [AF.A4LM.Maintenance.Policy@us.af.mil](mailto:AF.A4LM.Maintenance.Policy@us.af.mil), within 30 days of approval, for situational awareness and process improvement considerations. Ensure all records generated as a result of processes prescribed in this publication adhere to Air Force Instruction 33-322, *Records Management and Information Governance Program*, and are disposed in accordance with the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

### ***SUMMARY OF CHANGES***

This publication has been substantially revised and must be completely reviewed in its entirety. This interim change incorporates published guidance from the Department of the Air Force Guidance Memorandum (DAFGM) 2024-01. New requirements in **Chapter 1** new requirements for lead command reporting for mission capable aircraft standards and goals. **Chapter 2** for aerospace vehicle status detail on maintenance progression by capturing limiting factors and delays to enhance weapons systems analysis. **Chapter 10** has been completely revised for aircraft avionics pod reporting and accountability. **Attachment 2** Air Force standard algorithms have been removed and referenced to the source document TO 00-20-2, *Maintenance Data Documentation*. Finally, the identified waiver authority for requirements within this publication has been corrected to meet the guidelines set forth in DAFMAN 90-161, *Publishing Processes and Procedures*. A margin bar (|) indicates newly revised material.

<b>Chapter 1—REPORTING GUIDELINES</b>	<b>12</b>
1.1. Using Report Information.....	12
1.2. Lead Command Reporting Requirements.....	12
1.3. Correct Reporting. ....	13
1.4. Offices of Primary Responsibility are: .....	13
1.5. Supporting Publications.....	13
1.6. Aviation Support Equipment. ....	14
<b>Chapter 2—AEROSPACE VEHICLE (INCLUDING AIRCRAFT, AERIAL TARGETS/DRONES (FULL OR SUB-SCALE), REMOTELY PILOTED AIRCRAFT) GROUND STATION AND MINE RESISTANT AMBUSH</b>	

**PROTECTED VEHICLE INVENTORY, STATUS, AND UTILIZATION  
REPORTING**

**15**

Section 2A—Reporting System Overview.	15
2.1. Overview.....	15
2.2. The Reporting System. ....	15
2.3. Transmitting Data. ....	15
2.4. Security Classification. ....	15
Section 2B—Reporting Responsibilities.	16
2.5. Weapon System Program Activities. ....	16
2.6. Base and Depot Level Activities.....	16
2.7. MAJCOM/ FLDCOM/FOA AVDO and MAJCOM Flying Hour Program POC Coordination Guidance. Note: .....	19
2.8. USAF/USSF-AVDO.....	21
2.9. Contract Administration Activities (Except Contract Field Teams).....	21
Section 2C—Aerospace Vehicle Inventory Reporting.	21
2.10. Assignment Procedures.....	21
2.11. Possession Reporting. ....	21
2.12. Criteria for Gaining or Losing Possession. ....	23
2.13. Criteria for Terminating Possession.....	24
2.14. Criteria for Reporting Aerospace Vehicles as Deployed. ....	24
2.15. Possession Reporting Criteria for Depot Teams. ....	25
2.16. Notifying MAJCOMs of Possession Changes. ....	26
2.17. Gain Message, Aerospace Vehicle Possession Change Report. ....	26
2.18. Loss Message Aerospace Vehicle Possession Change Report. ....	26
2.19. Termination Message, Aerospace Vehicle Termination Report. ....	27
2.20. PIC Change Message, Aerospace Vehicle PIC Change Report.....	27
2.21. Mission Design Series (MDS)/Configuration Identifier Change Message, Aerospace Vehicle MDS/Configuration Identifier Change Report. ....	27
Section 2D—Aerospace Vehicle Status Reporting.	27
2.22. Reporting Maintenance Status. ....	27
2.23. Determining Maintenance Status.....	28
2.24. Pacing Items.....	31
2.25. Minimum Essential Subsystems List (MESL) or MDS equivalent. ....	31

	2.26. Developing the MESL. ....	32
Table	2.1. Sample MESL.....	32
	2.27. Determining Aerospace Vehicle Maintenance Status and Capability. ....	33
Table	2.2. Aerospace Vehicle Maintenance Status Code Flow Chart. ....	34
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).		35
	2.28. Flying Hour Program. ....	35
	2.29. Aerospace Vehicle Utilization Reporting Overview. ....	36
	2.30. What to Report. ....	37
	2.31. Multiple Utilization Reporting.....	37
Section 2F—Accountability, Termination, and Delivery Procedures.		37
	2.32. Aerospace Vehicle Accountability. ....	37
	2.33. Final Termination Accountability.....	37
	2.34. Delivering Aerospace Vehicles to Agencies Outside the AF. ....	39
	2.35. Using AFTO Form 290.....	39
Section 2G—Valuation of Aerospace Assets.		41
	2.36. Aircraft, Aerial Targets/Drones (i.e., Full or Sub-Scale) and Remotely Piloted Aircraft Asset Values.....	41
	2.37. Aircraft and Remotely Piloted Aircraft Asset Modification Value. ....	42
<b>Chapter 3—INVENTORY AND STATUS REPORTING OF INTERCONTINENTAL BALLISTIC MISSILES AND AIR LAUNCHED CRUISE MISSILES</b>		<b>44</b>
Section 3A—Reporting System Overview.		44
	3.1. Concepts.....	44
	3.2. Security Classification. ....	44
Section 3B—Reporting Responsibilities.		44
	3.3. Base and Depot Level Activities.....	44
Section 3C—Reporting ICBMs.		45
	3.4. Types of Reporting. ....	45
	3.5. Possession Gain, Loss, Termination, Relocation and Storage Criteria.....	47
	3.6. Notification Procedures. ....	47
	3.7. ICBM Accountability. ....	48

<b>DAFI21-103 1 NOVEMBER 2022</b>	<b>5</b>
Section 3D—Air Launched Cruise Missiles.	49
3.8. Air Launched Cruise Missile Reporting. ....	49
Section 3E—Valuation.	50
3.9. Operating Material & Supplies Asset Value—UMMs. ....	50
3.10. Cruise Missile Asset Value. ....	51
<b>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)</b>	<b>52</b>
4.1. Trainers Covered Under This Instruction. ....	52
4.2. Responsibilities. ....	52
4.3. Trainer, Equipment Designators. ....	53
4.4. Trainer Serial Number. ....	53
4.5. Reporting Criteria. ....	53
4.6. Possession Gain. ....	54
4.7. Possession Loss. ....	54
4.8. Possession Termination. ....	54
4.9. Audit Requirements. ....	54
<b>Chapter 5—MINE RESISTANT AMBUSH PROTECTED (MRAP) VEHICLE INVENTORY, STATUS, AND UTILIZATION REPORTING</b>	<b>55</b>
Section 5A—Reporting System Overview.	55
5.1. Concepts. ....	55
5.2. The Reporting System. ....	55
5.3. Reporting Accuracy. ....	56
5.4. Security Classification. ....	56
Section 5B—Reporting Responsibilities.	56
5.5. Unit-Level Activities. ....	56
5.6. Commands. ....	56
5.7. Command POCs. ....	56
5.8. Program Manager (PM). ....	57
Section 5C—Inventory Reporting.	57
5.9. Assignment, Possession, and Termination Procedures. ....	57

Section 5D—Status/Utilization Reporting.	57
5.10. MRAP Vehicle Status Code Definitions.....	57
5.11. Work Unit Codes (WUCs).....	58
5.12. MRAP Utilization Reporting Concept.....	58
5.13. Mission Status Reporting Tool. ....	58
Section 5E—Financial Accountability.	59
5.14. Asset Valuation.....	59
<b>Chapter 6—COMMUNICATIONS, CYBERSPACE, IT, AND SPACE (CCITS)</b>	
<b>EQUIPMENT STATUS AND INVENTORY REPORTING</b>	<b>61</b>
Section 6A—Reporting System Overview.	61
6.1. General Concepts.....	61
6.2. Security Classification. ....	61
6.3. Communications Equipment Reporting System Overview. ....	61
6.4. IT Equipment Reporting System Overview.....	62
6.5. DELETED. ....	62
Section 6B—Roles and Responsibilities.	62
6.6. Base and Depot Level Activities.....	62
Section 6C—Reporting Responsibilities.	66
6.7. Cyberspace and IT Asset Reporting. ....	66
6.8. Communications and Space Asset Reporting. ....	66
<b>Chapter 7—AUTOMATIC TEST EQUIPMENT INVENTORY, STATUS, AND</b>	
<b>UTILIZATION REPORTING</b>	<b>73</b>
Section 7A—Reporting System Overview.	73
7.1. How and What to Report. ....	73
7.2. Basic Reporting Concept. ....	73
7.3. Contractor Reporting. ....	73
7.4. The Reporting System. ....	73
7.5. Security Classification. ....	74
Section 7B—Reporting Responsibilities.	74
7.6. Unit-Level Activities. ....	74
7.7. MAJCOM Support Equipment/Automatic Test Station-Program Manager. ....	75
7.8. Air Force Life Cycle Logistics Manager. ....	75

**Chapter 8—UNITED STATES SPACE FORCE (USSF) WEAPON SYSTEMS STATUS  
AND INVENTORY REPORTING 76**

Section 8A—Reporting System Overview. 76

- 8.1. General Concepts..... 76
- 8.2. Equipment Status Definitions..... 77
- 8.3. Security Classification..... 77

Section 8B—Roles and Responsibilities. 77

- 8.4. Unit Level Activities..... 77
- 8.5. USSF Program Management Offices/Equipment Specialists..... 77
- 8.6. Field Command IMDS/REMIS/LIONS Functional will: ..... 78
- 8.7. Host Base MIS Manager will:..... 78
- 8.8. Unit level/Delta/Range Maintenance Management Organizations will: ..... 79
- 8.9. The workcenter will: ..... 80
- 8.10. Contract Maintenance..... 80

Section 8C—Inventory and Status Reporting Responsibilities. 80

- 8.11. Inventory Reporting ..... 80
- 8.12. Status and Discrepancy Reporting..... 81

Section 8D—Space Vehicle (Satellites) Inventory, Status, And Utilization Reporting Overview. 83

- 8.13. Purpose..... 83
- 8.14. What is Reportable..... 83

Section 8E—Reporting Responsibilities. 84

- 8.15. Each Delta and product center owning space assets reports on their systems through IMDS and REMIS..... 84
- 8.16. The Satellite System PM will: ..... 84
- 8.17. Reporting Accuracy..... 84
- 8.18. Security Exemption..... 84
- 8.19. Status Reporting..... 84
- 8.20. Status Definitions..... 84
- 8.21. Inventory Reporting..... 85
- 8.22. Organization Record..... 86
- 8.23. Organization Changes..... 87
- 8.24. Notification Procedures..... 87

Section 8F—USSF Rocket Reporting, Inventory and Status Reporting of Rocket System Launch Program Rocket Motors.	87
8.25. Overview.....	87
8.26. Inventory and Status Reporting. ....	87
8.27. DELETED. ....	88
8.28. Notification, Termination, and Relocation Procedures.....	88
8.29. DELETED. ....	88
8.30. Rocket System Launch Program Asset Valuation. ....	89
8.31. Operating Material & Supplies Asset Value – Rocket System Launch Program. ...	89
<b>Chapter 9—AEROSPACE VEHICLE AND MISSILE EQUIPMENT ACCOUNTABILITY PROGRAM</b>	<b>90</b>
Section 9A—General Information.	90
9.1. Aerospace Vehicle and Missile Equipment Accountability Program (Included assets listed in the -21 TO, example 1F-15A -21, Equipment Inventory List (MCDONNEL))......	90
9.2. Control Procedures. ....	90
9.3. Aerospace Vehicle and Missile Equipment Inventory.....	91
9.4. Management of -21 Technical Order (TO) Change Requests. ....	91
9.5. Equipment not Included in -21 TOs.....	92
9.6. Asset Categories. ....	92
Section 9B—Responsibilities.	94
9.7. Using Command. ....	94
9.8. HQ AFMC. ....	94
9.9. Base Activities. ....	95
Section 9C—Managing -21 Assets.	97
9.10. Transferring Aerospace Vehicle or Missile -21 Assets. ....	97
9.11. Disposing of Excess Assets. ....	98
9.12. Increasing Authorized Levels. ....	99
9.13. Arrival of New Equipment. ....	99
9.14. Adjusting for Shortages. ....	100
9.15. Removing Assets from Transient Aerospace Vehicles.....	100
9.16. Managing Deployed Assets. ....	100
9.17. Transferring Assets.....	101

9.18. Changing the Accountable Individual. ....	101
<b>Chapter 10—AIRCRAFT POD REPORTING AND ACCOUNTABILITY</b>	<b>103</b>
Section 10A—Overview.	103
10.1. Pods are modularly constructed to provide capabilities specific to aerospace vehicle mission requirements for self-protection against enemy radar-controlled weapons threats, airborne threats, navigational, target illumination, instrumentation, communications (telemetry and data link), precision geo-location, non-traditional intelligence, reconnaissance, and surveillance. ....	103
10.2. Reliability, Availability, Maintainability for Pods (RAMPOD). ....	103
10.3. Reporting. ....	103
10.4. Contractor Reporting. ....	105
10.5. Accountability begins when DD Form 250 is signed. ....	105
10.6. Accountability ends on receipt of a termination message and DD Form 1149. Pod program offices are required to delete pods from the active inventory or report any in-transit actions in RAMPOD within five workdays. ....	106
10.7. Account for previously acquired pods and shipping containers in RAMPOD when receiving documentation is not available within five workdays. ....	106
10.8. Pod managers will perform a quarterly and an annual 100% inventory by POD serial number and accomplish a manual reconciliation with the RAMPOD Monthly CFO Data Extract report. (T-1) ....	106
10.9. Pod Program Office. ....	106
10.10. AF POD Manager. ....	107
10.11. Command Pod Managers. ....	107
10.12. Unit Level Activities. ....	108
<b>Chapter 11—AF NUCLEAR COMMAND, CONTROL, AND COMMUNICATIONS (NC3) WEAPON SYSTEM (AN/USQ-225) STATUS AND INVENTORY REPORTING</b>	<b>110</b>
Section 11A—Reporting System Overview.	110
11.1. Overview. ....	110
11.2. Security Classification. ....	111
Section 11B—Roles and Responsibilities.	111
11.3. Base and Depot Level Activities. ....	111
11.4. Contract Maintenance. ....	114
Section 11C—Reporting Responsibilities.	115
11.5. Status and Discrepancy Reporting. ....	115

11.6.	Possession Reporting .....	115
11.7.	Communications Equipment Reporting System Overview. ....	115
11.8.	Determining Maintenance Status.....	116
Table 11.1.	NC3 Configuration Element Maintenance Status Code Flow Chart. ....	117
11.9.	Work Unit Codes (WUCs)/Logistics Control Numbers (LCNs). ....	117
11.10.	Minimum Essential Subsystems List (MESL).....	117
Table 11.2.	Sample Airborne Configuration Element MESL.....	118
Table 11.3.	Sample ICBM MESL.....	118
Table 11.4.	Sample Ground Based Configuration Element MESL. ....	119
<b>Attachment 1—GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION</b>		<b>13721</b>
<b>Attachment 2—MAINTENANCE STATUS CODES AND CONDITION STATUS CODES- (REFERENCE TO 00-20-2, CHAPTER 11, AIR FORCE STANDARD ALGORITHMS, FOR STATUS AND CONDITION CODE ALGORITHMS)</b>		<b>131</b>
<b>Attachment 3—STANDARD MESL MISSION CODES Attachment 4—AEROSPACE VEHICLE AND TRAINER TERMINATION CODES</b>		<b>1375</b>
<b>Attachment 5—DOWNTIME AND STATUS CODES FOR COMMUNICATIONS EQUIPMENT</b>		<b>140</b>
<b>Attachment 6—DELAY AND DOWNTIME CODES FOR COMMUNICATIONS EQUIPMENT</b>		<b>146</b>
<b>Attachment 7—HOW TO USE AF FORM 2691, AIRCRAFT/MISSILE EQUIPMENT PROPERTY RECORD</b>		<b>149</b>
<b>Attachment 8—HOW TO USE AF FORM 2692, AIRCRAFT/MISSILE EQUIPMENT TRANSFER/SHIPPING LISTING</b>		<b>151</b>
<b>Attachment 9—HOW TO USE DD FORM 1149, REQUISITION AND INVOICE/SHIPPING DOCUMENT</b>		<b>153</b>
<b>Attachment 10—SAMPLE GAIN MESSAGES UNCLASSIFIED</b>		<b>155</b>
<b>Attachment 11—SAMPLE AEROSPACE VEHICLE LOSS MESSAGE UNCLASSIFIED</b>		<b>157</b>
<b>Attachment 12—SAMPLE AEROSPACE VEHICLE TERMINATION MESSAGE UNCLASSIFIED</b>		<b>158</b>
<b>Attachment 13—SAMPLE POSSESSION PIC CHANGE MESSAGE UNCLASSIFIED</b>		<b>159</b>
<b>Attachment 14—SAMPLE MDS/CONFIGURATION IDENTIFIER CHANGE MESSAGE UNCLASSIFIED</b>		<b>160</b>

<b>DAFI21-103 1 NOVEMBER 2022</b>	<b>11</b>
<b>Attachment 15—STATUS REPORTING FOR WEATHER METEOROLOGICAL EQUIPMENT</b>	<b>161</b>
<b>Attachment 16—LOADING SERIAL NUMBERS FOR WEATHER SERVICE SYSTEMS</b>	<b>162</b>
<b>Attachment 17—AEROSPACE VEHICLE AND TRAINER PICS</b>	<b>164</b>
<b>Attachment 21—SAMPLE ICBM AND RSLP POSSESSION PIC CHANGE MESSAGE UNCLASSIFIED</b>	<b>173</b>
<b>Attachment 26—TEMPLATE FOR ANNUAL PHYSICAL INVENTORY COMMAND AVDO AF AVDO MEMORANDUM</b>	<b>176</b>
<b>Attachment 27—AEROSPACE VEHICLE STATUS DETAIL CODE</b>	<b>177</b>

## Chapter 1

### REPORTING GUIDELINES

**1.1. Using Report Information.** The Department of the Air Force (DAF) 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 DAF accountable inventory in accordance with Department of Defense Instruction (DoDI) 3110.05, *Sustainment Health Metrics in Support of Materiel Availability* and DoDI 5000.64, *Accountability and Management of DoD Equipment and Other Accountable Property*.

1.1.2. Build the DAF 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, Chief of Staff of the Air Force and Chief of Space Operations readiness reports in the Defense Readiness Reporting System.

### 1.2. Lead Command Reporting Requirements.

1.2.1. Annually, Lead Commands will establish standards and capability goals for each mission design series for the following Fiscal Year (FY). At a minimum the standard and goals will include Aircraft Availability (AA), Mission Capable (MC), Total Non-Mission Capable Maintenance (TNMCM), Total Non-Mission Capable Supply (TNMCS) rates and Cannibalization (CANN) Maximum Acceptable Level (MAL). Standards and goals will be sent to AF/A4LM org box: [AF.A4LM.Workflow@us.af.mil](mailto:AF.A4LM.Workflow@us.af.mil), prior to the last day of the current FY. The MC rate goals and CANN MAL data go into the yearly DoD Materiel Readiness Report to Congress. Additionally, the AA standards and MC goals will be published in the Basing and Logistics Analytical Data Environment (BLADE) Weapon Systems View.

1.2.2. Lead Commands will calculate the AA standard using the equation in **Attachment 25** of this instruction. Remotely piloted aircraft are exempt from using the prescribed equation. The Lead Command will determine the AA standard for remotely piloted aircraft using other criteria (for example, capabilities and operational requirements).

1.2.3. The MC standard comprises peacetime, contingency and approved wartime/operational plans not constrained by financial, manpower, or logistical factors. The MC goals enable the DoD to assess resource allocation funding during the Quarterly Deputy's Management Action Group (DMAG). The MC goals should be established using the following minimum criteria: constrained resources, manpower, and logistical factors; an attainable goal based on forecasting and predictable factors; and actions that are anticipated to result in MC goal accomplishment. Aircraft micro-fleets (<10) are exempt from establishing MC standards and goals.

**1.3. Correct Reporting.** The DAF uses reports named in this instruction to develop and defend the USAF and USSF input to the planning, programming, budgeting, and execution process. For this reason, correct and timely reporting is critical because errors in reporting can impact DAF 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 Materiel Command (AFMC), Maintenance Division.

1.4.2. Aerospace Vehicle Programing–Deputy Chief of Staff, Plans and Programs, Program Integration Division (AF/A8PE).

1.4.3. Intercontinental Ballistic Missile (ICBM) Status -Air Force Global Strike Command (AFGSC), Maintenance Policy, Analysis, and Training Division.

1.4.4. Aerospace Vehicle Utilization/Status - AF/A4LM

1.4.5. Communications Status and Inventory Reporting – Headquarters Cyberspace Capabilities Center (HQ CCC).

1.4.6. Mine Resistant Ambush Protected (MRAP) Vehicle Status – ACC/Logistics Readiness Division.

1.4.7. Automatic Test Equipment Status – AFMC, Air Force Life Cycle Management Center (AFLCMC), Automatic Test Systems Program Office.

1.4.8. Space Vehicle (Satellite) Status and Inventory Reporting – USSF, Space Operations Command (SpOC), Deputy Commanding General for Support (DCG-S)/Weapon System Policy and Compliance (S4MX).

1.4.9. Air Launched Cruise Missile Status – AFGSC, Nuclear Weapon Systems Sustainment Branch, 841 Fairchild Ave Bldg. 5541 Suite 201, Barksdale AFB, LA 71110.

1.4.10. Externally-Carried Pod Inventory – AFMC AFLCMC, Business and Enterprise Systems Directorate, Maintenance, (AFMC AFLCMC/HIM).

1.4.11. Nuclear Command and Control, Communications (NC3)-AFGSC, NC3 Sustainment Division.

1.4.12. Common Support Equipment, AFMC AFLCMC, Support Equipment & Vehicle Division.

1.4.13. USSF Nuclear Command and Control, Communications (NC3)-Space Operations Command (SpOC), Deputy Commanding General for Operations (DCG-O).

**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.

1.5.2. Instructions for data entry.

1.5.3. Report formats.

**1.6. Aviation Support Equipment.** In accordance with TO 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policies, and Procedures*, Defense Property Accountability System (DPAS) Maintenance and Utilization (M&U) Module is the reporting system for support equipment documentation, history, scheduling, and status.

## Chapter 2

### **AEROSPACE VEHICLE (INCLUDING AIRCRAFT, AERIAL TARGETS/DRONES (FULL OR SUB-SCALE), REMOTELY PILOTED AIRCRAFT) GROUND 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 station, and MRAP vehicle are always possessed by a designated and authorized DAF reporting organization. MRAP vehicles and ground stations are not aerospace vehicles but are covered within this publication and are treated like aerospace vehicles. Therefore, Reliability and Maintainability Information System (REMIS) is designated as the official inventory reporting system for MRAP and ground systems. **Note:** For 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 DAF reporting organization retains this responsibility when an aerospace vehicle is loaned or leased for use/testing by an organization external to the DAF. 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-2)**

2.1.1.4. Flying hours and sorties. **(T-2)**

2.1.1.5. Installed propulsion assets in accordance with Technical Order (TO) 00-25-254-1, *Comprehensive Engine Management System Engine Configuration, Status and TCTO Reporting Procedures*.

2.1.2. Contractor requirements within this instruction must be contained within the performance work statement, contract line-item number, task order, or workload agreement. **(T-2)**

**2.2. The Reporting System.** Units process inventory, status and utilization data using an approved MIS. **(T-0)** Headquarter (HQ) AF (HAF), Commands, Field Operating Agencies (FOAs), 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.

**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 (i.e., full cost and useful life) are properly reported in REMIS. The PM monitors REMIS updates to detect missing/inaccurate CFO reporting data elements as identified by the USAF Aerospace Vehicle Distribution Officer (AVDO), as inventory items are added, removed, or adjusted because of modifications. **Note:** For the purpose of this instruction, the use of the term government furnished materiel is as defined in DAFI 23-101, *Materiel Management Policy* and Air Force Manual (AFMAN) 23-122, *Materiel Management Procedures*.

2.5.2. Program office personnel are responsible for calculating and updating weapon systems when an asset has had a capitalizable modification accomplished. Program office personnel determine the financial values (i.e., full cost, useful life, and date-place-in-service) for each asset and update REMIS accordingly. **Note:** Capitalize only those modifications that meet the DoD capitalization threshold as defined in DoD 7000.14-R, Volume 4, *Department of Defense Financial Management Regulation: Accounting Policy*, and 1) add capability to the weapon system or 2) extend the useful life of the weapon system beyond its originally planned useful life.

2.5.2.1. For aircraft, Remotely Piloted Aircraft (RPA), and ground station(s) assets, financial reporting values (i.e., full cost and useful life) are entered (including the value of the Government-Furnished Material (GFM) in accordance with DoD 7000.14-R Volume 4), no later than (NLT) the last workday of the month after the USAF-AVDO notifies the PM that the asset record was established in REMIS.

2.5.2.2. For aerial target/drone assets (i.e., full, or sub-scale), enter the financial reporting value (full cost) of each asset (including the value of the GFM) in accordance with DoD 7000.14-R Volume 4, NLT the last workday of the month after the USAF-AVDO notifies the PM that the asset record was established in REMIS.

2.5.2.3. For MRAP vehicles, the PM enters financial reporting values (i.e., full cost and useful life) in REMIS NLT the last workday of the month after the USAF-AVDO notifies the PM that the asset record was established in REMIS.

2.5.2.4. For ground stations, the PM enters financial reporting values (i.e., full cost and useful life) in REMIS NLT the last workday of the month after the USAF-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 commanders, Group commanders, or depot maintenance directorate or equivalent responsibilities:

2.6.1.1. Ensure personnel maintain, correct, and report all data using the procedures in AFI 16-402 and this instruction. **(T-2)**

2.6.1.2. Appoint a primary and alternate AVDO to report inventory status for the unit or depot. **(T-2)** By email message, provide the Command 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)** All appointed AVDOs will have an active account in REMIS. **(T-2)**

2.6.1.3. Maintenance and depot units will establish daily contact procedures with the primary and alternate Flying Hour Program point of contact (POC) within operations to reconcile total flying time and sortie data. **(T-2)** Send the Command 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-3)**

2.6.2. Unit and Depot AVDOs will:

2.6.2.1. Be designated as the primary POCs for aerospace vehicle inventory within their organization. **(T-2)**

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-2)**

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

2.6.2.5. Ensure equipment loads to MIS for aerospace vehicles contain correct current operating time prior to performing gain transactions. **(T-2)**

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

2.6.2.7. Oversee the aircraft transfer and depot program (see [paragraph 2.6.2.14](#)). **(T-2)** Coordinate any changes to the transfer, depot, organic or contract field teams' programs with the Aircraft Maintenance Squadron, Aircraft Maintenance Unit, Missile Maintenance Group, and all affected agencies. **(T-2)**

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-2)**

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/FLDCOM supplements. **(T-2)** Emails are the standard format to transmit messages. Users will transmit email messages in accordance with DAFMAN 17-1301, *Computer Security (COMPUSEC)* to ensure the required level of security is applied to the transmission of the email messages. **(T-2)**

2.6.2.10. Follow Unit-AVDO procedures in AFI 16-402.

2.6.2.11. Ensure Department of Defense (DD) Form 1149, *Requisition and Invoice/Shipping Document* is completed in accordance with DAFI 24-602V2, *Cargo Movement* and sent as required (See **Attachment 9**). If an Air Force Technical Order

(AFTO) 290, *Aerospace Vehicle Delivery Receipt*, is used, complete in accordance with TO 00-20-1.

2.6.2.12. Physical Accountability. The AF reports accountability of aerospace vehicles as military equipment through the MIS and REMIS. Upon receipt of Equipment Inventory, Multiple Status, Utilization Reporting Subsystem Report (ERP) 4020, *Assignment and Possession Report*, from the Command AVDO, perform a physical inventory of assigned aerospace vehicles annually, NLT 30 September. Annotate any corrections to be made, sign and return to the Command AVDO within 30 business days.

2.6.2.12.1. Unit-AVDO will have deployed unit validate physical assets and report back with all possessed assets. **(T-2)**

2.6.2.12.2. On a quarterly basis perform an inventory of assigned aerospace vehicles. Units will compare serial number in MIS products with REMIS ERP4020. **(T-2)** Units will provide a copy of the signed and dated documents to the applicable Command AVDO. **(T-2)**

2.6.2.12.3. Maintain key supporting documents, including but not limited to, Unit AVDO messages, programmed depot schedules, aircraft transfer and/or loan memorandums in accordance with the Air Force records disposition schedule. **(T-2)**

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-2)**

2.6.2.14. Upon notification of an aerospace vehicle movement (assignment or possession change), but prior to the aerospace vehicle moving, a transfer schedule needs to be developed, funded, and approved by the MAJCOM and program office. **(T-2)** Ensure all nuclear weapons related materiel items are removed from the aerospace vehicle prior to transfer to the depot or Aerospace Maintenance and Regeneration Group (AMARG). **(T-2)** 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 Command AVDO and weapons system functional manager of the aerospace vehicle serial numbers and transfer dates by email message. **(T-2)** When changes occur to the transfer schedule, an updated email message is required with justification of change. **(T-2)**

2.6.2.15. Unit and depot AVDOs will maintain a continuity book/electronic folder and AVDO training plan. **(T-2)**

### 2.6.3. Wing MIS Managers:

2.6.3.1. Monitor the receipt acknowledgment output transmittal files from REMIS daily. **(T-3)**

2.6.3.2. Establish "dummy" depot reporting units for local depot and contract field teams reporting within the MIS as required. Ensure serial numbers on nuclear weapon related materiel assets are entered into the MIS as they appear on the asset data plate. **(T-2)**

### 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-2)**

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-2)

**2.7. MAJCOM/ FLDCOM/FOA AVDO and MAJCOM Flying Hour Program POC Coordination Guidance. Note:** The term Command includes MAJCOMs, FLDCOMs, and FOAs.

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

2.7.1.1. Represent their Command 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 Command 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 in accordance with 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 Command 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) 25-524, *Reliability & Maintainability Information Systems (REMIS) Volume 4 – Appendix REMIS Data Definitions and Algorithms REMIS Software User Manual (A018)*, Section B, "EIMSURS 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. Command AVDOs will perform quarterly manual reconciliations using unit provided MIS products and the accountable property system of record (APSR) for additions and deletions to inventory, to include all non-depot possession changes, to verify the assigned location, gain/loss messages, and attest to physical inventory. Once completed, each Command AVDO will create, sign, and store a memorandum stating they have accomplished their quarterly reconciliation. The Command AVDO will keep one year's worth of quarterly memorandums. Command AVDOs will maintain all artifacts used to conduct the reconciliations such as:

2.7.1.3.1. Unit's REMIS ERP4020 for identifying any new aircraft, aerial targets, RPAs, or ground station additions for the applicable Command with dates applicable to the Quarterly Reconciliation being accomplished.

2.7.1.3.2. REMIS ERP4140 for identifying aircraft, aerial targets, RPAs, or ground station transfers (possession changes) within a Command from base to base.

- 2.7.1.3.3. Unit's aircraft, aerial target, RPA, or ground station non-depot Gain/Loss messages for Assignment/Possession changes.
- 2.7.1.3.4. Unit's Applicable MIS (i.e., Integrated Maintenance Data System (IMDS), Field Maintenance Command and Control (FMxC2)) reports/screenshots with dates applicable to the Quarterly Reconciliation being accomplished.
- 2.7.1.3.5. Signed memorandum from the Command AVDO.
- 2.7.1.4. Command AVDOs will utilize an ERP4020 report to accomplish an annual REMIS reconciliation with applicable MIS and the Force Structure Worksheet provided by Command A5/8/9 or equivalent. The reconciliation review will include all aerospace vehicles in REMIS (Intercontinental Ballistic Missile, ground stations, cruise missiles, and MRAPS). The MRAP Weapon System Team (WST) will provide total number of each Mission Design Series (MDS) assigned to each Command. The review will include all assigned aerospace vehicles in REMIS. Send the reconciliation, in the form of a Memorandum for Record (use [Attachment 26](#)) to USAF AVDO NLT 30 September of each year. USSF will review satellites in storage and confirm satellites in REMIS are still in orbit.
- 2.7.1.5. Command AVDOs will reconcile assigned aerospace vehicles with DAF Form 913, *Aerospace Vehicle Project Action*, projects on file. Make any corrections needed in REMIS or create an amendment for the DAF Form 913.
- 2.7.1.6. The annual reconciliation must combine the aerospace vehicle information provided by Command AVDOs, unit, depot, contractor, and leased/loaned aerospace vehicle AVDOs or POCs within the command.
- 2.7.2. For aerospace vehicle transfer, replacement, or disposal Command AVDOs will:
  - 2.7.2.1. Coordinate with affected Commands, lead command, 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. In coordination with WST/Lead Command/Program Office assist transferring units to choose aerospace vehicle serial numbers to meet TO 00-20-1 requirements.
  - 2.7.2.4. Ensure nuclear weapons related materiel accountability is maintained in accordance with DAFI 23-101, and DAFMAN 20-110, *Nuclear Weapons-Related Materiel (NWRM) Management*.
- 2.7.3. Coordinate with the Command 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, flight date, take-off and landing time, number of landings, number of sorties, and total flight time. Utilization errors will be corrected at the unit level. For utilization that exists in the local MIS but is missing from REMIS, command AVDO will ensure utilization is loaded to REMIS.
  - 2.7.3.2. Ensure flying hour, sortie data, and aircraft utilization is coordinated/validated between operations and maintenance at the unit level daily.

2.7.3.3. Represent the Command, FOA at HAF/ HQ SpOC utilization meetings.

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

## 2.8. USAF/USSF-AVDO.

2.8.1. The USAF-AVDO is an AF-level function that resides within HQ AFMC. The USAF-AVDO is the subject matter expert for reporting information for aircraft, ICBM, and cruise missiles. The USSF-AVDO is the subject matter expert for reporting information for satellites.

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

2.8.3. Maintains the master USAF assigned aerospace vehicle inventory in accordance with AFI 16-402.

2.8.4. Monitors USAF/USSF inventory using REMIS ERP 4020.

2.8.5. Collect and review Command REMIS aerospace vehicles inventory reconciliations annually (includes MRAP vehicles).

**2.9. Contract Administration Activities (Except Contract Field Teams).** Report all gains, losses, and terminations as stated in this instruction, Command supplements, or in accordance with maintenance contracts. When a contractor controls or maintains an aerospace vehicle that requires inventory, status, and utilization reporting, the designated and authorized DAF 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 DAF Form 913 to Commands for DAF operational, support, training, and test missions according to AFI 16-402. The USAF-AVDO will send the information to the Command AVDO. **Note:** Aerial target/drones (full or sub-scale) reporting requirements in this section are exempt from licensing in accordance with AFI 33-324, *The Air Force Information Collections and Reports Management Program*.

**2.11. Possession Reporting.** Purpose Identifier Codes (PICs) 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 APSR in accordance with DoDI 5000.64, DoDI 3110.05, *Sustainment Health Metrics in Support of Materiel Availability*, and DoDI 5000.64\_DAFI 23-111, *Accountability and Management of DoD Equipment and Other Accountable Property*.

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

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-2)**

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

2.11.3.1. PIC "BQ" **is not** authorized when using an automated communication system, and the only reason for the communication with depot (organic or contract) supported engineering has been directed by technical order or previous disposition instructions on an existing condition. **(T-2)**

2.11.3.2. "BQ" **is** authorized for use when the wing has submitted a request in accordance with TO 00-25-107, *Maintenance Assistance*, or through an automated system. This assistance is for a Non-Mission Capable (NMC) condition preventing the aerospace vehicle from flying. Request is submitted asking for depot (organic or contract) equipment, or funding is anticipated from Command 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-2)**

2.11.3.2.2. The unit lacks the capability to correct the deficiency at the field level. Quality assurance has determined that depot level or field team repair is necessary. **(T-2)**

2.11.3.3. Commands are the approval authority for the use of PIC "BT" (See [Attachment 17](#)). Use of this code should not exceed a total of 48 hours; however, units may request additional "BT" status code time approval through their Command AVDO. **(T-2)**

2.11.3.4. "BU" is authorized to prepare an aerospace vehicle three 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 five 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-2)**

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 work is being performed. **(T-2)**

2.11.3.4.2. "BU" is not authorized if the repair instructions are outlined in field level technical orders. This does not constitute depot level repair and use of PIC "BU". **(T-2)**

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-2)

2.11.3.5.1. 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-2)

2.11.3.5.2. Once aerospace vehicles are placed in PICs "PR" or "PJ", the unit will notify the Command AVDO of the code change in accordance with this instruction, [paragraph 2.20.](#), PIC Change Message. (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-2)

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-2) 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-2) The unit will notify the Command AVDO of the code change in accordance with this instruction, [paragraph 2.20.](#), PIC Change Message. (T-2) Aerospace vehicles will continue to be tracked on a daily status sheet to ensure continued fleet health is maintained. (T-2)

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 HAF as not currently required by a command but are maintained in a serviceable condition. (T-2)

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-2)

**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 ACC/Air Operations Squadron 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 Command approved MOA, the possessing unit will

receive flying hour/sortie credit. This MOA will be coordinated through the Command AVDO prior to the aerospace vehicle transfer. **(T-2) 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-2)**

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-2)**

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 seven business days. **(T-2) Note:** Not applicable (N/A) for FMxC2 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-2)**

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-2)**

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-DAF 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 in accordance with AFMAN 11-101, *Management Reports on the Flying Hour Program*, and AFI 11-102, *Flying Hour Program Management*; 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. **(T-2)**

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. **(T-2)**

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 Command AVDO or Command 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 Command AVDO or operational order directs the change.

**2.15. Possession Reporting Criteria for Depot Teams.** If an aerospace vehicle has maintenance accomplished by a depot field team (Organic or Contract), transfer possession according to these criteria:

2.15.1. For Field Teams (Organic or Contract) performing depot level maintenance or modifications, the owning unit AVDO reports possession changes for both the owning and depot units.

2.15.1.1. Transfer possession to AFMC from "BQ" to "DJ" once AFMC has formally acknowledged acceptance of the responsibility to repair the aerospace vehicle in accordance with TO 00-25-107, maintenance assistance request, but before depot field team begins the work.

2.15.1.2. Change possession to PIC "DM" when the field team (Organic or Contract) arrives and begins work (depot level maintenance, modification, TCTO, etc.), on the aerospace vehicle.

2.15.1.3. Change the aerospace vehicle possession PIC to "DR" only if an AFMC aircrew will perform a functional check flight.

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 owning/assigned unit will do the required inventory reporting.

**2.16. Notifying MAJCOMs of Possession Changes.** Accurate reporting of possession changes is essential 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-2)

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, Time Compliance Technical Order (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 DAFI.

**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 no later than the third workday after the physical possession change. (T-2) See [Attachment 10, Figure A10.1](#) 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 no later than the third workday after the physical possession change. (T-2) 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. (T-1) 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-2)** 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 in accordance with TO 00-25-254-1. **(T-2)**

**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 email, no later than the first workday after the change. **(T-2)** See [Attachment 13](#) for a sample possession PIC change message and instructions for preparing it.

**2.21. Mission Design 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 an MDS/configuration identifier change e-mail message. **(T-2)** Obtain proper authorization from the Command AVDO before making the change and send a message not later than the first workday after the change. **(T-2)** 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 in accordance with AFI 33-324.

2.22.1. Use multiple status reporting to the maximum extent the MIS allows. Multiple statuses mean 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. Any aircraft that accomplishes NC3 mission requirements 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 11](#) of this instruction.

2.22.5. Use status detail reporting to the maximum extent the MIS allows. Status detail reporting is utilized to identify maintenance repair progression related to additional factors including but are not limited to personnel, facilities, equipment, and weather.

## 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 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).

2.23.2.4. Aircraft in any NMCM or NMCB status condition will have a status detail code assigned. Status detail codes provide details on maintenance progression and can also capture limiting factors and delays, enhancing weapons systems analysis, (see [Attachment 27](#)).

2.23.2.4.1. Use the code that which best describes the actual maintenance being performed, delay, and/or other current action. Comments and narrative fields in the MIS will be used to add detail beyond code definition. For example, when a status detail code is used to show a delay for support equipment, include comments of what type of equipment is needed (i.e., LOX cart, External Power Unit, etc.).

2.23.2.4.2. Once a reason is identified, the Production Superintendent will coordinate with MOC to update the status detail code for that aircraft in the MIS where the functionality exists.

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

2.23.2.6. 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 Impaired Capability Awaiting Parts (MICAP) supply part is found (NMCS), change the reported status to NMCB.

- 2.23.2.6.1. Dual status begins only when concurrent NMC or PMC categories exist for both supply and maintenance. For example, Partial Mission Capable Supply (PMCS) and NMCM conditions do not equate to NMCB.
- 2.23.2.7. 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).
- 2.23.2.8. Work Unit Codes (WUCs)/Logistics Control Numbers (LCNs). 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.
- 2.23.2.9. 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. The use of 000 and or 00 will not be used when a more specific WUC is available.
- 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 are complete.
- 2.23.3.2. If in-flight operational checks are required by technical data, maintenance status will stop when all maintenance actions leading up to the in-flight operational check are completed.
- 2.23.3.3. When lack of parts which limits the mission is verified and no maintenance actions can be performed.
- 2.23.3.4. If a functional check flight is required in accordance with TO 1-1-300, *Maintenance Operational Checks and Check Flights*, -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 these actions occur:
- 2.23.4.1. Maintenance verifies the aerospace vehicle requires an essential part.
- 2.23.4.2. A valid demand on supply and/or depot is made. **Note:** This includes 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 and supply together verify that the needed part is not available on base. **Exception:** Does not apply to contract logistics support or contract operated and maintained base supply provided parts.

2.23.5. Supply time will continue once received by an LRS supply activity, but unavailable to maintenance. 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).

2.23.5.1. 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 most 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. This is not intended to be an all-encompassing list as there may be other red X entries that fall into this category. 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.

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 an MC status within two hours of maintenance start time. The authorized use of the 2-hour rule only applies to scheduled maintenance printed in the weekly schedule/maintenance plan and does not apply to and will not be used for any unscheduled maintenance events.

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 two hours, do not report the aerospace vehicle as NMC.

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 two hours to return the aerospace vehicle to MC status, NMC status starts when the discrepancy is found.

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.

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. **(T-2)** Units will use a minimum of the 3-digit WUC/LCN when reporting the driving NMC condition. **(T-2)**

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.

2.24.3. When accomplishing single/multiple status reporting, use the following order of precedence: Non-Flyable: NMCBU(A), NMCBS(B), NMCS(E), NMCMU(C), NMCMS(D) Flyable: NMCBSA(L), NMCBUA(K), NMCSA(P), NMCMUA(M), NMCMSA(N), PMCB(F), 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 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 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. Commands 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 DAFI.

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 in accordance with Department of the Air Force Policy Directive (DAFPD) 10-9, *Lead Command/Lead Agent Designation and Responsibilities for United States Air Force Weapon Systems, Non-Weapons Systems, and Activities*. 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](#).

2.26.1. Lead commands will identify the location of their MESL in their published supplement.

2.26.2. 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.

2.26.3. 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.

2.26.4. 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 if the codes are standardized. Standard MESL mission codes are listed in [Attachment 3](#).

**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		
17.	76K	COUNTERMEASURES DISPENSER	X	X	X
18.	91	EMERGENCY EQUIPMENT	X	X	X
19.	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 AFMAN 11-202V3, *Flight Operations*.

## 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 unit's wartime, training, or test mission, but is still flyable (safe for flight).

2.27.3. A NMC flyable aerospace vehicle may be deployed if it can be returned to MC status (FMC or PMC) at the deployed site.

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 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 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
A. Is the aircraft RESTRICTED from use or FLYABLE?	RESTRICTED	NMC (Restricted – <b>Note 1</b> )
	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
	YES	Go to question E

D. Is the system/subsystem/component identified on all BSLs?	NO	PMC
E. Is the system/subsystem/component completely inoperative or display degraded performance? ( <b>Note 3</b> )	INOP	NMC (Flyable - <b>Note 2</b> )
	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 - <b>Note 2</b> ) training/test mission
<b>Notes:</b> 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, squadron or unit debrief section/depot-level equivalent is responsible for entering flying hours from the AFTO Form 781, *ARMS 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; DAFI 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 Flying Hour Program POCs 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-2)** Operations Flying Hour Program POC validates total sorties/hours flown and total sorties/hours flown for the month to date. **(T-2)** Units may use the daily sortie reconciliation aspect of Maintenance Scheduling Module instead of the printed daily copies of the aircraft utilization report. Mobility aircraft units may use equivalent FMxC2 screens.

2.28.2. The PS&D will make available a daily electronic copy of the Maintenance Scheduling Module product or the aircraft utilization report to the squadron or unit debrief section, and Operations Squadron monitors. **(T-2)**

2.28.2.1. Debrief sections and Operations Squadron Monitors will reconcile sorties and hours flown on the aircraft utilization report. **(T-2)** If a disparity exists, debrief/ Operations Squadron monitor will annotate the difference on the aircraft utilization report with debrief correcting the MIS. **(T-2)** 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-2)** 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 in accordance with Air Force Records Information Management System (AFRIMS) Series 21, Table 01., Rule 14.00. Operations Squadron monitors will send the final aircraft utilization report to the Operations Flying Hour Program POC and unit AVDO upon closing out the month. **(T-2)**

2.28.2.2. The Flying Hour Program POC and unit 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-2)** 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 fourth calendar day of the following month. Any hours or changes reported after that will be included as late time in the following months report.

2.28.2.2.2. Command Flying Hour Program POC will review and clear REMIS utilization errors. **(T-2)**

**2.29. Aerospace Vehicle Utilization Reporting Overview.** The reporting requirements in this section are exempt from licensing in accordance with 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-2)** 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 fourth calendar day will be reported in the next month's data in the MIS. 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 is reporting flying hours on aerospace vehicles at locations other than where the aerospace vehicles are possessed, the base prescribes how hours will be forwarded to the MIS reporting location. The base 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.

2.29.4. When a depot contractor or depot field team (organic or contract) 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-2)**

2.29.4.2. Program Element Code 0708211F. **(T-2)**

2.29.4.3. Program Element Identification "I" (INDIA). **(T-2)**

2.29.4.4. Command code "MTC" for the field team. **(T-2)**

#### 2.29.4.5. Field team organization. (T-2)

2.29.5. In aerospace vehicle movements such as rotations and deployments, the Command 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 Command, Command AVDOs will collaborate to gain consensus on the inventory reporting changes to make sure utilization is reported to the desired Command. (T-2) Command AVDOs provide inventory reporting instructions before aerospace vehicle movement unless the movement is urgent. The MAJCOM Flying Hour Program POC coordinates with the applicable Command 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, IMDS, and FMxC2 maintenance information systems.

2.31.1. Multiple utilization reporting allows sorties to be divided in segments as legs or modifiers (MODs). A leg or MOD 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 and MODs 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 USAF-AVDO assigns voucher numbers for terminated aerospace vehicles and records them on AF Form 3131, *General Purpose*. **Note:** AF Form 3131 is used as a manual register of all assigned vouchers.

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 if assets are assigned to a USAF, ANG, or USAF Reserve activity. Accountability ends on receipt of a termination message, DD Form 1348-1A *Issue Release/Receipt Document* and/or DD Form 1149 with termination transactions input to the appropriate MIS.

2.32.4. USAF-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.

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.

2.33.1.3. All excess aerospace vehicles are considered for reclamation. Excess serviceable or economically repairable aerospace vehicles are screened in accordance with AFI 16-402 and Department of Defense Manual (DoDM) 4160.21 V4, *Defense Materiel Disposition: Instructions for Hazardous Property and Other Special Processing Materiel*. AF/A4LM will issue disposition instructions using an DAF Form 913 prior to execution of a reclamation action. Save lists are part of a reclamation and will be completed in accordance with DAFI 23-101.

2.33.2. For aerospace vehicles requiring SIB or AIB, the possessing unit AVDO initiates and sends a termination message with once the applicable program office declares the aircraft total loss.

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-2) Note:** For aerospace vehicles that are 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. **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.

2.33.2.3. Once the program office declares an aerospace vehicle a total loss, it will be terminated in the MIS using the date the asset crashed.

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 in accordance with applicable TOs. Once the engine manager has disposed of or terminated the engines, the unit AVDO terminates the aerospace vehicle using the applicable termination code. **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 HAF 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 in accordance with the AF Records Disposition Schedule which is in AFRIMS and accessible via 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, in accordance with DAFI 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-DAF activities route signed original DD Form 1149 to HQ AFMC/USAF-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. **(T-2)** The representative will check each item received in column C. **(T-2)** When the check is complete, the representative will initial at the bottom of the column. **(T-2)**

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. **(T-2)**

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 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. **(T-2)**

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. **(T-2)**

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. **(T-2)**

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 Forms 290 and attach them to the first form. **(T-2)**

2.35.5.2. At these intermediate activities, the commander authorized representative will take responsibility for the items after check-in. **(T-2)**

2.35.5.3. The authorized activity representative and the pilot or transporter will check the items immediately after the aerospace vehicle arrives. **(T-2)**

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. **(T-2)**

2.35.5.5. If an item is missing, the representative will enter the correct figure in the check-in column. **(T-2)** The pilot or transporter will initial the corrected figure and explain any discrepancies in the remarks section of the form. **(T-2)** 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. **(T-2)** The pilot or transporter will check the proper intermediate activity checkout column and initial the bottom of the checkout column. **(T-2)** The activity representative will also initial the column. **(T-2)** The activity representative will explain any discrepancies in the remarks section of the form, giving his or her grade and signature. **(T-2)**

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. **(T-2)**

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. **(T-2)**

2.35.6.2. The authorized representative of the recipient organization will then sign the receipt in the space provided on the form. **(T-2)**

2.35.7. The releasing organization makes copies and sends them as follows: **Note:** Copies may be electronic.

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 (i.e., Full or Sub-Scale) and Remotely Piloted Aircraft Asset Values.**

2.36.1. Weapon System PMs are responsible for calculating and establishing the financial reporting values (i.e., full cost and useful life) in REMIS for each delivered aircraft and RPA asset. Aerial targets/drones (i.e., full or sub-scale) assets will provide financial reporting (i.e., full cost) data only in accordance with 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. Program office personnel record both full cost and useful life values for aircraft, ground stations and RPA assets and full cost only for aerial targets/drones (i.e., full or sub-scale) in REMIS NLT the last workday of the month after the USAF-AVDO notifies the PM that the asset record was established in REMIS.

2.36.1.3. Since the full-scale drone costs are determined in phases, program office personnel enter the initial cost (i.e., fly away cost from AMARG) and then update the cost in REMIS as the other costs are reported to the program 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. **(T-1)**

2.36.2. The program office will maintain key supporting documents (KSDs) that support/substantiates the existence/completeness and derived value of the weapons system. KSDs will be maintained for the life of the weapon system plus five years. These KSDs can be stored electronically. Examples of appropriate KSDs include: those that identify the date the weapons system was placed in service (e.g., DD 250, *Invoicing, Receipt, Acceptance, and Property Transfer (iRAPT) Receiving Report (RR)*, DD 1348, *DoD Single Line Item Requisition System Document (Manual)*, etc.); those that substantiate how the weapons system value was determined and the methodology used to make that determination ( e.g., contracts, Contract Line Item Number (CLIN) analysis, contract-based analysis, Military Interdepartmental Purchase Requests (MIPRs), Statements of Work (SOWs), Purchase Orders, DD 1155, *Order for Supplies or Services*, DD 1149, etc.); and, those that support changes in status (e.g., declaration of excess, documentation supporting a determination of impairment from performance of physical inventory counts). **Note:** KSDs should be maintained in a manner that support prompt retrieval upon request (i.e., during an audit) and allow a knowledgeable third person to review the documentation, conduct a similar evaluation process, and arrive at approximately the same value for the weapons system.

## **2.37. Aircraft and Remotely Piloted Aircraft Asset Modification Value.**

2.37.1. Weapon System PMs are responsible for calculating and establishing the financial reporting values in REMIS for each delivered asset's modification NLT the last workday of the month after the assets modification has been completed.

2.37.1.1. This CFO requirement applies to aircraft and remotely piloted aircraft assets only. The aerial targets/drones (i.e., 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 will be established in REMIS not more than five workdays after the qualified modification contract were awarded or when the contract price is known. In addition, the modification completion date should be entered in REMIS not more than five workdays after the modification were completed on the specific asset.

2.37.2. The program office will maintain KSDs that support/substantiates the existence/completeness and derived value of the weapons system. KSDs will be maintained for the life of the weapon system plus five years. These KSDs can be stored electronically. Examples of appropriate KSDs include: those that identify the date the weapons system was placed in service (e.g., DD-250, DD1348, etc.); those that substantiate how the weapons system

value was determined and the methodology used to make that determination ( e.g., contracts, CLIN analysis, contract-based analysis, MIPRs, SOWs, Purchase Orders, DD1155, DD1149, etc.); and, those that support changes in status (e.g., declaration of excess, documentation supporting a determination of impairment from performance of physical inventory counts). **Note:** KSDs should be maintained in a manner that support prompt retrieval upon request (i.e., during an audit) and allow a knowledgeable third person to review the documentation, conduct a similar evaluation process, and arrive at approximately the same value for the weapons system.

## 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 is 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-2)**

3.1.2. If a contractor controls or maintains ICBM Uninstalled Missile Motor (UMM), which includes the Propulsion System Rocket Engine (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,** Theater Integrated Combat Munitions System (TICMS) 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-2)**

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-2)**

3.3.2. Unit and Depot AVDO appointees:

3.3.2.1. Perform duties as the primary POCs for inventory and status reporting within their organization. **(T-2)**

3.3.2.2. Monitor and input data in the MIS as applicable. **(T-2)**

3.3.2.3. Review and resolve any data reporting problems between MIS and APSR. **(T-2)**

3.3.2.4. Initiate MIS possession PIC change and termination messages. **(T-2)**

3.3.2.5. Send Nuclear Munitions Command and Control (NMC2) messages as required by this instruction and MAJCOM supplements. **(T-2)**

3.3.2.6. NMC2 emails are the standard format to transmit messages. Users will transmit email messages in accordance with DAFMAN 17-1301 to ensure the required level of security is applied to the transmission of the email messages.

3.3.2.7. Follow Unit-AVDO procedures in AFI 16-402.

3.3.2.8. DELETED.

3.3.2.9. Distribute UMMs as required. (Depot only) **(T-2)**

3.3.2.10. Prior to processing MIS data and sending NMC2 messages, verify inventory transaction dates and times (Zulu) to ensure they match. **(T-2)**

### *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 (AUR) as military equipment through the MIS and REMIS. An ICBM is classified as an AUR when in the launch facility, with the downstage, missile guidance system, PSRE, and re-entry system, and possessed in PIC "CC." The AF reports accountability of UMM and assembled downstages (both within a launch facility and uninstalled) as Operating Materials and Supplies through TICMS.

3.4.1.1. DELETED.

3.4.1.2. DELETED.

3.4.1.3. DELETED.

3.4.1.4. The ICBM Program Office is the assigned and accountable entity and must reconcile asset condition codes as follows:

3.4.1.4.1. ICBM Program Office will transfer financial accountability of UMMs to installed military equipment from TICMS to REMIS upon receipt of the NMC2 message from Unit AVDO after the Unit AVDO updates the MIS PIC to "CC". **(T-1)**

3.4.1.4.2. ICBM Program Office will transfer financial accountability of installed military equipment to UMMs from REMIS to TICMS upon receipt of the NMC2 message from Unit AVDO after Unit AVDO updates the MIS PIC to "CE or CD". **(T-1)**

3.4.1.5. Unit AVDO will reconcile ICBM AUR and UMMs with the MIS, TICMS, and REMIS. **(T-2)**

3.4.1.5.1. DELETED.

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 KSDs used to verify inventory will be retained to support audit inquiries IAW AFRIMS retention rules. **(T-2) Note:** Additional inspections may be directed in accordance with 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, in accordance with AFI 16-608, Implementation of, and Compliance with, Treaties Involving Weapons of Mass Destruction.

3.4.1.5.4. Command AVDOs will utilize an ERP4020 report to accomplish an annual REMIS reconciliation with applicable MIS and the Force Structure Worksheet provided by MAJCOM A5/8/9 or equivalent. The reconciliation review will include all ICBMs in REMIS. Send the reconciliation, in the form of a memorandum for Record (use [Attachment 26](#)) to USAF-AVDO NLT 30 September of each year.

3.4.1.5.5. The annual reconciliation must combine the ICBM information provided by Missile Wing AVDOs or POCs within the command. **(T-2)**

3.4.1.5.6. Command AVDOs will reconcile assigned ICBMs with DAF Form 913 projects on file. Make any corrections needed in REMIS or create an amendment for the DAF Form 913. **(T-2)**

3.4.1.5.7. Command AVDOs will perform quarterly manual reconciliations between the applicable MIS and the APSR for additions and deletions to inventory, to verify the assigned location, purpose identifier code and attest to unit's physical inventory. Once completed, each Command AVDO will create, sign, and store a memorandum stating they have accomplished their quarterly reconciliation. **(T-2)** The Command AVDO will keep one year's worth of quarterly memorandums. **(T-2)** Command AVDOs will maintain all artifacts used to conduct the reconciliations such as:

3.4.1.5.7.1. Unit's REMIS ERP4020 for identifying any new ICBM addition or deletions for the applicable command with dates applicable to the quarterly reconciliation being accomplished. **(T-2)**

3.4.1.5.7.2. DELETED.

3.4.1.5.7.3. Unit's NMC2 PIC change messages. **(T-2)**

3.4.1.5.7.4. Unit's Applicable MIS (i.e., IMDS, FMxC2) reports/screenshots with dates applicable to the quarterly reconciliation being accomplished. **(T-2)**

3.4.1.5.7.5. Signed memorandum from the Command AVDO. **(T-2)**

3.4.1.5.8. Unit AVDOs will, upon receipt of ERP4020 from the Command AVDO, perform an inventory of assigned ICBMs between REMIS and the local MIS. **(T-2)** Annotate any corrections to be made, sign, date and return the ERP4020 and local MIS products to the Command AVDO within 30 workdays.

3.4.1.6. The ICBM AUR financial information is maintained in REMIS. ICBM UMM financial information is maintained in TICMS. The ICBM Program Office is responsible for establishing and maintaining the financial reporting values (e.g., historical cost, deemed cost, etc.) of UMMs (including TICMS-managed components) as well as value changes resulting from associated modifications (See [Section 3E](#)). The ICBM Program Office will reconcile these values with TICMS indicative data at least annually. **(T-2)**

3.4.2. Inventory and Status Reporting. ICBM reporting includes inventory and status reporting on ICBM AURs.

3.4.2.1. The unit AVDO records this information and sends it to the MAJCOM.

3.4.2.2. Reporting begins when the PIC in the MIS is updated by the AVDO with “CC” status. (T-2)

3.4.2.3. Reporting will stop when re-entry system is removed from the AUR and the PIC in the MIS is changed from CC to any other possession code by the AVDO. (T-2)

3.4.3. DELETED.

3.4.3.1. DELETED.

3.4.3.2. DELETED.

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

3.5.1. DAF organizations gain possession of a UMM when the gaining organization accepts the asset in TICMS.

3.5.2. Contractor organizations gain possession of a UMM when they accept the asset and report in accordance with the contract requirements.

3.5.3. DELETED.

3.5.3.1. DELETED.

3.5.3.2. DELETED.

3.5.4. Possession terminates when the missile motor or PSRE is destroyed (such as, demilitarized, launched), or is transferred to another responsible organization.

3.5.5. DELETED.

3.5.6. DELETED.

**3.6. Notification Procedures.** Accurate reporting of possession changes is essential for the DAF to accurately account for the location and use of the UMM and ICBM AURs. 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. DELETED.

3.6.2. DELETED.

3.6.3. DELETED.

3.6.4. Possession PIC Change Message, ICBM Asset Possession PIC Change Report. When changing a possession PIC, the AVDO sends a NMC2 email message no later than the first workday after the change. (T-2) See [Attachment 21](#) for a sample possession PIC change message and instructions for preparing the message.

3.6.5. DELETED.

3.6.6. DELETED.

3.6.7. DELETED.

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 USAF-AVDO maintains accountability for ICBMs in REMIS. The USAF-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.

3.7.4. Weapon System PMs are responsible for calculating and establishing the financial reporting values (i.e., full cost and useful life) in REMIS for each delivered ICBM AUR. **(T-2)**

3.7.4.1. The value includes all installed subcomponents purchased on a separate contract and all GFM. **(T-2)**

3.7.4.2. The PM/designee records full cost and useful life data in REMIS NLT the last workday of the month after the USAF-AVDO notifies the PM that the asset record was established in REMIS. **(T-2)**

3.7.4.3. The program office will maintain KSDs that support/substantiates the existence/completeness and derived value of the weapons system. **(T-2)** KSDs will be maintained for the life of the weapon system plus five years. **(T-2)** These KSDs can be stored electronically. Examples of appropriate KSDs include: those that identify the date the weapons system was placed in service (e.g., DD-250, DD1348, etc.); those that substantiate how the weapons system value was determined and the methodology used to make that determination (e.g., contracts, CLIN analysis, contract-based analysis, MIPRs, SOWs, Purchase Orders, DD1155, DD1149, etc.); and, those that support changes in status (e.g., declaration of excess, documentation supporting a determination of impairment from performance of physical inventory counts). **Note:** KSDs should be maintained in a manner that support prompt retrieval upon request (i.e., during an audit) and allow a knowledgeable third person to review the documentation, conduct a similar evaluation process, and arrive at approximately the same value for the weapons system.

3.7.4.4. ICBM AUR Modification Valuation.

3.7.4.5. Weapon System PMs are responsible for calculating and establishing the financial reporting values in REMIS for each delivered asset's modification NLT the last workday of the month after the assets modification has been completed. **(T-2)**

3.7.4.6. This requirement applies to ICBM AURs only. **Note:** Capitalize only those modifications that meet the DoD capitalization threshold as defined in DoD 7000.14-R Volume 4 and 1) add capability to the ICBM AUR or 2) extend the useful life of the ICBM AUR beyond its originally planned useful life.

3.7.4.7. The modification records will be established in REMIS NLT the last workday of the month 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 NLT the last workday of the month after the modification was completed on the specific asset.

3.7.4.8. The program office will maintain KSDs that support/substantiates the existence/completeness and derived value of the weapons system. **(T-2)** KSDs will be maintained for the life of the weapon system plus five years. **(T-2)** These SDs can be stored electronically. Examples of appropriate KSDs include: those that identify the date the weapons system was placed in service (e.g., DD-250, DD1348, etc.); those that substantiate how the weapons system value was determined and the methodology used to make that determination ( e.g., contracts, CLIN analysis, contract-based analysis, MIPRs, SOWs, Purchase Orders, DD1155, DD1149, etc.); and, those that support changes in status (e.g., declaration of excess, documentation supporting a determination of impairment from performance of physical inventory counts). **Note:** KSDs should be maintained in a manner that support prompt retrieval upon request (i.e., during an audit) and allow a knowledgeable third person to review the documentation, conduct a similar evaluation process, and arrive at approximately the same value for the weapons system.

### *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 2.10](#) through [paragraph 2.21](#) and [paragraph 2.32](#) through [paragraph 2.34.3](#) of this instruction).

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

3.8.1.1. Conduct quarterly and annual physical inventory utilizing source document(s) from the appropriate MIS(s) and correct all discrepancies on source document and MIS. **(T-2)** Document inventory with a signed memorandum. **(T-2)** Maintain current and previous memorandums and all key supporting documents. **(T-2)**

3.8.1.2. DELETED.

3.8.1.3. DELETED.

3.8.1.4. Upon receipt of ERP4020 from the Command AVDO, perform an inventory of assigned cruise missiles between REMIS and the local MIS. **(T-2)** Annotate any corrections to be made, sign, date and return the ERP4020 and local MIS products to the Command AVDO within 30 workdays. **(T-2)**

3.8.2. Command AVDOs will:

3.8.2.1. Utilize an ERP4020 report to accomplish an annual REMIS reconciliation with applicable MIS and the Force Structure Worksheet provided by command A5/8/9 or equivalent. The reconciliation review will include all cruise missiles in REMIS. Send the reconciliation, in the form of a Memorandum for Record (use [Attachment 26](#)) to USAF-AVDO NLT 30 September of each year.

3.8.2.2. The annual reconciliation must combine the cruise missile information provided by the command, unit, depot, contractor, leased/loaned AVDOs or POCs within the command.

3.8.2.3. Reconcile assigned cruise missiles with DAF Form 913 projects on file. Make any corrections needed in REMIS or create an amendment for the DAF Form 913.

3.8.2.4. Perform quarterly manual reconciliations between the applicable MIS and the APSR for additions and deletions to inventory, to include all non-depot possession changes, in order to verify the assigned location, gain/loss messages and attest to physical inventory. Once completed, each Command AVDO will create, sign, and store a memorandum stating they have accomplished their quarterly reconciliation. The Command AVDOs will keep one year's worth of quarterly memorandums. Command AVDOs will maintain all artifacts used to conduct the reconciliations such as:

3.8.2.4.1. Unit's REMIS ERP4020 for identifying any new cruise missile additions or deletions for the applicable MAJCOM with dates applicable to the Quarterly Reconciliation being accomplished.

3.8.2.4.2. REMIS ERP 4140 for identifying cruise missiles transfers (possession changes) within command from base to base.

3.8.2.4.3. Unit's gain/loss messages for assignment/possession changes.

3.8.2.4.4. Unit's applicable MIS (i.e., IMDS, FMxC2) reports/screenshots with dates applicable to the quarterly reconciliation being accomplished.

3.8.2.4.5. Signed memorandum from the Command AVDO.

### *Section 3E—Valuation.*

#### **3.9. Operating Material & Supplies Asset Value—UMMs.**

3.9.1. Weapon System PMs are responsible for calculating and establishing the financial reporting values (e.g., full cost) in TICMS for each delivered UMM. 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. The program office will maintain KSDs that support/substantiates the existence/completeness and derived value of the weapons system. KSDs will be maintained for the life of the weapon system plus five years. These KSDs can be stored electronically. Examples of appropriate KSDs include: those that identify the date the weapons system was placed in service (e.g., DD-250, DD1348, etc.); those that substantiate how the weapons system value was determined and the methodology used to make that determination ( e.g., contracts, CLIN analysis, contract-based analysis, MIPRs, SOWs, Purchase Orders, DD1155, DD1149, etc.); and, those that support changes in status (e.g., declaration of excess, documentation supporting a determination of impairment from performance of physical inventory counts). **Note:** KSDs should be maintained in a manner that support prompt retrieval upon request (i.e., during an audit) and allow a knowledgeable third person to review the documentation, conduct a similar evaluation process, and arrive at approximately the same value for the weapons system.

3.9.4. UMM financial statement reporting is conducted through established TICMS quarterly CFO report processes.

### 3.10. Cruise Missile Asset Value.

3.10.1. Weapon System PMs are responsible for calculating and establishing the financial reporting values (i.e., full cost, useful life) in REMIS for each delivered cruise missile.

3.10.1.1. The value includes all installed subcomponents purchased on a separate contract and all GFM.

3.10.1.2. The PM/designee records full cost and useful life data in REMIS NLT the last workday of the month after the USAF-AVDO notifies the PM that the asset record was established in REMIS.

3.10.2. The program office will maintain KSDs that support/substantiates the existence/completeness and derived value of the weapons system. KSDs will be maintained for the life of the weapon system plus 5 years. These SDs can be stored electronically. Examples of appropriate KSDs include: those that identify the date the weapons system was placed in service (e.g., DD-250, DD1348, etc.); those that substantiate how the weapons system value was determined and the methodology used to make that determination ( e.g., contracts, CLIN analysis, contract-based analysis, MIPRs, SOWs, Purchase Orders, DD1155, DD1149, etc.); and, those that support changes in status (e.g., declaration of excess, documentation supporting a determination of impairment from performance of physical inventory counts). **Note:** KSDs should be maintained in a manner that support prompt retrieval upon request (i.e., during an audit) and allow a knowledgeable third person to review the documentation, conduct a similar evaluation process, and arrive at approximately the same value for the weapons system.

## 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) in accordance with AFI 33-324. 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 DAFI. 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 correct the errors. **(T-2)**

4.2.1.3. When maintenance training devices are no longer required, the owning organization will contact the applicable Command A4 maintenance trainer OPR for disposition instructions. **(T-2) Note:** OPR coordinates with the contractor logistics support in-place team concerning training devices under contract.

4.2.2. Commands 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; validate the reported data is correct and up to date; and correct or report any discrepancies or problems.

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

4.2.2.4. Ensure all MAJCOM staff agencies responsible for training utilize assigned trainers in accordance with 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 in accordance with AFI 10-217, *Management of Air Force Operational Training and Undergraduate Aircrew Training Systems*, and this instruction.

4.2.3. Will ensure that contracting documents state the contractor will assign serial numbers to all trainers in accordance with DAFI 23-101.

### 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 Commands 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 DAFI 23-101.

**4.5. Reporting Criteria.** Report on base level trainers. Use the procedures outlined in the appropriate MIS user's manuals. **Note:** For the purpose of this instruction, government property including government furnished equipment, military equipment, and any DAF accountable property is referred to as "government furnished property" which is delineated more specifically in DAFI 23-101, DAFMAN 23-119, *Government Furnished Property* and DAFMAN 23-122.

4.5.1. Unit OPRs will report the inventory of all groups of trainers. **(T-2).**

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 APSR in accordance with DODI 5000.64\_DAFI 23-111.

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-2)**

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-2)**

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 a DAF 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 DAF inventory using the "GI" code and input the gain into the appropriate MIS. **(T-2)**

4.6.2. Gain message, Aerospace Equipment Possession Change Report. Report with a gain message as described in [paragraph 2.17](#).

#### **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.

4.7.2. Loss message, Aerospace Equipment Possession Change Report. Report with a loss message as described in [paragraph 2.18](#).

#### **4.8. Possession Termination.**

4.8.1. Terminate trainers when required and input the termination into the appropriate MIS using the correct termination code.

4.8.2. Termination message, Aerospace Equipment Termination Report. Report with a termination message as described in [paragraph 2.19](#).

#### **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. **(T-2)**

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 DAF 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-2)**

5.1.1.4. Utilization data. **(T-2)**

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 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-2)** The organization requiring the contract-controlled maintenance will work with the contracting officer to ensure inventory and equipment status reporting requirements are accurately captured in contract documents. **(T-2)**

5.1.3. Deployed asset reporting. Deployed units will coordinate with the appropriate command 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 in accordance with AFI 33-324. Units process inventory, status, and utilization data using an approved MIS. **(T-0)** 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 AFI 33-322, *Records Management and Information Governance Program*, Attachment 2. Contact the 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-2)**

5.2.2. 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 DAF 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-2)**

**5.6. Commands.**

5.6.1. The DAF reports accountability of MRAP vehicles as military equipment through the MIS and REMIS.

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 in accordance with TOs and other transfer inspection requirements, as applicable.

**5.7. Command 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 [paragraph 5.6](#) of this instruction.

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

5.7.5. Command AVDOs will utilize an ERP4020 report to accomplish an annual REMIS reconciliation with applicable MIS documents from WST and the Force Structure Worksheet provided by MAJCOM A5/8/9 or equivalent. The reconciliation review will include all MRAPs in REMIS. The MRAP WST will provide total number of each MDS assigned to each

Command. Send the reconciliation, in the form of a Memorandum for Record (use [Attachment 26](#)) to USAF-AVDO NLT 30 September of each year.

5.7.6. The annual reconciliation must combine the MRAP information provided by the MRAP WST or POCs within the command.

5.7.7. Command AVDOs will reconcile assigned MRAPs with DAF Form 913 projects on file. Make any corrections needed in REMIS or create an amendment for the DAF Form 913.

5.7.8. Command AVDOs will perform quarterly manual reconciliations between the applicable MIS and the APSR for additions and deletions to inventory, to include all non-depot possession changes, to verify the assigned location, gain/loss messages, and attest to physical inventory. Once completed, each Command AVDO will create, sign, and store a memorandum stating they have accomplished their quarterly reconciliation. Command AVDOs will keep one year's worth of quarterly memorandums. Command AVDOs will maintain all artifacts used to conduct the reconciliations such as:

5.7.8.1. Unit's REMIS ERP4020 for identifying any new MRAP addition or deletions for the applicable MAJCOM with dates applicable to the Quarterly Reconciliation being accomplished.

5.7.8.2. REMIS ERP4140 for identifying MRAP transfers (i.e., possession changes) within a command from base to base.

5.7.8.3. Unit's gain/loss messages for assignment/possession changes.

5.7.8.4. Unit's applicable MIS (i.e., IMDS, FMxC2) reports/screenshots with dates applicable to the Quarterly Reconciliation being accomplished.

#### **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.

#### ***Section 5C—Inventory Reporting.***

**5.9. Assignment, Possession, and Termination Procedures.** Inventory reporting starts when an MRAP vehicle is accepted into the DAF inventory. Possession, changes to possession, and termination will follow procedures as outlined in [Chapter 2, Section 2C](#), of this instruction, and associated Command 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 can perform all 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 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 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 (WUCs).** 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. 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.

**5.12. MRAP Utilization Reporting Concept.** Report utilization data for each possessed MRAP vehicle. 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. Any utilization data reported after the fourth calendar day will be reported in the next month's data in MIS.

**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 users 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 WST.

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 its assigned missions as PMC.

5.13.2.6.2. Report an MRAP vehicle that cannot perform any of its assigned missions as NMC.

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. **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.

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.

### ***Section 5E—Financial Accountability.***

**5.14. Asset Valuation.** Weapon System PMs are responsible for calculating and establishing the financial reporting values (i.e., full cost, useful life) in REMIS for each delivered MRAP vehicle NLT the last workday of the month after the USAF-AVDO notifies the PM that the asset record was established in REMIS.

5.14.1. Asset Modification Valuation. Weapon System PMs are responsible for calculating and establishing the financial reporting values (i.e., full cost, useful life, and date place-in-service) in REMIS for each delivered MRAP vehicle modification. **Note:** Capitalize only those modifications that meet the DoD capitalization threshold as defined in DoD 7000.14-RV4, *Department of Defense Financial Management Regulation*, and 1) add capability to the MRAP vehicle or 2) extend the useful life of the MRAP vehicle beyond its originally planned useful life.

5.14.2. The modification records will be established in REMIS NLT the last workday of the month 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 NLT the last workday of the month after the modification was completed on the specific asset.

5.14.3. The program office will maintain KSDs that support/substantiates the existence/completeness and derived value of the weapons system. KSDs will be maintained for the life of the weapon system plus five years. These KSDs can be stored electronically. Examples of appropriate KSDs include: those that identify the date the weapons system was

placed in service (e.g., DD-250, DD1348, etc.); those that substantiate how the weapons system value was determined and the methodology used to make that determination (e.g., contracts, CLIN analysis, contract-based analysis, MIPRs, SOWs, Purchase Orders, DD1155, DD1149, etc.); and, those that support changes in status (e.g., declaration of excess, documentation supporting a determination of impairment from performance of physical inventory counts). **Note:** KSDs should be maintained in a manner that support prompt retrieval upon request (i.e., during an audit) and allow a knowledgeable third person to review the documentation, conduct a similar evaluation process, and arrive at approximately the same value for the weapons system.

## Chapter 6

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

#### *Section 6A—Reporting System Overview.*

#### **6.1. General Concepts.**

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

6.1.2. For communications and space assets, 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:

6.1.2.1. Helps managers identify trends and clear up problems.

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

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

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

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

6.1.4. CCITS equipment will be tracked in DPAS in accordance with DAFMAN 17-1203. Document maintenance in accordance with TO 00-33A-1001.

**6.2. 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 command's security classification guide.

#### **6.3. Communications Equipment Reporting System Overview.**

6.3.1. Each communications equipment asset or system is always possessed by a designated DAF reporting organization at either the organizational or depot level. For purpose of this instruction, communications equipment or system is defined by type equipment code "C" or "R" per TO 00-20-2. The designated DAF reporting organization retains this responsibility in instances where a CCITS is loaned, leased or in use by any organization external to the DAF. USSF reporting for space communication systems is outlined in **Chapter 8** of this instruction. The possessing organization or depot will report:

6.3.1.1. The hours it possesses the communication asset. **(T-2)**

6.3.1.2. Changes in communications asset possession. **(T-2)**

6.3.1.3. Status conditions that affect a communications ability to perform assigned missions. **(T-2)**

6.3.1.4. The asset as active or inactive as applicable. **(T-2)**

6.3.2. If a contractor controls or maintains communications, or space assets that require inventory, status, and utilization reporting, the DAF entity and/or government representative possessing invoice, receipt, acceptance, and property transfer receiving report or DD Form 250 is the assigned and accountable entity responsible for ensuring all reporting requirements are met. **(T-2)** When responsibility is delegated via a contract, the administrative contracting officer will submit the needed reports and/or information to the agency that requests it, unless the applicable contract states otherwise. **(T-2)** Use these reports whenever it is in the best interest of the government.

6.3.3. The applicable weapon system PM, single manager, equipment specialist or designated representative will enter CFO data and modification records in the appropriate APSR and determine the value of the modification on each asset and document when the modification was completed on each asset. Capitalize only those modifications that meet the DoD capitalization threshold as defined in DoD 7000.14-R Volume 4 and add capability to the weapon system or extend the useful life of the system beyond its originally planned useful life.

#### 6.4. IT Equipment Reporting System Overview.

6.4.1. Each IT equipment asset or system is always possessed by a designated DAF reporting organization at either the organizational or depot level. The processing organization or depot will report:

6.4.1.1. Changes in IT asset possession. **(T-2)**

6.4.1.2. Status conditions that affect IT asset ability to perform assigned missions. **(T-2)**  
**Exception:** Theater deployable equipment is IT Equipment and will be tracked in DPAS in accordance with DAFMAN 17-1203 and maintenance will be documented in IMDS when capability is provided. **(T-2)** See [paragraph 6.8](#). Communications equipment, for more details.

6.4.2. If a contractor controls or maintains IT assets that require inventory, status, and utilization reporting, the DAF entity and/or government representative possessing invoice, receipt, acceptance, and property transfer receiving report or DD Form 250 is the assigned and accountable entity responsible for ensuring all reporting requirements are met. **(T-2)** 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. **(T-2)** Use these reports whenever it is in the best interest of the government.

#### 6.5. DELETED.

#### *Section 6B—Roles and Responsibilities.*

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

6.6.1. Wing/Group Commanders or equivalent responsibilities:

6.6.1.1. 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-2)**

6.6.1.2. 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 HQ CCC annually or as when superseded. **(T-2)**

6.6.2. Unit POC(s) will:

6.6.2.1. Track CCITS inventory and status reporting within their organization. **(T-3)**

6.6.2.2. Monitor and/or input data in the MIS daily. **(T-3)**

6.6.2.3. Resolve any data reporting problems. **(T-3)**

6.6.2.4. Ensure equipment loads to MIS for space contain correct current operating time prior to performing gain transactions. **(T-3)**

6.6.2.5. Initiate inventory transactions and movement reports as required. **(T-3)**

6.6.2.6. Send messages or emails as required by this instruction and command supplements. **(T-3)**

6.6.2.7. Ensure the DD Form 1149 is completed in accordance with DAFI 24-602V2, *Cargo Movement* and sent as required. **(T-3)**

6.6.2.8. Distribute assigned CCITS as required. **(T-3)**

6.6.2.9. 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-3)**

6.6.2.10. Upon notification of a CCITS asset movement, but prior to the CCITS assets moving, develop a transfer schedule that is funded and approved by the Command and program office. **(T-3)**

6.6.2.10.1. Notify the Command and applicable weapons system functional manager of the CCITS asset serial numbers and transfer dates by email message. **(T-3)**

6.6.2.10.2. When changes occur to the transfer schedule, send an updated email message to the Command and program office with justification of change. **(T-3)**

6.6.2.11. Verify transactional history in IMDS. **(T-3)** 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 in accordance with DoDI 5000.64. **(T-0)**

6.6.3. Program Management Offices/Depot:

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

6.6.3.2. Maintain the DAF master inventory of serially controlled equipment.

6.6.3.3. Notify Commands and FOAs in changes and deletions to CCITS equipment designator records.

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

6.6.5. Assistant Secretary of the Air Force for CIO: Office of the Chief of Information will: Act as the DAF focal point for the Communications Equipment/System portion of CCITS reporting policy and procedures in partnership with ACC/2/3/4/6.

6.6.6. Command/FOA IMDS/REMIS Functional will:

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

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

6.6.6.1.2. Assist commands/FOAs to integrate their unique reporting requirements into the approved DAF MIS.

6.6.6.1.3. Provide technical assistance to field units/commands/FOAs to resolve IMDS/REMIS/ Remedy reporting issues and problems.

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

6.6.6.3. Maintain the DAF master inventory.

6.6.6.4. Resolve REMIS errors with help of the units and host base MIS Manager.

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

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

6.6.6.7. Provide data from REMIS for special studies or assessments as requested by command equipment managers.

6.6.6.8. Provide MAJCOM-unique (i.e., non-centrally managed) equipment standards update annually, as needed, or confirm no changes to Communications-Electronics Enterprise Dashboard (CEED) administrators to support accurate Reliability Maintainability and Availability reporting. **Exception:** If equipment or system standards are classified, omit this requirement.

6.6.7. Wing MIS Manager/Host base MIS Manager will:

6.6.7.1. Monitor the receipt acknowledgment output transmittal files from REMIS daily. **(T-2)**

6.6.7.2. Establish "dummy" depot reporting units for local depot and contract field teams reporting within the MIS is required for maintenance data reporting. **(T-2)**

6.6.7.3. Aid and train as required. **(T-2)**

6.6.7.4. Process NFS5B0 when required by local communications units or Command IMDS/REMIS Functional and provide NFS5B0 error output files to requestor. **(T-2)**

6.6.8. 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, and Command Post.

6.6.8.1. Establish a process to ensure timely and accurate entry of equipment status reporting data into the applicable MIS(s). **(T-2)** 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-2)**

6.6.8.2. Act as the IMDS Subsystem manager to communicate between the unit, host base MIS Manager and commands/FOAs on IMDS/REMIS support issues. **(T-2)**

6.6.8.3. Report equipment status and inventory changes as quickly as possible after each event and process changes. **(T-2)** Reference, AFCSM 21-560 Volume 2, *Integrated Maintenance Data System (IMDS) Communications Equipment (C-E) Status and Inventory Reporting*.

6.6.8.4. Ensure NFS5B0 is processed quarterly and review the output file for errors and take corrective actions. NFS5B0 can also be processed, as required, to confirm the reconciliation results.

6.6.8.5. Perform checks and balances necessary to ensure Equipment Inventory List is current and accurate. **(T-2)**

6.6.8.6. Coordinate with the host base MIS Manager to set up contingency procedures to track equipment status while IMDS is unavailable. **(T-2)**

6.6.8.7. Update IMDS status changes that occurred during the system outage as soon as IMDS processing capability is restored. **(T-2)**

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

6.6.8.9. Ensure the host base MIS Manager processes the Communications Status Summary Report monthly, using formats 1 and 4 on separate IMDS products, for example, Generation Run Screens. **(T-2)** Other formats can be produced as necessary. See AFCSM 21-560 Volume 2, for specific instructions.

6.6.8.10. Maintain and update the Equipment Inventory List with information provided from the workcenter. **(T-2)**

6.6.8.11. Reconcile all Red/Amber jobs using the Open Incident List. **(T-2)**

6.6.8.12. Provide workcenters an Open Incident List weekly for reconciliation of all Red/Amber jobs. **(T-2)**

6.6.8.13. Ensure updates provided by the workcenter are entered into the Equipment Inventory List system through IMDS. **(T-2)**

6.6.8.14. Ensure CCITS status attributed to supply is reported to the LRS POC. **(T-2)**

6.6.9. The workcenter will:

6.6.9.1. Appoint an IMDS/ Equipment Status Reporting POC if the workcenter has Equipment Inventory List reportable equipment. **(T-3)** 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-3)**

6.6.9.2. Review the Open Incident List to ensure each job against the workcenter is current and correct. **(T-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-3)**

6.6.9.3. 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-3)**

6.6.9.4. Units will reconcile MIS equipment records with the actual on hand equipment items annually in accordance with DAFI 23-101, DoDI 5000.64, DAFI 23-111, DAFMAN 23-122, Air Force Handbook (AFH) 23-123V2, *Integrated Logistics System-Supply (ILS-S)*, *Materiel Management Operations*, and DAFMAN 17-1203.

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

6.6.10.1. Contractor Reporting. For contractor controlled or maintained equipment/system(s), the DAF possessing organizations will retain the responsibility to ensure inventory, status, utilization, and configuration reporting is accomplished. **(T-2)**

6.6.10.2. 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-3)** The organization requiring the contract-controlled maintenance will coordinate with the contracting officer to ensure inventory and equipment status reporting requirements are accurately captured in contract documents. **(T-3)** For example, the contracting Contract Officer Representative may have to enter the inventory and equipment status reporting in IMDS.

### ***Section 6C—Reporting Responsibilities.***

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

6.7.1. 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-2)** Refer to the IMDS/REMIS SRD table for additional information.

**6.8. Communications and Space Asset Reporting.** Report all communications and space assets (i.e., type equipment "C" or "R") that are assigned a DAF SRD, as listed in the IMDS/REMIS SRD Table. This requirement exists even when bases are undergoing closure. Systems will be reported until deactivated or the base is closed. Use transaction identification code "QBC", Program

NFSU10, screen 127 or transaction identification code “QCC”, Program NFS840, screen 126 to view the SRD table.

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

6.8.1.1. Report equipment inventory and status in IMDS for all equipment (including in-garrison deployable equipment) assigned an SRD. **(T-2)**

6.8.1.2. Report equipment inventory for SRD category U and IMDS report level P COMSEC equipment to ensure accurate Preventive Maintenance Inspections tracking, in accordance with DAFI 23-101 and DAFMAN 23-122. **(T-2)**

6.8.1.3. 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-2) 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-2)**

6.8.1.4. Report classified equipment status on DAF intelligence, surveillance, and reconnaissance equipment (SRD category Q) as directed by 16th AF. SRD category Q will only be used by 16th AF units. **(T-2)** Commands are not authorized to use SRD category Q unless permitted by 16th AF. **(T-2)**

6.8.1.4.1. Custodians will notify Equipment Accountable Element of upcoming deployment and expected return date. **(T-2)** Equipment Accountable Element will provide custodians with a DPAS inquiry report of equipment as required for custodians to indicate which assets are deploying. **(T-2)**

6.8.1.5. 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-2)**

6.8.2. Commands, FOAs, or higher headquarters determine what mission reporting is required (IMDS reporting level Y). Command/FOA supplements to this instruction define specific reporting and non-reporting requirements.

6.8.3. 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.

6.8.4. 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 near an established base. The following procedures apply:

6.8.4.1. Reporting Criteria: Report equipment status as per [paragraph 6.8.5](#) 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.

6.8.4.2. Requirement for real time outage reporting (when the equipment is deployed and operational) will be determined by appropriate reporting agency.

6.8.5. Equipment Inventory List status reporting procedures:

6.8.5.1. 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.

6.8.5.1.1. 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.

6.8.5.1.2. 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.

6.8.5.2. Unless specified in a command supplement, do not report:

6.8.5.2.1. Outages of less than 5 minutes.

6.8.5.2.2. Frequency changes, crypto reset, or runway change outages that last less than 15 minutes.

6.8.5.2.3. Adjustments or alignments performed during scheduled maintenance such as preventive maintenance inspections, TCTOs, and time change items. These actions are documented during the outage.

6.8.5.2.4. 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".

6.8.5.3. Use the downtime codes listed in [Attachment 5](#) to describe the reason for the outage.

6.8.5.4. Use the delay codes listed in [Attachment 6](#) to describe any maintenance delay that prevents the equipment from being returned to operational status.

6.8.5.5. Use Equipment Inventory List sequence codes to upgrade or downgrade status. 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.

6.8.6. 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.

6.8.6.1. 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.

6.8.7. Refer to MAJCOM supplement of mission reporting requirements for associated equipment status reporting.

6.8.8. Reporting procedures. MOC will report changes in equipment status as they become aware of them. This is accomplished by user notification or from the workcenter. The following procedures apply:

6.8.8.1. Status times. Use the notification time the outage was reported. Do not backdate times to previous days. Not applicable to USSF when status of outages is considered classified. Time logged to put equipment back into service will be used to close the job.

6.8.8.2. 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. **Note:** Downtime code definitions are found in [Attachment 5](#) of this instruction and AFCSM 21-560V2.

6.8.8.3. Delay codes. Use delay codes when maintenance is not working on the problem. 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.

6.8.8.4. Comment requirements:

6.8.8.4.1. Enter comments against the status and delay codes that require one. 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.

6.8.8.4.2. Comments against the status:

6.8.8.4.2.1. Initial status comments may not provide the exact reason for an outage. Use the words given by the user for the first comment. Example: 125/WSA MM3 CONSTANT ALARM.

6.8.8.4.2.2. Once maintenance has determined the problem cause, an actual reason for the outage will be entered. Example: 125/ALARMS CAUSED BY FAULTY WIRES.

6.8.8.4.2.3. When the problem is corrected, enter the corrective action. Example: 128/CE REPLACED EXTERIOR BUILDING WIRES.

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

6.8.8.4.2.5. Enter the Julian date followed by a slash and then the comment. Example: A336/.

6.8.8.4.2.6. 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. (T-2) Example: 11/RADIO WEAK RX NM/OP.

6.8.8.4.2.7. Abbreviations may be used if common to all levels of command. Example: 224/123.1 RX INOP.

6.8.8.4.2.8. 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.

#### 6.8.9. Inventory records:

6.8.9.1. 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 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.

6.8.9.2. Only communications equipment which possesses a DAF 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.

6.8.9.2.1. Not all equipment maintained by the unit is CCITS equipment. Items such as vehicles, toolboxes will not be listed on the Equipment Inventory List. There are trainers, support equipment, test measurement and diagnostic equipment, which are loaded on other IMDS subsystems. These other subsystems have separate inventory lists which require different IMDS equipment loads.

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

6.8.9.2.3. Gain equipment (enter it into the inventory) when a unit accepts maintenance responsibility, and it has been accounted for in DPAS.

6.8.9.2.4. 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.

6.8.9.2.5. 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.

6.8.9.2.6. 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).

6.8.9.2.7. 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.

6.8.9.2.8. 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 in accordance with DAFI 23-101. If a duplicate serial number is found, verify the number, and contact the applicable command/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.

6.8.9.2.8.1. 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 command for serial number assignment to prevent duplication of serial numbers in REMIS.

6.8.9.2.8.2. A system made up of several components will use the serial number of the control unit or main component.

6.8.9.2.9. Requiring command. Enter the command 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.

6.8.9.2.10. 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. 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 6](#) for delay codes "U" and "T" will be expanded to capture delays being merged.

#### 6.8.10. Organization record.

6.8.10.1. 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.

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

6.8.10.1.2. The organization record must be changed or updated in REMIS and provided to IMDS. Notify IMDS/REMIS communication functional before making the change.

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

6.8.10.2. Assign a 4-digit organizational identification (ORG ID) only to actual units, detachments, and operating locations (OLs). 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 command, the inventory will be lost and regained.

6.8.10.2.1. 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.

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

6.8.10.2.3. 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".

6.8.10.2.4. For an OL of a detachment, use the detachment and the OL letter; for example, "1C2A".

#### 6.8.11. Organization Changes.

6.8.11.1. The organization record must be loaded correctly to ensure data flows between IMDS and REMIS. 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. Command/FOA or higher headquarters will provide specific instructions when a change to this record is required.

6.8.11.2. The commands/FOAs functional 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 command/FOA functional prior to loading or changing organizations.

6.8.11.3. Make organization changes in IMDS using transaction identification code organization record, Program NFSD80.

6.8.11.4. 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.

## 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 in accordance with 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.

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-2)**

#### **7.2. Basic Reporting Concept.**

7.2.1. Each item of automatic test equipment is possessed by a DAF 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-2)**

7.2.2.2. Conditions that change the ability of the automatic test equipment to do its mission (condition status). **(T-2)**

7.2.2.3. Configuration. **(T-2)**

7.2.2.4. Daily utilization. **(T-2)**

7.2.2.5. Test station line replaceable unit capability (Global Eye MIS only). **(T-2)**

7.2.2.6. Open maintenance discrepancies with any applicable supply information if applicable (Global Eye MIS only). **(T-2)**

**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-2)**

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

7.4.1. Units 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-2)**

7.4.2. 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.***

***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 appoint an automatic test equipment POC. **(T-3)**

7.6.1.1. The POC will:

7.6.1.1.1. Ensure that automatic test equipment inventory, status, and utilization reporting is accurate and timely. **(T-3)** Global Eye MIS users will update all automatic test equipment status, Line Replaceable Unit (LRU) capabilities, and comments weekly. **(T-3)**

7.6.1.1.2. Ensure the unit correctly maintains inventory, maintenance status, utilization, and configuration data. **(T-3)** All data will be accurately reported on the Current Station Status Report under Test Station Reports in Global Eye. **(T-3)**

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-3)**

7.6.1.1.3.2. Initial Tester Replaceable Unit inventory or changes. **(T-3)**

7.6.1.1.3.3. Station or equipment status changes. **(T-3)**

7.6.1.1.3.4. Station or equipment LRU capability (i.e., Global Eye only). **(T-3)**

7.6.1.1.3.5. Station or equipment comments will reflect the maintenance status and the maintenance discrepancy (e.g., AWM, INW). **(T-3)** Awaiting Part discrepancies will include quantity WUC, wholesale requisition number, national stock number, reference designator, and corresponding shop document number (i.e., Global Eye only). **(T-3)** (Example: AWP - RF Generator #2 Fails Calibration: 1 EA: CSEB0, FE480981770001, 6625-01-434-1238, A5A5, J183TS72650001).

7.6.1.1.4. Update Station or equipment utilization time. **(T-3)**

7.6.1.1.5. Check the error file daily and corrects all automatic test equipment errors with help from the unit or host base MIS Manager as needed. **(T-3)**

7.6.1.1.6. Coordinate 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-3)**

7.6.2. Units without access to an automated MIS will coordinate with MAJCOM or equivalent to determine alternative procedures. **(T-3)**

**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 Commands, 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 in accordance with TO 00-20-1, preventive maintenance program requirements, and other transfer inspection requirements, as applicable.
- 7.7.1.5. Assist other Command 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. DELETED.

## Chapter 8

### UNITED STATES SPACE FORCE (USSF) WEAPON SYSTEMS STATUS AND INVENTORY REPORTING

#### *Section 8A—Reporting System Overview.*

**8.1. General Concepts.** The USSF operates and maintains communications equipment that supports multi-domain space operations. Those systems include but are not limited to Satellite Control, Global Positioning, Missile Warning, Missile Tracking, Nuclear Detonation Detection System, Missile Defense, Launch and Test Range Systems, Satellite Communications, Space Domain Awareness and Space Based Warning systems. The systems are comprised of communications systems and equipment (i.e., antennas, terminals, messaging, tracking stations, radar sites, recorders, telemetry, transmitters, meteorological/weather radar, towers, etc.) providing necessary communication and global situational awareness to the Combatant Commands.

8.1.1. The Reporting System. IMDS is the approved MIS for USSF communication equipment for units to process unclassified inventory, maintenance status and utilization data. The Logistics Information and Operations Network System (LIONS) is the approved MIS for USSF communication equipment for units to process classified inventory, maintenance status, and utilization data.

8.1.2. Authorized users of REMIS database have the capability to retrieve maintenance data on in-use communications and space systems around the world.

8.1.3. Each USSF communications equipment, space asset or assigned system is always possessed by a designated USSF reporting organization at either the organizational (Delta or LF), or depot level. Ground based communication and launch equipment assigned to the USSF organizations is defined as type equipment code “C” or “R” per TO 00-20-2. The designated USSF reporting organization retains this responsibility in instances where a USSF communication equipment is loaned, leased or in use by any organization external to the USSF. **Note:** This equipment does not include satellite vehicles. The possessing organization or depot utilizing the approved MIS will report:

8.1.3.1. The hours it possesses the equipment. **(T-2)**

8.1.3.2. Changes in equipment possession. **(T-2)**

8.1.3.3. Status conditions that affect the equipment’s ability to perform its assigned or intended mission. **(T-2)**

8.1.3.4. The equipment as active or inactive as appropriate. **(T-2)** (Reference [paragraph 8.11.2.5](#) for procedures and the Terms Section of this instruction for definitions.)

8.1.4. If a contractor controls or maintains a space asset that requires inventory, status, and utilization reporting. The DAF entity and/or government representative possessing invoice, receipt, acceptance, and property transfer receiving report or DD Form 250 is the assigned and accountable entity responsible for ensuring all reporting requirements are met. **(T-2)** When responsibility is delegated via a contract, the administrative contracting officer will submit the needed reports and/or information to the agency that requests it, unless the applicable contract

states otherwise. **(T-2)** Use these reports whenever it is in the best interest of the government. **(T-2)**

**8.2. Equipment Status Definitions.** Status will be determined in accordance with the asset's functionality per TO specifications, user guides, directives, manuals, MOAs, instructions and/or commercial manuals. Equipment statuses are defined as in [Attachment 2](#).

**8.3. Security Classification.** *Do not enter classified data into IMDS or REMIS.* Report equipment maintenance and status information as directed by maintaining command guidance and as specified in the applicable security classification guide.

### ***Section 8B—Roles and Responsibilities.***

#### **8.4. Unit Level Activities.**

8.4.1. Delta Commanders and/or S4/Chiefs of Maintenance will:

8.4.1.1. Ensure personnel document and report maintenance and equipment status data accurately in the approved MIS. **(T-2)**

8.4.1.2. Establish processes to review and correct errors in reporting. **(T-2)**

8.4.1.3. Appoint (by letter) a primary and alternate Delta/S4 IMDS Communications Subsystem Manager or equivalent in accordance with [Chapter 6](#). **(T-2)** Provide the appointment letter to the USSF AVDO. Include name, grade, duty phone, email address, and office symbol.

8.4.2. The Unit IMDS Communications Subsystem Manager will:

8.4.2.1. Track equipment inventory and ensure equipment status is accurate within the organization utilizing the approved MIS. **(T-2)**

8.4.2.2. Monitor and ensure Equipment Status Report (ESR) and Job Data Documentation data is input into the approved MIS daily. **(T-2)**

8.4.2.3. Resolve any data reporting problems with the possessing workcenter. **(T-2)**

8.4.2.4. Initiate inventory transactions and movement reports as required. **(T-2)** The deployed unit will retain accountability for items deployed for exercises and contingencies.

8.4.2.5. Review and correct the IMDS Equipment Inventory Listing Quarterly. Maintain the most recent review on file. **(T-2)**

8.4.2.6. Report equipment gains, losses, and transfers to the USSF Lead Maintenance Analyst (SpOC S4MX) via e-mail message. Include the equipment designator, serial number, and transfer dates. **(T-2)**

#### **8.5. USSF Program Management Offices/Equipment Specialists.**

8.5.1. Maintain the master inventory of serially controlled equipment by SRD and equipment designator.

8.5.2. Request and manage Standard Reporting Designators and notify Commands of changes and/or deletions of SRDs and associated equipment designators.

8.5.3. Validate the REMIS SRD Table Annually. Use the AFTO Form 230, *Standard Reporting Designator (SRD) Candidate Information*, to make updates and send the AFTO Form 230 to the USSF AVDO for validation and coordination with the servicing Command (AFMC).

8.5.4. Produce and manage equipment or system Work Unit Code Tables in REMIS.

8.5.5. Will ensure CFO data elements (i.e., full cost and useful life) are properly reported in REMIS in a timely fashion. The PM or designated representative will update REMIS with missing/inaccurate CFO reporting data elements as inventory items are added, removed, or adjusted because of modifications.

8.5.6. Enter the CFO reporting data elements (i.e., full cost and useful life) value of each asset (include the value of the government furnished material) in accordance with DoD 7000.14-RV4.

8.5.7. 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-R Volume 4 and add capability to the system or extend the useful life of the system beyond its originally planned useful life.

8.5.8. Will perform an annual audit of all active and inactive "C" and "R" type equipment assigned and/or possessed by USSF reporting organizations. Audit will be performed by comparing records against the REMIS ERP4300 report.

#### **8.6. Field Command IMDS/REMIS/LIONS Functional will:**

8.6.1. Provide direction/guidance/assistance as needed to ensure correct and consistent reporting by Delta organizations.

8.6.2. Maintain the portion of the REMIS/LIONS organization table for their respective command.

8.6.3. Maintain the USSF master inventory for their respective command.

8.6.4. Utilize REMIS/LIONS maintenance data to perform special studies or assessments to provide sustainment/readiness information as requested.

8.6.5. Provide USSF-unique (i.e., non-centrally managed) equipment standards update annually, as needed, or confirm no changes to LIMS-EV 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.

#### **8.7. Host Base MIS Manager will:**

8.7.1. Establish "dummy" depot reporting units for local depot and contract field teams reporting within the MIS is required for maintenance data reporting. **(T-2)**

8.7.2. Aid and provide training to IMDS users as required. **(T-2)**

8.7.3. Control access to specific IMDS programs and subsystems by utilizing Transaction Identification Codes (TRICs) security profiles. Develop local tracking procedures for TRIC and batch privileges for all users. **(T-2)**

8.7.4. Receive IMDS system advisory notices from Field Assistance Service and inform applicable users of the status of applicable TRICs prior to release. Save all applicable system advisory notices until expiration or completion of release. **(T-2)**

8.7.5. Ensure IMDS users are notified of scheduled/unscheduled MIS downtime. **(T-2)**

8.7.6. Validate data entered in to MIS (e.g., with an ESR) as part of daily duties, identify erroneous or missing ESR data, and inform responsible agency for correction or completion. **(T-2)**

8.7.7. At least annually, review IMDS security profiles utilizing the IMDS TRIC PRB, Program NFS3R0 (Master Profile Report). **(T-2)** Take appropriate measures when a compromise is suspected or reported. **(T-2)**

8.7.8. At least annually, review IMDS personnel records utilizing IMDS TRIC MPL, Program NFS410 (Maintenance Personnel List). **(T-2)** Take appropriate measures for users without DD Form 2875, *System Authorization Access Request (SAAR)*, on file or if user no longer is needed in IMDS. **(T-2)**

8.7.9. Develop local procedures/checklists in accordance with guidance from AFCSM 21-571, Vol 2, *Database Management Software User Manual*, in the event of inadvertent entry of classified data into MIS. **(T-2)**

8.7.10. Maintain/process/manage IMDS organizational records in accordance with [paragraph 8.22](#) and organizational changes in accordance with [paragraph 8.23](#) of this instruction. **(T-2)**

#### **8.8. Unit level/Delta/Range Maintenance Management Organizations will:**

8.8.1. Establish a process to ensure timely and accurate entry of maintenance status data into the MIS. **(T-2)** 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-2)**

8.8.2. Act as the MIS Subsystem manager to communicate between the unit, host base MIS Manager and Commands on IMDS/FMxC2/REMIS support issues. **(T-2)**

8.8.3. Coordinate with the host base MIS Manager to process NFS5B0 reconciliation program as required and review the quarterly NFS5B0 error output file for action. **(T-2)** Be familiar with using Transaction Identification Code "STI" (i.e., IMDS 230 NFSB80, Status Inquiry) so the job status of new or existing jobs may be reviewed during the duty day for accuracy. **(T-2)**

8.8.4. Coordinate with the host base MIS Manager to set up contingency procedures to track equipment status while MIS is unavailable. **(T-2)**

8.8.5. Provide training to each workcenter supervisor and Equipment Inventory List point of contact. **(T-2)**

8.8.6. Ensure the host base MIS Manager processes the Communications Status Summary Report monthly.

8.8.7. Reconcile all open Job Control Numbers daily. **(T-2)**

8.8.8. Ensure updates provided by the workcenter are entered into the Equipment Inventory List system through the approved MIS.

**8.9. The workcenter will:**

8.9.1. Appoint an IMDS Equipment Inventory POC if the workcenter has Equipment Inventory List reportable equipment. **(T-2)** The Equipment Inventory POC can be the workcenter supervisor or any individual within the section. **(T-2)** The Equipment Inventory POC will review and provide updates/corrections/terminations to Maintenance Management Analysis weekly. **(T-2)**

8.9.2. Review open job control numbers to ensure each job against the workcenter is current and correct. **(T-2)**

8.9.3. Contact the Maintenance Management organization when problems are discovered and provide updates on a timely basis so the job status can be updated. **(T-2)**

8.9.4. Applicable units will reconcile MIS equipment records with the actual on hand equipment items annually in accordance with DAFI 23-101, DODI 5000.64\_DAFI 23-111, DAFMAN 23-122, and DAFMAN 17-1203.

**8.10. Contract Maintenance.**

8.10.1. Contract Administration Activities (Except Contract Field Teams). Report all gains, losses, and terminations as stated in this instruction, Field Command guidance, or in accordance with maintenance contracts. **(T-2)**

8.10.2. Contractor Reporting. For USSF contractor controlled or maintained equipment/system(s), the DAF possessing organizations will retain the responsibility to ensure inventory, status, mission area correlation, and configuration reporting is accomplished. **(T-2)** The organization owning the 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. **(T-2)** The organization requiring the contract-controlled maintenance will coordinate with the contracting officer to ensure inventory and equipment status reporting requirements are accurately captured in the contract performance work statement. **(T-2)** For example, the contracting Contract Officer Representative may have to enter the inventory and equipment status reporting into IMDS.

***Section 8C—Inventory and Status Reporting Responsibilities.*****8.11. Inventory Reporting.**

8.11.1. Equipment that possesses an SRD being maintained by a unit or by a contractor overseen by a USSF unit or under the oversight of a PM will be entered on the Equipment Inventory List.

8.11.2. Load reportable equipment into IMDS by following the instructions for transaction identification code CEL, IMDS screen 800, Program NFSE20 and MCR, IMDS screen 216, Program NFSK60, in accordance with AFCSM 21-560 Volume 2.

8.11.2.1. Units must enter the IMDS Equipment ID in the “Command Option” field on screen 800. **(T-2)**

8.11.2.2. Use the actual equipment serial number from the equipment data plate. If the serial number is longer than fifteen characters, use the last fifteen characters. If a duplicate

serial number is found, verify the Equipment Designator and Serial Number, and contact the applicable Field Command IMDS functional for assistance.

8.11.2.2.1. 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 FLDCOM S4 for serial number assignment to prevent duplication of serial numbers in REMIS.

8.11.2.3. Enter the requiring command that the equipment supports. **Note:** This is the command that is the customer for the equipment.

8.11.2.4. Overhaul/Install Date. When the equipment is initially loaded, use the date the equipment was accepted by the unit or the last overhaul date. Do not change this date unless the original acceptance date was entered in error.

8.11.2.5. Active/Inactive/Gain/Loss Procedures. Inventory reporting starts when equipment has been accepted in the USSF Inventory. Utilize IMDS Screen 800 to process changes to active/inactive status and gains and losses.

8.11.2.5.1. 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.

8.11.2.5.2. Gain equipment when a unit accepts maintenance responsibility, and it has been accounted for in DPAS.

8.11.2.5.3. Lose equipment when:

8.11.2.5.3.1. A unit no longer has maintenance responsibility or transfers possession and/or maintenance responsibility to another organization.

8.11.2.5.3.2. When the equipment has been decommissioned and removed from DPAS.

8.11.2.5.4. Equipment Termination Procedures. When equipment has been decommissioned and removed from the APSR it will be terminated in IMDS. Utilize screen 800 to process a loss transaction.

## 8.12. Status and Discrepancy Reporting.

8.12.1. Maintenance documentation will be recorded in accordance with TO 00-20-2. 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. Refer to the database manager for delayed reporting override edits.

8.12.2. Report on all assigned type equipment "C" and/or "R" that are assigned an SRD as listed in the IMDS/REMIS SRD Table. Use IMDS transaction identification code "QBC", Program NFSU10, screen 127 or transaction identification code "QCC", Program NFS840, screen 126 to view the SRD table.

8.12.3. 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". Do not report status against embedded equipment (such as, items installed on a higher-level end item). Status is always reported against the highest assembly.

8.12.4. 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.

8.12.5. Owning FLDCOMs will determine what equipment designators are identified for mission reporting (IMDS reporting level Y). USSF equipment designators required for mission reporting are currently maintained by SpOC/S4MX and can be found at [https://usaf.dps.mil/x:r/sites/USSF-HQ-SpOC/DCG/S/S4/S4M/S4MX/\\_layouts/15/Doc.aspx?sourcedoc=%7B3736272D-9552-4A6A-B659-ACDC9F2D47FA%7D&file=USSF%20Reportable%20Equipment%20Designator%20Master%20List.xlsx&action=default&mobileredirect=true](https://usaf.dps.mil/x:r/sites/USSF-HQ-SpOC/DCG/S/S4/S4M/S4MX/_layouts/15/Doc.aspx?sourcedoc=%7B3736272D-9552-4A6A-B659-ACDC9F2D47FA%7D&file=USSF%20Reportable%20Equipment%20Designator%20Master%20List.xlsx&action=default&mobileredirect=true)

8.12.6. 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 meteorological equipment.

8.12.7. Units will process status and discrepancy data using an approved MIS. **(T-2)**

8.12.8. If the approved MIS is IMDS utilize Screen 996 to open status and IMDS Screen 997 to close status. Refer to AFCSM 21-560V2 or the IMDS Screen Help menu for assistance.

8.12.8.1. Use the downtime codes listed in **Attachment 5** to describe the reason for the outage.

8.12.8.1.1. Unless specified by FLDCOM supplement do not report outages of less than five minutes; frequency changes, crypto resets, or runway change outages of less than 15 minutes; adjustments or alignments performed during scheduled maintenance; or scheduled generator run ups.

8.12.8.1.2. Units will report generator run-up failures over five minutes “Red” and use downtime code “N”. **(T-2)**

8.12.8.2. Use the delay codes listed in **Attachment 6** to describe any maintenance delay that prevents the equipment from being returned to operational status.

8.12.8.3. Work Unit Codes. Report 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.

8.12.8.3.1. Units will report a WUC to the 4th or 5th digit (e.g., ABAC0) into the equipment status when an equipment problem is discovered or repaired (except for downtime code of "U"). **(T-2)** The use of \*\*000 (i.e., system level WUCs) will only be used for troubleshooting. System level WUCs will not be used when a more specific WUC is available.

8.12.8.3.2. Always report status against the highest-level end item when reporting a “Red” or “Amber” status condition against an embedded end item.

8.12.8.4. The possessing organization as identified in the MIS will utilize the approved MIS to report changes in equipment status as they become aware of them. **(T-2)** This is accomplished by user notification or from the work-center. The following procedures apply:

8.12.8.4.1. Status times. Use the time the outage was discovered. Do not backdate times unless the outage is considered classified. Time logged to put equipment back into service will be used to close the job.

8.12.8.4.2. Downtime codes. Initial downtime code of "U-Unknown" will be entered until such time as maintenance can determine the exact problem. Change the downtime code to one that best describes the reason for the outage.

8.12.8.4.3. Delay codes. Use delay codes when maintenance is not working on the problem. 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.

8.12.8.4.3.1. Researching parts is not a delay unless it exceeds 30 minutes.

8.12.8.5. Comment requirements. Enter comments against the status and delay codes that require one. Make comments with concise information to describe the discrepancy. Enter comments pertinent to the status of the equipment as they become known. 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. **Note:** While comments are important. The use of the 4- and 5-digit WUC that best describes the status and/or discrepancy is critical.

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

8.12.8.5.2. Enter an initial status comment as reported by the technician.

8.12.8.5.3. When the problem/cause has been determined update the comment with an actual reason for the outage.

8.12.8.5.4. Enter the corrective action comment when the problem/cause has been corrected.

8.12.8.5.5. Initials will be entered when required.

8.12.8.5.5.1. Place initials one space after the comment.

8.12.8.5.5.2. Do not use an entire line for initials.

8.12.8.5.5.3. Do not use workcenter or agency names.

### ***Section 8D—Space Vehicle (Satellites) Inventory, Status, And Utilization Reporting Overview.***

**8.13. Purpose.** The purpose for tracking satellites is to have a single tracking tool within the DAF to show an accurate status of USSF satellite assets. **Exception:** asset accountability and valuation reporting the reporting, requirements in this section are exempt from licensing in accordance with AFI 33-324.

**8.14. What is Reportable.** Report the existence and valuation of all USSF satellite systems through REMIS. Satellite systems will include the satellite.

*Section 8E—Reporting Responsibilities.*

**8.15. Each Delta 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-2) Space operational unit personnel will collect and process the information. (T-2)

**8.16. The Satellite System PM will:**

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

8.16.2. 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.

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

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

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

**8.18. 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 (i.e., full cost and useful life). Specific data about satellite and constellation degradation is reported through secure operational means.

**8.19. 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.

**8.20. Status Definitions.**

8.20.1. Green FMC - DoD as the assigned and accountable entity of the system and has declared the system operational.

8.20.2. Amber PMC - DoD as the assigned and accountable entity of the system. It has been functionally turned over (i.e., 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).

8.20.3. Red NMC - The system is a contractor asset. It is not under control of the DAF.

**8.21. Inventory Reporting.** Inventory reporting begins when a satellite transfers to the DAF as the assigned and accountable entity (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 Delta/unit.

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

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

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

8.21.3.1. 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 USSF and held in storage.

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

8.21.3.3. If an USSF 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.

8.21.4. 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.

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

8.21.6. Validation documents. The program office will maintain KSDs that support/substantiates the existence/completeness and derived value of the system. KSDs will be maintained for the life of the system plus five years. These KSDs can be stored electronically. Examples of appropriate KSDs include: those that identify the date the system was placed in service (e.g., DD-250, DD1348, etc.); those that substantiate how the system value was determined and the methodology used to make that determination ( e.g., contracts, CLIN analysis, contract-based analysis, MIPRs, SOWs, Purchase Orders, DD1155, DD1149, etc.); and, those that support changes in status (e.g., declaration of excess, documentation supporting a determination of impairment from performance of physical inventory counts).

**Note:** KSDs should be maintained in a manner that support prompt retrieval upon request (i.e., during an audit) and allow a knowledgeable third person to review the documentation, conduct a similar evaluation process, and arrive at approximately the same value for the system.

8.21.7. USSF AVDOs will utilize an ERP4020 report to accomplish an annual REMIS reconciliation with applicable Operation Capability Summary. The reconciliation review will include all Satellites listed in REMIS. Send the reconciliation, in the form of a Memorandum for Record (use [Attachment 26](#)) to USSF AVDO NLT 30 September of each year. USSF will review satellites in storage and confirm that satellites listed in REMIS are still in orbit.

8.21.8. USSF AVDOs will reconcile assigned Satellites with DAF Form 913 projects on file. Make any corrections needed in REMIS or create an amendment for the DAF Form 913.

8.21.9. USSF AVDOs will perform quarterly manual reconciliations between the applicable MIS and the APSR for additions and deletions to inventory, to include all non-depot possession changes, to verify the assigned location, gain/loss messages and attest to physical inventory. Once completed, the Command AVDO will create, sign, and store a memorandum stating they have accomplished their quarterly reconciliation. Command AVDOs will keep memorandums for one year. Command AVDOs will maintain all artifacts used to conduct the reconciliation such as:

8.21.9.1. REMIS ERP4020 for identifying any new Satellite addition or deletions for the applicable Command with dates applicable to the Quarterly Reconciliation being accomplished.

8.21.9.2. REMIS ERP4140 for identifying Satellite transfers (possessions changes) within a MAJCOM.

8.21.9.3. Gain/Loss messages for Assignment/Possession changes.

8.21.9.4. Applicable MIS reports/screenshots with dates applicable to the Quarterly Reconciliation being accomplished.

8.21.9.5. Signed memorandum from the USSF AVDO.

## 8.22. Organization Record.

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

8.22.1.1. 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 Command or FOA Database Administrator before making the change.

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

8.22.2. Satellite Operational Units will:

8.22.2.1. 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-3)

- 8.22.2.1.1. 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-3)**
- 8.22.2.1.2. The last two positions of the ORG ID are "00" for the basic (parent) unit; for example, use "1C00". **(T-3)**
- 8.22.2.2. For detachments or OLs, the last two positions of the ORG ID are the detachment number or OL letter. **(T-3)** For example, for Detachment 2, use "1C02"; for OL "A" use "1C0A".
- 8.22.2.3. For an OL of a detachment, use the detachment and the OL letter; for example, "1C2A". **(T-3)**

### **8.23. Organization Changes.**

- 8.23.1. The Commands 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 in accordance with [paragraph 8.22.1.1](#).
- 8.23.2. Make organization changes in IMDS using Transaction Identification Code Organization Record, Program NFSD80.

**8.24. Notification Procedures.** Notification of initial possession or change in possession will be done in accordance with [paragraph 2.16](#).

### ***Section 8F—USSF Rocket Reporting, Inventory and Status Reporting of Rocket System Launch Program Rocket Motors.***

**8.25. Overview.** The Rocket System Launch Program (RSLP) utilizes retired flight-worthy ICBM motors for space lift, target vehicles and research & development. The RSLP stores and transports motors and components nationwide.

### **8.26. Inventory and Status Reporting.**

- 8.26.1. Reporting includes inventory and status reporting on RSLP Office owned/managed uninstalled rocket motors at all locations (i.e., Depot, contractor facilities), through end of life (such as, launched, disposed/demilitarized or transfer of assignment and accountability).
- 8.26.2. USSF reports accountability of RSLP owned/managed uninstalled rocket motors as Operating Material and Supplies through TICMS. **(T-2)**
- 8.26.3. The Space Systems Command RSLP Office assigns a Munitions Accountable Systems Officer (MASO). In addition to guidance outline in this publication, the MASO is also responsible for duties and responsibilities outlined in DAFMAN 21-201, Munitions Management.
- 8.26.4. The Rocket System Launch Program Office MASO is responsible to:
- 8.26.4.1. DELETED.
  - 8.26.4.2. DELETED.

8.26.4.3. Coordinate with receiving program office (such as, 309 MMXG ICBM AVDO), prior to transferring assignment and accountability of a rocket motor to the other program office.

8.26.4.4. DELETED.

8.26.4.5. DELETED.

8.26.4.6. DELETED.

8.26.4.7. DELETED.

8.26.5. Units will:

8.26.5.1. DELETED.

8.26.5.2. Financial information is maintained in TICMS. **(T-2)** The RSLP Office is responsible for establishing and maintaining the CFO reporting data elements (e.g., full cost) of each rocket motor (See [paragraph 8.30.](#)). Valuation of all rocket motors must be reconciled at least annually. **(T-2)**

8.26.5.3. Complete physical accountability (such as, actual assets to TICMS information and TICMS information to actual assets) of all Minuteman III Stage I within 15 days of the semi-annual data exchange per New Start Treaty requirements in accordance with AFI 16-608. **(T-2)**

## **8.27. DELETED.**

8.27.1. DELETED.

8.27.1.1. DELETED.

8.27.1.2. DELETED.

## **8.28. Notification, Termination, and Relocation Procedures.**

8.28.1. RSLP Office ensures personnel maintain, correct, and report all data using the procedures in AFI 16-402, and this instruction.

8.28.1.1. DELETED.

8.28.1.2. DELETED.

8.28.2. Termination Message, RSLP Asset Termination Report. The unit or depot where the RSLP asset was destroyed or sent to Defense Logistics Agency Disposition Services sends a priority termination Email message not later than five working days after the action has occurred. **(T-2)** RSLP provides a signed termination letter or equivalent containing how, when, where serial number and the date the asset was destroyed. **(T-2)**

8.28.3. DELETED.

## **8.29. DELETED.**

8.29.1. DELETED.

8.29.1.1. DELETED.

8.29.1.2. DELETED.

**8.30. Rocket System Launch Program Asset Valuation.**

8.30.1. The RSLP Office is responsible for establishing the value of uninstalled RSLP owned rocket motors. **(T-1)** This value is normally derived from the original system CFO reporting data elements (e.g., full cost) however, in the absence of this information (for the older weapon systems), the cost may be derived from other means. For example, retired ICBM system booster costs established by the ICBM Program Office.

8.30.2. A copy of the documentation supporting the CFO reporting data elements (i.e., full cost and useful life) will be maintained with the System Program Manager for the life of the system plus five years. This documentation may 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 System Program Managers).

**8.31. Operating Material & Supplies Asset Value – Rocket System Launch Program.**

8.31.1. The ICBM System Program Managers are responsible for providing the CFO reporting data elements (e.g., full cost) of rocket motors when they are transferred to RSLP. RSLP is responsible for providing updated costs when RSLP assets undergo configuration change. **(T-1)** 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).

8.31.2. A copy of the documentation supporting the CFO reporting data elements (i.e., full cost and useful life) will be maintained with the System Program Manager for the life of the system plus five years. This documentation may 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 System Program Managers).

8.31.3. RSLP financial statement reporting is conducted through established TICMS quarterly CFO report processes.

## Chapter 9

### AEROSPACE VEHICLE AND MISSILE EQUIPMENT ACCOUNTABILITY PROGRAM

#### *Section 9A—General Information.*

**9.1. Aerospace Vehicle and Missile Equipment Accountability Program (Included assets listed in the -21 TO, example 1F-15A -21, *Equipment Inventory List (MCDONNEL)*).** The reporting requirements in this section are exempt from licensing in accordance with 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 are exempt, Command Equipment Management Office (CEMO) will continue to reside at Air Force Reserve Command (AFRC) and the ANG Bureau.

9.1.2. The 440th Supply Chain Operations Squadron manages and oversees equipment processes previously assigned to the Command 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 Command facilitates determination of equipment requirements in accordance with DAFI 23-101 and DAFMAN 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 responsible for forecasting, programming, assessment, disposition, and readiness of support equipment. Specific responsibilities will be defined in DAFI 23-101 and DAFMAN 23-122.

9.1.4. Commands may establish guidance for 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-2)**

#### **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. Commands 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 is 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 is 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 is 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 Command supplements and consolidate the items into Allowance Standards. (T-2)

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 to be listed in automated products (See [Attachment 7](#)). (T-3)

9.3.5. Squadron commanders that need COMSEC materials will ensure that a COMSEC Responsible Officer is appointed in accordance with AFMAN 17-1302-O, *Communications Security (COMSEC) Operations*. Units without sufficient safeguards and/or storage space within the applicable area may maintain or store COMSEC equipment in accordance with 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. (T-3)

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 in accordance with AFMAN 17-1302-O and DAFI 21-101.

### 9.4. Management of -21 Technical Order (TO) Change Requests.

9.4.1. Commands may submit TO change request in accordance with 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. Commands and Lead Command ERAAs will account for installed specialized or classified equipment in accordance with DAFI 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 TO 1F-15A-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. Repairable items.

9.6.1.3. Expendable items.

9.6.2. AFMC Air Logistics Complex, 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 are different for each category of items. Maintain accountability files in accordance with DAFI 23-101 and DAFMAN 23-122.

9.6.4. Lead Command ERAA, Commands, 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 Command supplement to show which Platform 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 DPAS Custodian Inventory Reports and AF Form 601, *Authorization Change Request*.

9.6.5. Lead Command ERAA, Commands, AFRC/ANG CEMO, CEMF, AFLCMC PMs, or product centers identify items managed and controlled as repairable (ERRC XD and XF).

9.6.5.1. Mark the -21 TO to show which maintenance activity that will manage the asset as a repairable.

9.6.5.2. The maintenance activity uses the management and control methods of the DAF Recoverable Assembly Management Process.

9.6.5.3. The Special Purpose Recoverable 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 DAFI 23-101 and DAFMAN 23-122.

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-2)** Units will submit an AF Form 601 to correct variances between authorized and on hand quantities of armament/munitions -21 equipment in accordance with DAFI 23-101 and DAFMAN 23-122, routed through the owning Command, and approved by the applicable lead command. **(T-2)**

9.6.6. Lead Command ERAA, Commands, 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 technical order. 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 technical order to show which maintenance activity will manage the items as expendables. **(T-2)**

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. Commands 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 in accordance with procedure outlined in [paragraph 9.6.5. \(T-2\)](#)

9.6.6.7. Units will coordinate disposal of excess quantities of serviceable armament and munitions -21 assets with the applicable Command and lead command for approval. (T-2)

### ***Section 9B—Responsibilities.***

**9.7. Using Command.** Each Command may supplement this instruction or the -21 technical order for assigned weapon systems, or both, or issue separate command instructions. The using command will:

9.7.1. Appoint an OPR to focus management attention on -21 assets and inform the Lead Command ERAA.

9.7.2. Develop a control system to make sure base level accounting of items is accurate and tailored to unique Command requirements. Authorized -21 levels will not be greater than the number of assigned aerospace vehicles without prior Command and lead command approval in accordance with [paragraph 9.11.](#)

9.7.3. Reallocate -21 items within the Command.

9.7.4. Coordinate with 440 SCOS, 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 Command 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 review -21 technical orders for asset requirements of assigned weapon systems in coordination with program and item managers and redistributes or adjusts items as appropriate.

### **9.8. HQ AFMC.**

9.8.1. HQ AFMC will:

9.8.1.1. Fulfill using command responsibilities in accordance with [paragraph 9.7.](#)

9.8.1.2. Be responsible for interfacing and ensuring all information involving the movement of equipment is coordinated with the Lead Command ERAA and 440 SCOS.

9.8.1.3. Develop control procedures for items not intended for the -21 technical order (such as prototypes under development, test, and evaluation).

9.8.1.4. In coordination with the gaining or using command, develop an initial -21 TO order 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 technical orders are current in coordination with Commands in accordance with [paragraph 9.7.7](#).

9.8.2.2. Ensure equipment listed in aerospace vehicle and missile -21 technical orders and Command supplements includes all items Commands and AFLCMC PMs will oversee.

9.8.2.3. Validate Command -21 levels and make changes as needed.

9.8.2.4. Maintain DAF 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 technical order 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 because 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 Commands and HAF in accordance with [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 Command weapons system managers NLT 30 Sep annually. **(T-3)**

9.9.1.3. Report shortages impacting unit mission via message to applicable weapon systems manager. **(T-3)**

9.9.1.4. Hold disposition of overages pending Command reconciliation. **(T-3)**

9.9.2. Armament Flight or equivalent as defined in DAFI 21-101 will account for, manage, and control weapons suspension items (ERRC XD) in Section II of applicable -21 aerospace vehicle technical orders. **(T-3)** In addition, suspension items with (ERRC XF) such as LAU-129 missile launchers will be tracked and controlled using the R25 SPRAM listing. **(T-3)**

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-3)**

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-3)**

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. **(T-3)**

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-3)**

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-3)**

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-3)** Establish local MOA/Memorandum of Understanding (MOU) governing external fuel tanks in accordance with DAFI 21-101. **(T-3)** **Note:** Not applicable 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. **(T-3)** SPRAM account custodians will maintain a custodian file in accordance with DAFMAN 23-122. **(T-3)** The DPAS Custodian Inventory Reports 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 technical orders. **(T-3)**

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 Command, maintains item inventories (DPAS Custodian Inventory Reports or SPRAM listing or both). **(T-2)**

9.9.8.1. As new items arrive or are transferred, units will update the inventory listing using AF Form 601, AF Form 2692, AF Form 2005, *Issue/Turn-In Request*, SF Form 153, or DD Form 1348-1A, depending on how the items were moved (See [paragraph 9.13](#) through [paragraph 9.18](#)). **(T-2)**

9.9.8.2. The custodian will:

9.9.8.2.1. Maintain a record copy of the input documents. **(T-3)**

9.9.8.2.2. Inventory and reconcile the account upon change of custodian. **(T-3)**

9.9.8.2.3. Complete host Command DPAS Custodian Inventory Reports account reviews when directed. **(T-3)**

- 9.9.8.2.4. Perform initial (upon assumption of account), annual and periodic inventories of SPRAM and/or Custodian Inventory Report assets in accordance with DAFI 23-101 and DAFMAN 23-122. **(T-3)**
- 9.9.8.2.5. Create a local devised checklist to account for all SPRAM authorizations and assets. **(T-3)**
- 9.9.9. The -21 Support Function:
  - 9.9.9.1. Will monitor the movement of -21 items. **(T-3)**
  - 9.9.9.2. Will coordinate the gathering, packing, and shipping of -21 items when aerospace vehicles are transferred. **(T-3)**
  - 9.9.9.3. Will notify the designated workcenter of the number of items to be shipped. **(T-3)**
  - 9.9.9.4. Will reconcile shortages with gaining or losing organizations and send copies of correspondence to the gaining and losing Command Headquarters. **(T-3)**
  - 9.9.9.5. Will forward AF Form 2692 to appropriate PS&D section. **(T-3)**
  - 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-3)** 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. **(T-3)** 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-3)**
- 9.9.10. Accountable individuals. Will use automated, manual reports, or DAF Form 1297, *Temporary Issue Receipt*, to control equipment in serviceable condition, including items in extended storage. **(T-3)** The reports will identify equipment by type, serial or field number, date issued, and the accountable squadron individual. **(T-3)**
- 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-3)**
  - 9.9.11.2. Ensure in-use equipment is monitored and scheduled for maintenance. **(T-3)**
  - 9.9.11.3. Acknowledge responsibility by signing the equipment control report. **(T-3)**

### ***Section 9C—Managing -21 Assets.***

#### **9.10. Transferring Aerospace Vehicle or Missile -21 Assets.**

- 9.10.1. Commands 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 Command will:

- 9.10.1.1.1. Request approval from Lead Command ERAA and CEMF.
  - 9.10.1.1.2. Send the transfer directives to subordinate units.
  - 9.10.1.1.3. Coordinate 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. The unit will use AF Form 2692 to transfer installed equipment.
- 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. The losing unit will send the remaining equipment to the gaining unit no later than 30 days before the completion date.
- 9.10.5. For transfers through Military Assistance Program or donations and sales to agencies outside the DAF, 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 Assistant Secretary of the Air Force for International Affairs (SAF/IA) and Air Force, Directorate of Logistics (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 Command with the Lead Command ERAA, CEMF, and AFLCMC PMs approve the excess. The possessing unit will ensure -21 approved excess/variance letter provided by Command Headquarters is retained. **(T-2)** 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 Command 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. Command 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 DAF 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 DAF Form 913, the appropriate disposition for training (e.g., ground maintenance/Aircraft Battle Damage Repair), National Museum of the USAF, and 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 Command will coordinate -21 increase requests with the Lead Command ERAA and 440 SCOS. Approved requests will be sent to the respective AFLCMC PM (except for XB3 asset requests). The Lead Command ERAA will approve any increase in armament expendable XB3 assets after Command approval. Further coordination/approval of armament expendable assets are not required.

9.12.1.2. The respective AFLCMC PM agrees with the Command request.

9.12.1.3. A source for the item has been identified (Command redistribution, excess, war reserve materiel, or other source).

9.12.2. Items sourced from war reserve materiel require AF/A4LM approval.

9.12.3. Command funded items (such as missile launchers) require no further approval. Units will identify funds (from either AFMC or Command) and get the approval of the appropriate program and funds programs manager for all other shortfalls requiring funding.

9.12.4. The PM approves the requirements after these criteria have been met.

9.12.5. Refer unresolved disagreements to appropriate Command for resolution.

## 9.13. Arrival of New Equipment.

9.13.1. Command 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 (i.e., DPAS, RAMP) 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 in accordance with records disposition schedule.

9.13.4. In all cases, the total amount of -21 equipment will equal the Program Management Directive requirements for the weapon system.

9.13.5. List any assets delivered separately on DD Form 1149 or DD Form 1348-1A.

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.

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-2)** Designated workcenter representatives will (if appropriate) remove and store items and update on hand quantities as applicable. **(T-2)**

#### **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. **(T-2)** Send a copy of the notification to the applicable Command Headquarters.

9.14.2. Shortages identified during annual reconciliation and/or inventories will be thoroughly researched, resolved, or adjusted in accordance with DAFMAN 23-122. Report unresolved shortages or discrepancies to the Command 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 DAF Form 1297. **(T-3)** A designated representative of the transient activity completes and signs this form in three copies. **(T-3)**

9.15.1.1. Send one copy to the appropriate PS&D section or equivalent at home station. **(T-3)**

9.15.1.2. Keep one copy and place one copy in AFTO Form 781 series binder before the aerospace vehicle leaves. **(T-3)**

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-3)**

9.15.2.1. Send the Transportation Control Number to the owning unit as soon as it is known. **(T-3)**

9.15.2.2. If the inventory is not correct, the owning unit will act according to procedures in [paragraph 9.14](#) to resolve the issue. **(T-3)**

#### **9.16. Managing Deployed Assets.**

9.16.1. The owning Command and the deployed unit retain accountability for -21 items deployed for exercises and contingencies. Command 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. Command 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 Command 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-2)**

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-2)** 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-2)**

9.16.3.2. Separate and identify deployed equipment into three deployed groups:

9.16.3.2.1. With aerospace vehicle or missile. **(T-2)**

9.16.3.2.2. Through normal transportation channels. **(T-2)**

9.16.3.2.3. By dedicated support aerospace vehicles. **(T-2)**

## 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-2)**

9.17.2. Each accountable workcenter will prepare their applicable items for transfer. **(T-2)**

9.17.2.1. If shipping the item on or with the aerospace vehicle or missile, list it on AF Form 2692. See **Attachment 8** for instructions on filling out this form.

9.17.2.2. If shipping the item separately, list it on AF Form 601, DD Form 1149, or DD Form 1348-1A. Use one copy of the form to adjust inventory records.

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-2)** 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 Command Headquarters. **(T-2)**

## 9.18. Changing the Accountable Individual.

9.18.1. New account custodians will be qualified and will have attended custodian training. **(T-2)**

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-2)**

9.18.3. Appointed equipment/SPRAM custodians will complete Block III, Equipment Custodians SPRAM training provided by the LRS. **(T-2)** Additionally, custodians will attend locally developed workcenter training on -21/SPRAM equipment management responsibilities. **(T-2)** Relief of account custodial responsibilities will be consistent with the requirements outlined in DAFI 23-101 and DAFMAN 23-122.

9.18.4. Organizational commanders will appoint alternate equipment custodians in writing for all equipment accounts in their organization in accordance with DAFI 23-101.

## Chapter 10

### AIRCRAFT POD REPORTING AND ACCOUNTABILITY

#### *Section 10A—Overview.*

10.1. Pods are modularly constructed to provide capabilities specific to aerospace vehicle mission requirements for self-protection against enemy radar-controlled weapons threats, airborne threats, navigational, target illumination, instrumentation, communications (telemetry and data link), precision geo-location, non-traditional intelligence, reconnaissance, and surveillance.

10.1.1. DELETED.

10.1.2. DELETED.

10.1.3. DELETED.

10.1.4. DELETED.

#### *Section 10B—Reporting System.*

**10.2. Reliability, Availability, Maintainability for Pods (RAMPOD).** 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 pods. RAMPOD is the financial reporting system to Defense Finance and Accounting Service for all DAF externally carried pods.

10.2.1. AF/A4L and Assistant Secretary of the Air Force for Financial Management & Comptroller (SAF/FM) have designated RAMPOD as the APSR for all DAF externally carried Pods, including leased pods. **(T-1)**

10.2.2. 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.

10.2.3. The Program Management Office for RAMPOD is HQ AFMC AFLCMC/GBM, 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>.

10.2.4. Data is processed at the unit level via RAMPOD or approved MIS. Users accurately record pod accountability in the RAMPOD, Portal Status and Inventory Management System to reflect current inventory, configuration, location, and status. Refer to **paragraph 10.3** through **paragraph 10.4**. MAJCOMs, ANG, HAF, and other authorized users of the RAMPOD or approved MIS database monitor the data.

10.2.5. 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. Reporting.**

10.3.1. The reporting requirements in this section are exempt from licensing in accordance with AFI 33-324. 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.

10.3.2. The following data is reported in RAMPOD:

10.3.2.1. DD Form 250 for all pod acquisitions. **Note:** If a DD Form 250 is unavailable, pod program offices can forward a DD Form 1149 accompanied by a signed MFR. **Exception:** For ASQ-236 pods a Receiving Report is issued in place of the classified DD Form 250. (T-2)

10.3.2.2. Source documentation showing the audit trail that results in the disposal/deletions of pods from active inventory, for example, Report of Survey or equivalent.

10.3.2.3. All in-transit actions.

10.3.2.4. All pod modification costs.

10.3.2.5. Pod MDS, model, part number, and serial number.

10.3.2.6. Pod operational status.

10.3.2.7. Pod assignment and accountability (i.e., DAF, ANG or AFR).

10.3.2.8. Cost data for leased pods.

10.3.2.9. All pod shipping containers by serial number, status, and current location.

10.3.2.10. The Elapsed Time Indicator (ETI) meter readings. The frequency of ETI Indicator capture will be determined based on configuration and maintenance philosophy of the affected pod.

10.3.2.11. Readings of external ETI meters for Advanced Targeting Pods will be updated weekly.

10.3.2.11.1. Low Altitude Navigation Targeting Infra-Red for Night (LANTIRN) Navigation pods will be updated upon arrival at the depot and when returned to the field from the supply system.

10.3.2.11.2. Readings of internal ETI meters will be captured on any maintenance action requiring de-paneling for maintenance and/or inspection.

10.3.2.12. Changes in pod assignment and accountability between Regular DAF and AFR, and changes in current and assigned pod location and support responsibility, to include all deployments, TDYs, and/or special missions.

10.3.3. For DAF range pods see AFMAN 13-212V1, *Range Planning and Operations*, for additional guidance and instructions.

10.3.3.1. DELETED.

10.3.3.2. DELETED.

10.3.4. DELETED.

10.3.4.1. DELETED.

10.3.4.2. DELETED.

10.3.4.3. DELETED.

10.3.4.4. DELETED.

10.3.4.5. DELETED.

10.3.4.6. DELETED.

10.3.4.7. DELETED.

10.3.4.8. DELETED.

10.3.4.9. DELETED.

10.3.4.10. DELETED.

10.3.4.10.1. DELETED.

10.3.4.10.2. DELETED.

10.3.4.10.3. DELETED.

10.3.4.11. DELETED.

10.3.4.12. DELETED.

10.3.5. DELETED.

**10.4. Contractor Reporting.** For contractor-controlled or maintained pod systems, the contractor will provide all resources and services necessary to perform their functional responsibilities as defined in the applicable SOW. **(T-2)** The contractor will report the inventory, status, utilization, configuration, and location of items being maintained or sustained by contract support. **(T-2)** If the contractor is exempt from providing inventory, status, utilization, configuration and location of items, the contracting officer or designated official will be responsible for delegating the required inventory reporting authority to a local representative or the Information Owner (AF Pod Manager). **(T-2)**

**\*Section 10C—Accountability.**

**10.5. Accountability begins when DD Form 250 is signed.** Pod program offices are required to forward a copy of the DD Form 250 to [RAMPOD.HelpDesk@us.af.mil](mailto:RAMPOD.HelpDesk@us.af.mil) for any new pods within five workdays of receipt of form.

10.5.1. If a DD Form 250 is not available for a gaining asset, a Memorandum for Record (MFR) along with DD Form 1149 may be used in place.

10.5.2. The MFR will contain the minimum: **(T-2)**

10.5.2.1. Serial Number

10.5.2.2. Equipment designator

10.5.2.3. Transfer date

10.5.2.4. Assets Valuation Amount

10.5.2.5. Service Acquired From

10.5.2.6. Signature block of Govt POC assuming ownership

10.5.2.7. Reasoning for no DD250

10.6. Accountability ends on receipt of a termination message and DD Form 1149. Pod program offices are required to delete pods from the active inventory or report any in-transit actions in RAMPOD within five workdays.

10.7. Account for previously acquired pods and shipping containers in RAMPOD when receiving documentation is not available within five workdays.

10.7.1. DELETED.

10.7.2. DELETED.

10.7.2.1. DELETED.

10.7.3. DELETED.

10.7.3.1. DELETED.

10.7.3.2. DELETED.

10.7.3.2.1. DELETED.

10.7.4. DELETED.

10.7.4.1. DELETED.

10.7.4.2. DELETED.

10.7.4.2.1. DELETED.

10.7.4.2.2. DELETED.

10.7.4.2.3. DELETED.

10.7.4.2.4. DELETED.

10.7.4.2.5. DELETED.

10.8. Pod managers will perform a quarterly and an annual 100% inventory by POD serial number and accomplish a manual reconciliation with the RAMPOD Monthly CFO Data Extract report. (T-1) The annual inventory will be completed by 30 September.

10.8.1. DELETED.

10.8.2. DELETED.

10.8.3. DELETED.

10.8.4. DELETED.

**10.9. Pod Program Office.**

10.9.1. 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. Contact the AF Pod Program Manager to resolve reporting problems requiring clarification.

10.9.2. Provide coordination, direction, and support necessary to ensure units achieve timely resolution of supportability issues.

10.9.3. DELETED.

10.9.4. DELETED.

10.9.5. DELETED.

**10.10. AF POD Manager.** AF Pod Managers will:

10.10.1. Ensure all AFLCMC/WNX/WNY pods and reportable assets stored at DLA or equivalent warehouse locations (via a MOU/MOA), contractor-controlled maintenance/test facilities are inventoried, accounted for, and have the status updated in RAMPOD as status changes or in conjunction with weekly ETI reporting. Refer to [paragraph 10.4](#) for additional contractor guidance.

10.10.2. Verify through AFLCMC/WNX/WNY that DLA, organic depot, contractor-controlled maintenance/test facilities accomplish a semi-annual 100% physical inventory for all possessed pods. Physical inventories will be conducted by verification of pod serial number or AFMC Pod Program Manager approved verification method.

10.10.3. Verifies DLA, organic depot, contractor-controlled maintenance/test facilities semi-annual inventories are accurate, annotates/signs/dates RAMPOD PARS inventory completion. Completed and signed inventories will be maintained for historical purpose for two-years on a local server or SharePoint site.

10.10.4. Coordinate and consolidate all annual reconciliations of pods fleet. Reconcile pod inventory outcomes with the RAMPOD reported inventory (*book to floor/floor to book method*). Reconcile any missing assets following the accountability procedures for Stock Record Assets outlined in DAFI 23-101. The annual validation will include the most current unit level and DLA, organic depot, contractor controlled or maintained inventory completion.

10.10.5. Ensure classified pods are stored in authorized areas in accordance with DoDM 5200.01-V3, *DoD Information Security Program: Protection of Classified information. (T-0)*

**10.11. Command Pod Managers.** Command Pod Managers will:

10.11.1. 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. Contact the AF Pod Manager to resolve reporting problems requiring clarification.

10.11.2. Perform quarterly and annual reconciliations to verify the assigned location and gains/losses, to include all non-depot possession changes, utilizing the following:

10.11.2.1. Unit quarterly and annual inventory reports.

10.11.2.2. Applicable RAMPOD PARS or RAMPOD Inventory Maintenance System Software (RIMSS) inventory.

10.11.2.3. RAMPOD Monthly CFO Data Extract report.

10.11.3. Document quarterly and annual reconciliation with a signed memorandum. Maintain memorandum and all key supporting documents for two years.

10.11.4. Maintain oversight of pod shipping containers and DAF contractor supported spare part kits and coordinate resolution of supportability issues. Reference the applicable DAF contractual requirement agreements.

## 10.12. Unit Level Activities.

10.12.1. The possessing unit will ensure accurate and timely RAMPOD inventory, status, and utilization reporting is accomplished. **(T-2)**

10.12.2. The maintenance unit (such as, flightline/backshop/contractor/depot) possessing the RAMPOD-reportable assets will:

10.12.2.1. Appoint a Unit Pod Managers and send the names to: [RAMPOD.HelpDesk@us.af.mil](mailto:RAMPOD.HelpDesk@us.af.mil) or AFLCMC/HIM (RAMPOD Program Management Office), 4170 Hebble Creek Rd., B280, D15, Wright-Patterson AFB, OH 45433-5655. **(T-2)** Include Air Force Engineering and Technical Support representative, if applicable.

10.12.3. Once per week or when status changes, units will update status of inventory via RAMPOD or approved MIS. **(T-2) Note:** Pod Asset Reporting System (PARS) software user manuals can be found under the applicable (such as, Sensor, EW) universe link.

10.12.4. The Unit Pod Manager will:

10.12.4.1. Maintain inventory, maintenance status, utilization, and configuration data. **(T-2)**

10.12.4.2. Ensure data is updated and verified at least once every duty day on all RAMPOD-reportable assets at the workcenter in RAMPOD. **(T-2)**

10.12.4.2.1. Reconcile changes with Wing Avionics Manager (WAM) as they occur to ensure pod availability status/data is maintained. **(T-2)**

10.12.5. WAM or designated individual will:

10.12.5.1. Maintain oversight of, and report all wing assigned operational, non-operational, and test pods assigned. **(T-2)** Wing Tenant, Detachments and Contractor units will work with the WAM or designated individual to ensure oversight and awareness for an accurate assigned Wing POD asset posture. **(T-2)**

10.12.5.2. Coordinate and conduct a quarterly (i.e., December, March, June, and September) 100% physical inventory/verification by Pod serial number or approved verification indicator against RAMPOD. **(T-2)** Correct identified errors and discrepancies in RAMPOD to ensure completion of inventory no later than the 15th (i.e., January, April, July, and October) of the new quarter.

10.12.5.2.1. Document quarterly reconciliation has been accomplished with a signed memorandum and include printed inventory. **(T-2)** Key supporting documents will be maintained for historical purpose for two-years. **(T-2)**

10.12.5.2.2. Contact Command POCs or contractor field teams to solve reporting problems requiring clarification for completion of quarterly inventory. **(T-2)**

10.12.5.2.3. Losing Unit Action. The losing maintenance unit/contractor prepares the POD(s) for shipment, drafts a DD Form 1149 to provide the LRS transportation driver, and notifies parent command via message of in-transit actions. **(T-2) Note:** If a pod

movement is provided under a logistics support contract, commercial carrier shipping documentation can be used in lieu of a DD Form 1149.

10.12.5.2.4. Gaining Unit Action. The gaining unit/contractor notifies the parent command via message of Pod arrival and “gains” the Pod(s) in RAMPOD or approved MIS to show the Pod(s) as “Assigned” to the location (i.e., Seymour Johnson AFB).  
**(T-2)**

## Chapter 11

### AF NUCLEAR COMMAND, CONTROL, AND COMMUNICATIONS (NC3) WEAPON SYSTEM (AN/USQ-225) STATUS AND INVENTORY REPORTING

#### *Section 11A—Reporting System Overview.*

##### 11.1. Overview.

11.1.1. Nuclear Command, Control, and Communications (NC3) provide the capability through which Presidential authority for employment and termination of nuclear weapon operations is exercised, and operational command and control over U.S. nuclear forces is conducted. It provides an integrated system comprised of equipment, communications, procedures, and personnel; and is essential to the proper execution of the National Military Command System (NMCS), which includes continuous, survivable, and secure nuclear command and control as one of its mission essential functions. The AF NC3 Weapon System (AN/USQ-225) is a system of systems that spans multiple fixed sites, airborne platforms, mobile platforms and mobile support teams that enable the necessary communications between the President of the United States (POTUS) and fielded forces to execute the nuclear mission. The SecAF and CSAF designated AFGSC as the Lead Command for the Air Force Nuclear Deterrence Mission.

11.1.2. The AN/USQ-225 is operationalized via NC3 Radios, terminals, messaging and conferencing systems within a single configuration boundary and function as the host's "NC3 subsystem". As a result, the AN/USQ-225 is now a Weapon System (WS) comprised of individual systems. Link and relay systems, or other equipment external to the AN/USQ-225, (e.g., communication satellites, ground entry points, communication terminals not physically connected, and DoD information Networks links) are categorized as "external dependencies", and are considered for system of systems integration, test, and certification purposes only. Many of the communication systems used on the AN/USQ-225 are also considered "dual use" (e.g., nuclear and/or conventional missions). Therefore, the AN/USQ-225 drastically narrows the focus of the aircraft-based system C-E and aggregates the equipment in ground-based C-Es (Command Posts, Command Centers, and Recovery Teams).

11.1.2.1. The AN/USQ-225 maintenance and status data will be documented in IMDS or FMxC2 MIS, using the REMIS NC3 assigned Equipment Designator, SRD, and Equipment ID's. Data metrics specific to AN/USQ-225 Operational Availability (A<sub>o</sub>) and Configuration Element/Variant Availability (CA) can be found in Terms. Formula can be found in TO 00-20-2 AFGSC Supplement.

11.1.2.2. Platforms with NC3 equipment will be statused using the applicable NC3 Configuration Elements (CE) MESL provided by the lead command.

11.1.2.3. Individual units will report status and utilization of NC3 assets.

11.1.2.4. MAJCOMs in conjunction with the lead command, will identify any additional NC3 status reporting mission requirements. **(T-2)**

11.1.2.5. Units will obtain access to applicable system(s) and document AN/USQ-225 maintenance and status data in approved MIS (i.e., IMDS or FMxC2) to ensure entry into REMIS. **(T-2)**

11.1.3. DELETED.

11.1.3.1. DELETED.

11.1.3.2. DELETED.

11.1.3.3. DELETED.

## 11.2. Security Classification.

11.2.1. *Do not enter classified data into MIS* (e.g., IMDS, FMxC2). Report equipment maintenance and status information as specified in applicable security classification guides.

### *Section 11B—Roles and Responsibilities.*

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

11.3.1. Wing/Group Commanders will:

11.3.1.1. Ensure personnel document and report maintenance and equipment status data accurately in an approved MIS. **(T-2)**

11.3.1.2. Establish processes to review and correct errors in reporting. **(T-2)**

11.3.1.3. Appoint in writing the Wing/Host MIS Manager. **(T-2)**

11.3.2. The MIS Manager will:

11.3.2.1. Monitor and ensure data is entered into the approved MIS daily. **(T-2)**

11.3.2.2. Resolve data reporting problems. **(T-2)**

11.3.2.3. Initiate inventory transactions and movement reports as required. **(T-2)**

11.3.2.4. Send correspondence as required by this instruction and MAJCOM supplements. **(T-2)**

11.3.2.5. Prior to processing MIS data and sending gain/loss messages, verify inventory transaction dates (Julian) and times (Zulu) with corresponding units, depots, or contractors to ensure the data matches and to maintain data integrity. **(T-2)**

11.3.2.6. Upon notification of an AN/USQ-225 Command Post or Command Center configuration item relocation, but prior to moving the equipment, develop a transfer schedule that is funded and approved by the MAJCOM and program office. **(T-2)**

11.3.2.6.1. 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 in accordance with the classification of the information being transmitted. **(T-2)**

11.3.2.6.2. 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-2)**

11.3.2.7. The unit MIS Manager will verify transactional history in MIS. **(T-2)** 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 in accordance with DoDI 5000.64.

11.3.3. Program Management Offices/Depots that support NC3 Constituent Systems will:

11.3.3.1. 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-2)**

11.3.3.2. Maintain the DAF master inventory of serially controlled equipment by the assigned SRD and equipment designator. **(T-2)**

11.3.3.3. Notify MAJCOMs, FOAs and Air Force Nuclear Weapon Center Nuclear C3 Integration Directorate – Product Support Integration Branch (AFNWC/NCW) when changes and deletions occur to the equipment designator records of an AN/USQ-225 constituent system. **(T-2)**

11.3.3.4. Manage Standard Reporting Designators and notify Commands and AFNWC/NCW of changes and/or deletions of SRD’s and associated equipment designators. **(T-2)**

11.3.3.5. Produce and manage equipment or system Work Unit Code Tables for the NC3 Constituent Systems in REMIS and notify AFNWC/NCW of changes to Work Unit Code Tables in accordance with TO 00-20-2.

11.3.4. Air Force Nuclear Weapon Center Nuclear C3 Integration Directorate will:

11.3.4.1. Ensure Joint Electronic Type Designation/Joint Electronic Type Designation Automated System equipment designators for NC3 Weapon System and C-E are consistent with MIL-STD 196D for type “R” code equipment.

11.3.4.2. Maintain the DAF master inventory of serially controlled equipment by the assigned SRD and equipment designator, of the AN/USQ-225 C-E.

11.3.4.3. Manage Standard Reporting Designators for the AN/USQ-225 and C-E and notify Commands of changes and/or deletions of SRD’s and associated equipment designators.

11.3.4.4. Validate the REMIS SRD table annually. Use an AFTO Form 230 to make updates and send the AFTO Form 230 to the AFNWC SRD Manager in accordance with DAFMAN 23-122.

11.3.4.5. Produce and manage equipment or system Work Unit Code Tables for the AN/USQ-225 C-E in REMIS.

11.3.5. Lead Command will:

11.3.5.1. Oversee implementation of AN/USQ-225 MESLs for each Configuration Element.

11.3.5.2. Calculate metrics standards bi-annually for the AN/USQ-225 C-E and provide to the using Commands.

11.3.5.3. Act as the DAF focal point for the AN/USQ-225 reporting policy and procedures.

11.3.6. MAJCOM/FOA IMDS/FMxC2/REMIS Functional will:

- 11.3.6.1. Provide direction/guidance as needed to ensure correct and consistent reporting.
- 11.3.6.2. Assist MAJCOMs/FOAs to integrate their unique reporting requirements into the approved MIS.
- 11.3.6.3. Provide technical assistance to field units/MAJCOMs/FOAs to resolve IMDS or FMxC2 reporting issues and problems.
- 11.3.6.4. Maintain the portion of the REMIS organization table for their command.
- 11.3.6.5. Maintain the DAF Master Inventory.
- 11.3.6.6. Resolve REMIS errors with help of the units and host base MIS Manager.
- 11.3.6.7. Ensure the NFS5B0 transactions to REMIS are accomplished and REMIS reconciliation errors are corrected.
- 11.3.6.8. Provide training to MAJCOM equipment managers on the information available in REMIS and how to extract that data themselves.
- 11.3.6.9. Provide data from REMIS for special studies or assessments as requested by MAJCOM equipment managers.

11.3.7. Wing MIS Managers/Host Base MIS Managers will:

- 11.3.7.1. Monitor the receipt acknowledgment output transmittal files from REMIS daily. **(T-3)**
- 11.3.7.2. Provide assistance and training as required. **(T-3)**
- 11.3.7.3. When required by local communications units or MAJCOM MIS Functional provide NFS5B0 error output files to requestor. **(T-3)**

11.3.8. Base-level Organization/Unit/Functions Manager will:

- 11.3.8.1. Establish a process to ensure timely and accurate entry of NC3 maintenance status data into the MIS. **(T-2)** 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-2)**
- 11.3.8.2. Act as the MIS Subsystem manager to communicate between the unit, host base MIS Manager and MAJCOMs/FOAs on IMDS/FMxC2/REMIS support issues. **(T-2)**
- 11.3.8.3. Coordinate with the host base MIS Manager to process NFS5B0 reconciliation program as required and review the quarterly NFS5B0 error output file for action. **(T-2)** 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-2)**
- 11.3.8.4. Perform checks and balances necessary to ensure the Equipment Inventory List is current and accurate. **(T-2)**
- 11.3.8.5. Coordinate with the host base MIS Manager to set up contingency procedures to track equipment status while MIS is unavailable. **(T-2)**
- 11.3.8.6. Provide training to each workcenter supervisor and Equipment Inventory List point of contact. **(T-2)**

11.3.8.7. Ensure the Host MIS Manager processes the Summary Report monthly IAW TO 00-33A-1001. MAJCOM NC3 leads will forward reports to Lead Command no later than the 15th of the month.

11.3.8.8. Reconcile all open Job Control Numbers in approved MIS daily. **(T-2)**

11.3.8.9. Ensure updates provided by the workcenter are entered into the Equipment Inventory List system through the approved MIS. **(T-2)**

11.3.8.10. Ensure AN/USQ-225 status attributed to supply is reported to the LRS POC. **(T-2)**

11.3.9. The Workcenter will:

11.3.9.1. Appoint an IMDS/FMxC2 Equipment Inventory List POC if the workcenter has Equipment Inventory List reportable equipment. **(T-3)** 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-3)**

11.3.9.2. Review open job control numbers to ensure each job against the workcenter is current and Open Inventory List's reported status is correct. **(T-3)**

11.3.9.3. 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-3)** (i.e., when a Job Control Number does not match Open Inventory List Status)

11.3.9.4. Applicable units will reconcile MIS equipment records with the actual on hand equipment items annually in accordance with DAFI 23-101, DODI 5000.64 \_DAFI 23-111, DAFMAN 23-122, AFH 23-123V2PT1, AFH 23-123V3, DAFMAN 17-1203, and MAJCOM supplements. **(T-3)**

#### 11.4. Contract Maintenance.

11.4.1. Contract Administration Activities (Except Contract Field Teams). Report all gains, losses, and terminations as stated in this instruction, MAJCOM supplements, or in accordance with maintenance contracts. **(T-2)**

11.4.2. Contractor Reporting. For NC3 contractor controlled or maintained equipment/system(s), the DAF possessing organizations will retain the responsibility to ensure inventory, status, utilization, and configuration reporting is accomplished. **(T-2)** 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, in accordance with TO 00-33A-1001. The organization requiring the contract-controlled maintenance will coordinate with the contracting officer to ensure inventory and equipment status reporting requirements are accurately captured in the contract performance work statement. **(T-2)** For example, the contracting Contract Officer Representative may have to enter the inventory and equipment status reporting into IMDS.

## *Section 11C—Reporting Responsibilities.*

### **11.5. Status and Discrepancy Reporting.**

11.5.1. Units will process status and discrepancy data using an approved MIS. (T-2)  
Authorized users of the REMIS database verify accuracy of the data. (T-2)

11.5.2. Maintenance documentation of AN/USQ-225 will be recorded in accordance with TO 00-20-2, **paragraph 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. Refer to the database manager for delayed reporting override edits”.

11.5.3. NC3 Configuration Elements will be statused separately from their host platform. (i.e., the ASC-49 will be statused separately from the F-15Es, the ASC-48 will be statused separate from the nuclear B-52s, etc.)

11.5.3.1. Aircraft and ICBM units will multiline status NC3 configuration elements and variants/platforms.

11.5.3.2. Units that maintain Command Post and Command Center equipment will report status on the end item NC3 system when another NC3 system that is embedded becomes Red or Amber. (T-2) For example, GSC-42 is a standalone UHF Milstar system that is also found in GRC-221 AACE. If the GSC-42 within AACE breaks, the AACE system will be statused accordingly.

### **11.6. Possession Reporting.**

11.6.1. 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: AN0005.

11.6.2. 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.

11.6.3. Command Posts, Command Centers, and Support Teams Configuration Element C-E will not be placed in depot status. The AN/USQ-225 systems that reside in these C-E may be put into depot status.

### **11.7. Communications Equipment Reporting System Overview.**

11.7.1. AN/USQ-225 weapons systems components, (non-fly) will be tracked in DPAS in accordance with DAFMAN 17-1203 and DAFI 23-111, Enclosure 3.

11.7.1.1. DELETED.

11.7.1.2. DELETED.

11.7.1.3. DELETED.

11.7.1.4. DELETED.

11.7.2. The approved Automated Information System (AIS) or MIS for documenting NC3 maintenance actions is IMDS in accordance with TO 00-33A-1001, *Methods and Procedures*

-- *General Cyberspace Support Activities Management Procedures and Practice Requirements.*

11.7.3. See **chapter 6** for further instructions for reporting and documentation of communications equipment.

## 11.8. Determining Maintenance Status.

11.8.1. **Attachment 2** contains a list of maintenance and condition statuses 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 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. Streamlining of the MESL on airborne C-E down to a single mission limits the use of PMC to very few instances for airborne C-E. Launch control centers and ground-based C-E will have more opportunities to be PMC or Amber due to multiple communications systems.

11.8.2. A status change will be reported when a maintenance discrepancy that impacts mission performance is identified. The maintenance status code is determined by the following criteria:

11.8.2.1. Units will report a the NC3 configuration element's that has a degraded performance in its assigned mission as PMC status by comparing each subsystem's status against the Full System List (FSL) and the NC3 status is then determined by the result of the subsystem's condition to meet the Basic System List (BSL). **(T-2)** Refer to each configuration element's MESL for assigned missions. Report a configuration element that cannot perform its assigned mission as NMC.

11.8.2.2. Add the letter M (maintenance), S (supply), or B (both supply and maintenance) to show the reason the configuration element is PMC or NMC.

11.8.2.3. Dual status conditions NMCB or PMCB starts when a configuration element requires maintenance for one discrepancy and supplies for a second discrepancy.

11.8.2.4. 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.

11.8.2.5. Supply status starts when a valid demand is made, and it is determined that the part is not available on base.

11.8.2.6. 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.

11.8.2.7. Maintenance status stops when maintenance is completed according to applicable technical data and all ground checks are completed.

11.8.2.8. Use the NC3 Configuration Element Maintenance Status Code Flow Chart in **Table 11.1** along with the configuration element MESL found in the AFGSC Addendum to this DAFI to help determine the proper configuration element maintenance and condition status codes to report.

**Table 11.1. 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 ( <b>Note 1</b> )
	DEGRADED	PMC ( <b>Note 2</b> )
<b>Notes:</b> 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.		

11.8.3. For units that maintain ground-based C-E equipment. Command Post, Command Centers, and Mobile Support Teams Maintenance Status will:

11.8.3.1. Report Amber status when equipment can perform at least one, but not all its assigned missions or functions. **(T-2)**

11.8.3.2. Report Red status when equipment cannot accomplish any of its assigned missions or functions. **(T-2)**

### 11.9. Work Unit Codes (WUCs)/Logistics Control Numbers (LCNs).

11.9.1. Configuration Elements with established WUCs/LCNs will be input into the MIS.

11.9.1.1. 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. 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. The use of 00 or 000 will not be used when a specific WUC/LCN is available.

### 11.10. Minimum Essential Subsystems List (MESL).

11.10.1. MESLs are the basis for status reporting. MESLs lists the minimum essential systems and sub-systems that must operate for a weapon to perform a specifically assigned wartime mission. The appearance of MESLs will differ based on the configuration element.

11.10.2. MESLs for all NC3 C-E in which AFGSC has been designated Lead Command in accordance with DAFPD 10-9 will be posted on the AFGSC, NC3 Sustainment Division site: <https://usaf.dps.mil/sites/AFNC3C/SitePages/Home.aspx>.

11.10.3. The MESLs used by the airborne C-E 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 11.2](#).

**Table 11.2. Sample Airborne Configuration Element MESL.**

<b>B-52 C-E MESL</b>			
<b>WUC</b>	<b>SYSTEM/SUBSYSTEM</b>	<b>FSL*</b>	<b>ASN*</b>
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
<b>Notes:</b> 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.			

11.10.4. The MESL used by the launch control center C-E will be used on the associated launch control center and launch facility. The MESL will list only sub-systems included in the NC3 weapon system.

**Table 11.3. Sample ICBM MESL.**

<b>ICBM MESL</b>					
<b>No.</b>	<b>WUC</b>	<b>SYSTEM/SUBSYSTEM</b>	<b>FSL</b>	<b>BSL</b>	
				<b>NDS</b>	<b>NDV</b>
1	BA0	Launch Facility	X	X <sup>1</sup>	X <sup>1</sup>
2	BAF	Missile Shock Isolation and Alignment Support	X	X	X
3	BAR	Debris System	X	X	X
<b>Notes:</b> LF Lost Tools - PMC when a tool is lost within the LER and Launch Tube					

11.10.5. The MESLs used by all other ground-based systems will consist of a function column and three requirement columns defining functionality needed for Green, Amber, or Red. The ground-based C-E 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 C-E are still maturing, when mature the ground-based elements will have MESL tables posted at the SharePoint site referenced in [paragraph 11.10.2](#). A sample ground-based configuration element MESL is shown in [Table 11.4](#).

Table 11.4. Sample Ground Based Configuration Element MESL.

<b>FIXED SUPPORT CONFIGURATION ELEMENT MESL</b>			
<b>FUNCTION</b>	<b>*Green</b>	<b>*Amber</b>	<b>*Red</b>
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.
<b>Notes:</b>			
1. Do not report on any function areas that are not required at Command Post and Command Center location.			
2. Do not document in MIS during outage.			
3. Document maintenance in MIS within 24 hours of system restoration.			

| TOM D. MILLER  
Lieutenant General, USAF  
DCS/Logistics, Engineering and Force  
Protection

## Attachment 1

## GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

*References*

DoD 7000.14-R Volume 4, *Department of Defense Financial Management Regulation: Accounting Policy*, 1 Oct 2024

DoDD 8000.01, *Management of the Department of Defense Information Enterprise (DoD IE)*, 17 Mar 2016

DODI 3110.05, *Sustainment Health Metrics in Support of Materiel Availability*, 24 Apr 2024

DoDI 5000.64\_DAFI 23-111, *Accountability and Management of DoD Equipment and Other Accountable Property*, 6 Dec 2021

DoDM 4160.21V4, *Defense Materiel Disposition: Instructions for Hazardous Property and Other Special Processing Materiel*, 22 Oct 2015

DoDM 5200.01-V3, *DoD Information Security Program; Protection of Classified information*, 24 Feb 2012

DAFPD 10-9, *Lead Command/Lead Agent Designation and Responsibilities for United States Air Force Weapon Systems, Non-Weapons Systems, and Activities*, 25 May 2021

AFPD 13-5, *Air Force Nuclear Mission*, 17 Jul 2018

DAFPD 21-1, *Maintenance of Military Materiel*, 21 Feb 2024

DAFI 21-101, *Aircraft and Equipment Maintenance Management*, 16 Jan 2020

DAFI 23-101, *Materiel Management Policy*, 25 Jan 2024

DAFI 24-602V2, *Cargo Movement*, 20 Dec 2023

DAFI 91-204, *Safety Investigations and Reports*, 10 Mar 2021

AFI 10-217, *Management of Air Force Operational Training and Undergraduate Aircrew Training Systems*, 22 Dec 2023

AFI 13-500, *Air Force Nuclear Mission Responsibilities*, 14 Nov 2018

AFI 13-550, *Air Force Nuclear Command, Control, and Communications (NC3)*, 16 Apr 2019

AFI 16-401, *Designating and Naming Defense Military Aerospace Vehicles*, 3 Nov 2020

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 33-322, *Records Management and Information Governance Program*, 23 Mar 2020

AFI 33-324, *The Air Force Information Collections and Reports Management Program*, 22 Jul 2019

DAFMAN 17-1203, *Information Technology (IT) Asset Management (ITAM)*, 13 Sep 2022

DAFMAN 17-1301, *Computer Security (COMPUSEC)*, 9 Dec 2024

DAFMAN 17-1302-O, *Communications Security (COMSEC) Operations*, 13 Dec 2024

DAFMAN 20-110, *Nuclear Weapons-Related Materiel (NWRM) Management*, 3 Oct 2024

DAFMAN 21-202, *Missile Maintenance Management*, 30 May 2024

DAFMAN 23-119, *Government Furnished Property*, 6 Apr 2022

DAFMAN 23-122, *Materiel Management Procedures*, 20 Mar 2024

DAFMAN 90-161, *Publishing Processes and Procedures*, 18 Oct 2023

AFMAN 11-101, *Management Reports on the Flying Hour Program*, 23 Dec 2020

AFMAN 11-202V3, *Flight Operations*, 10 Jan 2022

AFMAN 11-421, *Aviation Resource Management*, 23 Mar 2020  
 AFMAN 13-212V1, *Range Planning and Operations*, 14 Mar 2023  
 AFCSM 21-571, Vol 2, *Database Management Software User Manual*, 1 Feb 2019  
 AFCSM 21-560V2, *Integrated Maintenance Data System (IMDS) Communications Equipment (C-E) Status and Inventory Reporting*, 1 Oct 2018  
 AFCSM 21-556V2, *IMDS DSD: G105-FS, Intro to IMDS Centralized Database*  
 AFH 23-123V2PT1, *Integrated Logistics System-Supply (ILS-S), Materiel Management Operations*, 8 Aug 2013  
 AFH 23-123V3, *Air Force Equipment Management*, 8 Aug 2013  
 TO 00-5-1, *AF Technical Order System*, 17 Nov 2024  
 TO 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policies, and Procedures*, 19 Dec 2023  
 TO 00-20-2, *Maintenance Data Documentation*, 12 Dec 2024  
 TO 00-25-107, *Maintenance Assistance*, 15 Aug 2022  
 TO 00-25-254-1, *Comprehensive Engine Management System Engine Configuration, Status and TCTO Reporting Procedures*, 1 Feb 2022  
 TO 00-33A-1001, *Methods and Procedures -- General Cyberspace Support Activities Management Procedures and Practice Requirements*, 23 May 2024  
 TO 1-1-300, *Maintenance Operational Checks and Check Flights*, 15 Dec 2023

### ***Prescribed Forms***

None

### ***Adopted Forms***

DAF Form 913, *Aerospace Vehicle Project Action*  
 AFTO Form 230, *Standard Reporting Designator (SRD) Candidate Information*  
 DAF Form 1297, *Temporary Issue Receipt*  
 AF Form 3131, *General Purpose (11" X 8-1/2")*  
 AF Form 2005, *Issue/Turn-In Request*  
 AF Form 2691, *Aircraft/Missile Equipment Property Record*  
 AF Form 2692, *Aircraft/Missile Equipment Transfer, Shipping Listing*  
 AFTO Form 290, *Aerospace Vehicle Delivery Receipt*  
 AFTO Form 781, *ARMS Aircrew/Mission Flight Data Document*  
 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 1155, *Order for Supplies or Services*  
 DD Form 1348, *DoD Single Line Item Requisition System Document (Manual)*  
 DD Form 1348-1A, *Issue Release/Receipt Document*  
 DD Form 2875, *System Authorization Access Request (SAAR)*  
 AF Form 601, *Authorization Change Request*  
 DAF Form 679, *Department of the Air Force Publication Compliance Item Waiver Request/Approval*  
 DAF Form 847, *Recommendation for Change of Publication*

### ***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  
**AFTO**—Air Force Technical Order  
**AIB**—Accident Investigation Board  
**AMARG**—Aerospace Maintenance and Regeneration Group  
**AMC**—Air Mobility Command  
**ANG**—Air National Guard  
**APSR**—Accountable Property System of Record  
**AUR**—All Up Round  
**AVDO**—Aerospace Vehicle Distribution Officer  
**BSL**—Basic Systems List  
**CANN**—Cannibalization  
**CCITS**—Communications, Cyberspace, IT, and Space  
**C-E**—Communications Electronics  
**CEMO**—Command Equipment Management Office  
**CFO**—Chief Financial Officer  
**CLIN**—Contract Line Item Number  
**COMSEC**—Communications Security  
**DAF**—Department of the Air Force  
**DAFI**—Department of the Air Force Instruction  
**DAFPD**—Department of the Air Force Policy Directive  
**DD**—Department of Defense  
**DEV**—Deviation  
**DLA**—Department Logistics Agency  
**DMS**—Decentralized Materiel Support  
**DoD**—Department of Defense  
**DoDI**—Department of Defense Instruction  
**DoDM**—Department of Defense Manual  
**DPAS**—Defense Property Accountability System  
**EIMSURS**—Equipment Inventory, Multiple Status, Utilization Reporting Subsystem  
**ERAA**—Equipment Review Authorization Activity  
**ERP**—EIMSURS Reports  
**ERRC**—Expendability, Recoverability, Reparability Category  
**EST**—Equipment Status Report  
**ETI**—Elapsed Time Indicator  
**FLDCOM**—Field Command  
**FMC**—Full Mission Capable

**FMS**—Foreign Military Sales  
**FMxC2**—Field Maintenance Command and Control  
**FOA**—Field Operating Agency  
**FSL**—Full Systems List  
**FY**—Fiscal Year  
**GFM**—Government Furnished Material  
**GMT**—Greenwich Mean Time  
**HAF**—Headquarters Air Force  
**HF**—High Frequency  
**HQ**—Headquarters  
**ICBM**—Intercontinental Ballistic Missile  
**IMDS**—Integrated Maintenance Data System  
**IT**—Information Technology  
**KSDs**—Key Supporting Documents  
**LCN**—Logistics Control Number  
**LF**—Launch Facility  
**LIONS**—Logistics Information and Operations Network System  
**LRS**—Logistics Readiness Squadron  
**MAJCOM**—Major Command  
**MAL**—Maximum Acceptable Level  
**MASO**—Munitions Accountable Systems Officer  
**MC**—Mission Capable  
**MDS**—Mission Design Series  
**MESL**—Minimum Essential Subsystems List (or MDS equivalent)  
**MICAP**—Mission Impaired Capability Awaiting Parts  
**MIPR**—Military Interdepartmental Purchase Report  
**MIS**—Maintenance Information System  
**MMXG**—Missile Maintenance Group  
**MOA**—Memorandum of Agreement  
**MOC**—Maintenance Operations Center  
**MOD**—Modifier  
**MOU**—Memorandum of Understanding  
**MRAP**—Mine Resistant Ambush Protected  
**N/A**—Not Applicable  
**NC3**—Nuclear Command and Control Communications  
**NLT**—No Later Than  
**NMC**—Non-Mission Capable  
**NMC2**—Nuclear Munitions Command and Control  
**NMCA**—Non-Mission Capable Airworthy  
**NMCB**—Non-Mission Capable Both Maintenance and Supply  
**NMCBA**—Non-Mission Capable Both Maintenance and Supply Airworthy  
**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 Airworthy  
**NMCBUA**—Non-Mission Capable Both Maintenance and Supply Unscheduled Airworthy  
**NMCM**—Non-Mission Capable Maintenance

**NMCMA**—Non-Mission Capable Maintenance Airworthy  
**NMCMS**—Non-Mission Capable Maintenance Scheduled  
**NMCMU**—Non-Mission Capable Maintenance Unscheduled  
**NMCMSA**—Non-Mission Capable Maintenance Scheduled Airworthy  
**NMCMUA**—Non-Mission Capable Maintenance Unscheduled Airworthy  
**NMCO**— Non-Mission Capable Other  
**NMCS**—Non-Mission Capable Supply  
**NMCSA**—Non-Mission Capable Supply Airworthy  
**OL**—Operating Locations  
**OPLAN**—Operation Plan  
**OPR**—Office of Primary Responsibility  
**ORG ID**—Organizational Identification  
**PARS**—Pod Asset Reporting System  
**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  
**RSLP**—Rocket System Launch Program  
**RPA**—Remote Piloted Aircraft  
**SIB**—Safety Investigation Board  
**SpOC**—Space Operations Command (Field Command in USSF)  
**SPRAM**—Special Purpose Recoverable Authorized Maintenance  
**SRD**—Standard Reporting Designator  
**SOW**—Statement of Work  
**TAI**—Total Active Inventory  
**TCTO**—Time Compliance Technical Order  
**TICMS**—Theater Integrated Combat Munitions System  
**TNMC**—Total Non-Mission Capable  
**TNMCA**—Total Non-Mission Capable Airworthy  
**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  
**UHF**—Ultra High Frequency  
**UMM**—Uninstalled Missile Motor  
**USAF**—United States Air Force

**USSF**—United States Space Force

**VHF**—Very High Frequency

**WAM**—Wing Avionics Manager

**WST**—Weapon System Team

**WUC**—Work Unit Code

### *Office Symbols*

**AF/A4L**—Air Force Deputy Chief of Staff, Directorate of Logistics

**AF/A4LM**—Air Force Deputy Chief of Staff, Directorate of Logistics, Maintenance Division

**AF/A8PE**—Air Force Deputy Chief of Staff for Plans and Programs, Program Integration Division

**AFMC AFLCMC/HIM**—Air Force Materiel Command, Air Force Life Cycle Management Center, Business and Enterprise Systems Directorate, Maintenance

**AFNWC/NCW**—Air Force Nuclear Weapon Center Nuclear C3 Integration Directorate – Product Support Integration Branch

**DCG-S/S4MX**—Deputy Commanding General for Support, Weapon System Policy, and Compliance

**SAF/FM**—Assistant Secretary of the Air Force for Financial Management and Comptroller

**SAF/IA**—Assistant Secretary of the Air Force for International Affairs

**SpOC/S4MX**—Space Operations Command, Weapon System Policy, and Compliance

### *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**—An asset installed and commissioned to perform an operational mission or requirement. **Note:** 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 Stations. MRAP vehicles and Ground Stations are treated like aerospace vehicles to utilize REMIS as its official inventory reporting system.

**Aerospace Vehicle Termination**—Aerospace vehicles that have been removed from the DAF 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 divided by Total Active Inventory (TAI).

**Aircraft Availability Rate**—MC hours divided by TAI hours and then multiplied by 100.

**Aircraft Availability Standard**—An enterprise level-metric which provides a repeatable, logical, defensible method to calculate an DAF enterprise Aircraft Availability Standard for each MDS. It merges aircraft availability with operational requirements to provide 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 (AUR)**—An ICBM is classified as an AUR 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, in accordance with TO 00-20-2.

**Communications Equipment (C-E)**—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 in accordance with TO 00-33A-1001, *General Cyberspace Support Activities Management Procedures and Practice Requirements*. **Note:** Refer to **Chapter 6** of this instruction for USSF reporting requirements.

**Condition Status**—A term describing an aerospace vehicle, ICBM and CCITS ability to perform its assigned missions.

**Configuration Element/Variant Availability (CA)**—The percentage of Mission Capable (MC) Configuration Element/Variants that were available for a specified period. Additionally, it conveys how many Configuration Element/Variants, i.e., platforms, are available to perform their assigned mission.

**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.

**Cyberspace Equipment** —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 individuals who are assigned to a specific cyber weapon system

**Delay Code**—Alpha code used to indicate why a piece of communications equipment has not been returned to an operational status.

**Downtime Codes**—These codes provide the cause for asset downtime and are used in reporting status. See [Attachment 5](#) for list of downtime codes.

**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 a DAF-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.

**Ground Stations**—A collection of fixed or mobile equipment on Earth's surface that enable communications, signal transmission, and control of terrestrial and orbital assets.

**FMxC2**—Field Maintenance Command and Control 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 FMxC2 to aid in making fleet management decisions. The system is currently used by over 30,000 Air Force personnel & contractors worldwide. **Note:** G081 was renamed to FMxC2 August 2022.

**Integrated Maintenance Data System (IMDS)**—IMDS is the standard DAF maintenance information system for collection, storage, and dissemination of maintenance data for repair and improvement of DAF 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**—An asset 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.

**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: requires the use of such equipment, or 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.

**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 DAF 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 of 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.

**NC3 Assets**—NC3 Assets - A collection of communications terminals, radios, and direct ancillary communications support devices and communications support equipment that reside on or within each NC3 platform or within each NC3 mission facility, employed to execute nuclear command and control. Refer to [Chapter 11](#) of this instruction for status reporting instructions.

**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.

**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.

**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, CHAPTER 11, AIR FORCE STANDARD ALGORITHMS, FOR STATUS AND CONDITION CODE ALGORITHMS)**

**Note:** These codes are reported through the MIS to REMIS and are available to all REMIS users.

**A2.1. FMC - Full Mission Capable.** The aerospace vehicle/ICBM/NC3 configuration element can do all its assigned missions.

**A2.2. MC - Mission Capable.** Is a computed status that includes FMC and PMC time.

**A2.3. PMC - Partial Mission Capable.** Material condition of an aerospace vehicle/ICBM/NC3 configuration element, 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 F). The aerospace vehicle/ICBM/NC3 configuration element can do at least one, but not all, of its assigned missions because of maintenance and supply.

A2.3.2. PMCM - Partial Mission Capable Maintenance (Condition Status Code G). Material condition of an aerospace vehicle/ICBM/NC3 configuration element, 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).

A2.3.3. PMCS - Partial Mission Capable Supply (Condition Status Code H). Material condition of an aerospace vehicle/ICBM/NC3 configuration element, 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.

A2.3.4. TPMCS - Total Partial Mission Capable Supply. PMCS and PMCB added together equals TPMCS. The aerospace vehicle/ICBM/NC3 configuration element can do at least one, but not all, of its assigned missions because of supply.

A2.3.5. TPMCM - Total Partial Mission Capable Maintenance. PMCM and PMCB added together equals TPMCM. The aerospace vehicle/ICBM/NC3 configuration element can do at least one, but not all, of its assigned missions because of maintenance.

**A2.4. NMC - Non-Mission Capable.** The aerospace vehicle/ICBM/NC3 configuration element cannot do any of its assigned missions. The formula for NMC rate is NMC Hours/possessed hours.

A2.4.1. NMCA - Non-Mission Capable Airworthy. 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.

A2.4.2.1. DELETED.

A2.4.2.2. NMCBA - Non-Mission Capable Both Maintenance and Supply Airworthy. The aerospace vehicle cannot do any of its assigned missions because of maintenance and supply. The aerospace vehicle can fly (not restricted from use).

A2.4.2.3. NMCBS - Non-Mission Capable Both Maintenance and Supply Scheduled (Condition Status Code B). The aerospace vehicle/ICBM/NC3 configuration element cannot do any of its assigned missions because of supply and scheduled maintenance. The aerospace vehicle/ICBM cannot fly (restricted from use).

A2.4.2.4. NMCBU - Non-Mission Capable Both Maintenance and Supply Unscheduled (Condition Status Code A). The aerospace vehicle/ICBM/NC3 configuration element cannot do any of its assigned missions because of supply and unscheduled maintenance. The aerospace vehicle/ICBM cannot fly (restricted from use).

A2.4.2.5. NMCBSA - Non-Mission Capable Both Maintenance and Supply Scheduled Airworthy) (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).

A2.4.2.6. NMCBUA - Non-Mission Capable Both Maintenance and Supply Unscheduled Airworthy (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/NC3 configuration element cannot do any of its assigned missions because of maintenance.

A2.4.3.1. DELETED.

A2.4.3.2. NMCMA - Non-Mission Capable Maintenance Airworthy. The aerospace vehicle/NC3 configuration element cannot do any of its assigned missions because of maintenance. The aerospace vehicle can fly (not restricted from use).

A2.4.3.3. NMCMS - Non-Mission Capable Maintenance Scheduled (Condition Status Code D). The aerospace vehicle/ICBM/NC3 configuration element cannot do any of its assigned missions because of scheduled maintenance. The aerospace vehicle/ICBM cannot fly (restricted from use).

A2.4.3.4. NMCMU—Non-Mission Capable Maintenance Unscheduled (Condition Status Code C). The aerospace vehicle/ICBM/NC3 configuration element cannot do any of its assigned missions because of unscheduled maintenance. The aerospace vehicle cannot fly (restricted from use).

A2.4.3.5. NMCMSA - Non-Mission Capable Maintenance Scheduled Airworthy (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).

A2.4.3.6. NMCMUA - Non-Mission Capable Maintenance Unscheduled Airworthy (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/NC3 configuration element cannot do any of its assigned missions because of supply.

A2.4.4.1. DELETED.

A2.4.4.2. NMCSA - Non-Mission Capable Supply Airworthy (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).

A2.4.5. TNMC - Total Non-Mission Capable. NMCB + NMCM + NMCS + NMCA added together equals TNMC. The aerospace vehicle/ICBM/NC3 configuration element cannot do any of its assigned missions. Same as NMC.

A2.4.5.1. TNMCA - Total Non-Mission Capable Airworthy. NMCBUA, NMCBSA, NMCMUA, NMCMSA, and NMCSA added together equals TNMCA. Same as NMCA.

A2.4.5.2. TNMCS - Total Non-Mission Capable Supply. NMCS, NMCBU, NMCBS, NMCSA, NMCBUA, and NMCBSA added together equals TNMCS hours. The aerospace vehicle/ICBM/NC3 configuration element cannot do any of its assigned missions because of supply.

A2.4.5.3. TNMCM - Total Non-Mission Capable Maintenance. NMCMU, NMCMS, NMCBU, NMCBS, NMCMUA, NMCMSA, NMCBUA, and NMCBSA added together equals TNMCM hours. The aerospace vehicle/ICBM/NC3 configuration element cannot do any of its assigned missions because of maintenance.

**A2.5.—Total Flyable.** FMC, PMC and NMCA added together equals Total Flyable. The aerospace vehicle can fly.

**Table A2.** —DELETED.

**A2.6. CCITS Equipment Status Definitions.**—A2.6.1. 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.

A2.6.2. 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.

A2.6.2.1. Assets with redundant capabilities will be coded PMC when redundancy is lost, even though it is fully capable of supporting all missions. **(T-2)** Update status as Amber when a part is ordered with a status of PMCS.

A2.6.2.2. 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). **(T-2)** Assets reported as Amber for the sole purpose of ordering parts at a higher priority is not authorized.

A2.6.3. 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.

A2.6.4. 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 will be changed to inactive in the approved MIS.

A2.6.5. Mission status: Status hours required for operation of mission set equipment.

**Note:** Mission status reporting is optional within Integrated Maintenance Data System (IMDS); however, Commands/FOAs can define mission status reporting procedures in Command/FOA supplements, if required.

A2.6.6. 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 [Attachment5, FigureA5.2.](#) for a list of IMDS to REMIS Status Code Conversion Cross Reference.

A2.6.7. 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 [Attachment6, FigureA6.1.](#) for list of IMDS to REMIS Downtime to Reason Code.

## 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  
\*BSL – Basic System List  
CAS - Close Air Support  
CB – Coded Only  
DSP - Defense Suppression  
DTE - Developmental Test and Evaluation  
DTS - Developmental Test Support  
EC - Electronic Countermeasures  
FAC - Forward Air Control  
FC - Facility Checking  
\*FSL - Full System List  
MSP - Missile Site Support  
NDE – Nuclear Deterrence, Endure  
NDS – Nuclear Deterrence, Strike  
NDV – Nuclear Deterrence, Survive  
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  
TST - Test  
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.

<b>T1</b>	Hostile Foreign Armed Action - On combat support mission ( <b>see Note 1</b> ) - 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.
<b>T2</b>	Flying Accident - On combat support mission ( <b>see Note 1</b> ) - Aircraft/missile losses resulting from flying accidents while on combat support mission whether or not the cause of the accident is known. <i>This includes losses during takeoff or landing while on combat support missions.</i>
<b>T3</b>	Cause Unknown - On combat support mission ( <b>see Note 1</b> ) - Aircraft missing on combat support mission as a result of unexplained phenomena. <i>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.</i>
<b>T4</b>	Hostile Foreign Armed Action - Not on combat support mission ( <b>see Note 1</b> ) - 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).
<b>T5</b>	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. <i>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 DAFI 91-204, Safety Investigations and Reports.</i>
<b>T6</b>	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. <i>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 DAFI 91-204.</i>
<b>T7</b>	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. <i>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 DAFI 91-204.</i>
<b>TB</b>	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).
<b>TC</b>	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.
<b>TD</b>	Tested to Destruction - ( <b>see Note 3</b> ) Aircraft/missile/drone lost as a result of planned test involving ultimate destruction of the aircraft/missile/drones. <i>This includes drones destroyed as a result of programmed weapons fire.</i>

<b>TE</b>	Fair Wear and Tear - Aircraft/Missile/Drone/support equipment lost as a result of general deterioration in use.
<b>TF</b>	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.
<b>TG</b>	Abnormal Storage Deterioration - Aircraft/Missile/Trainers/Support Equipment lost as a result of improper or inadequate storage.
<b>TH</b>	Normal Storage Deterioration - Aircraft/Missile/Drone/Trainers/Support Equipment lost as a result of deterioration while properly stored.
<b>TI</b>	*Obsolete - Obsolete - Aircraft/Missile/Drone/Trainers wholly serviceable or reparable. The DAF will use the Repair or Retire Decision Process in accordance with AFI 16-402 to evaluate aerospace vehicles that meet this criterion. Refer to AFI 16-402 for additional guidance.
<b>TJ</b>	*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. <i>Do not include those that are more appropriately included in code TI.</i> The DAF will use the Repair or Retire Decision Process in accordance with AFI 16-402 to evaluate aerospace vehicles that meet this criterion. Refer to AFI 16-402 for additional guidance.
<b>TK</b>	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.
<b>TL</b>	*Transfer and Diversions - Aircraft/Missile/Drone/Trainers/ Support Equipment that (1) is wholly serviceable or reparable and (2) transferred to non-DAF 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 DAF will use the Repair or Retire Decision Process in accordance with AFI 16-402 to evaluate aerospace vehicles that meet this criterion. Refer to AFI 16-402 for additional guidance. <b>Note:</b> The use of this termination code is authorized for Support Equipment.
<b>TM</b>	Enemy Action - On combat mission ( <b>see Note 3</b> ) - 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).
<b>TN</b>	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. <i>This includes losses during takeoff or landing while on combat missions.</i>
<b>TP</b>	Cause Unknown - On combat mission ( <b>see Note 3</b> ) - 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.
<b>TQ</b>	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.

<b>TR</b>	Abandonment Due to Enemy Action - ( <b>see Note 3</b> ) Aircraft/Missile/Drone/Support Equipment that could not be evacuated and was abandoned or destroyed as the result of approaching enemy ground (surface) forces.
<b>TS</b>	Destroyed or Impounded - Aircraft/missile/drone destroyed by or impounded in a foreign country. <i>Do not use this code in reporting losses that should more appropriately be reflected as codes TM, TN, TP, TQ, or TR.</i>
<b>TT</b>	Operational Loss - Before Mission is Completed - Missile or drone losses that occur after launch and before the mission is completed.
<b>TU</b>	Operational Loss - After Mission is Completed - Missile or drone losses that occur after launch and after the mission is completed.
<b>TV</b>	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. <i>Do not include missiles or drone losses that should more appropriately be included in other applicable codes, especially those covered by code TB.</i>
<b>TW</b>	Museum or Schools - Aircraft/missiles/drones/trainers/Support Equipment transferred to schools (FSC-coded items) or National Museum of the USAF.
<b>TX</b>	Commercial Sale - Aircraft/Missiles/Drones/Trainers that exceed all AF requirements and are sold.
<b>TY</b>	Operational Loss - Failure to Retrieve ( <b>see Note 3</b> ) - 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. <i>Do not include drones not retrieved due to complete destruction.</i>
<b>TZ</b>	Operational Loss - Failure to Recovery System ( <b>see Note 3</b> ) - 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). <i>Do not include missiles and drones that have been recovered but not retrieved.</i>
<p><b>Note:</b> For use as both assignment/possession reporting identifiers.</p> <ol style="list-style-type: none"> <li>1. Possession reporting identifiers only.</li> <li>2. Assignment reporting identifiers only.</li> <li>*3. Does not require the DAF Form 913 to remove affected aerospace vehicle from the active/inactive inventory. Termination message is required in accordance with <b>paragraph 2.19</b>. Contact the assigned Command AVDO for additional guidance.</li> </ol>	

## 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 DAF, 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) <b>Note:</b> 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) <b>Note:</b> 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 (T & X merged into other delay code K)	NMCO / PMCO
--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 <b>Attachment 6, Figure A6.1.</b>	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

				<p>following edits to delay code: Include only if one of the following exist: B, F, G, H, K, O, U, V, W, or Z.</p> <p>Do not include if one of the following exist: D, I, J, L, M, N, P, Q, R, or Y.</p> <p>If Downtime Code = G, L, N, P, Q, W, or X then convert inbound and historical data as follows:</p> <p>If no related delay record is found, insert status reason code using default reason code listed in <b>Figure A5.3</b>.</p> <p>If a related delay record is found, convert delay code into reason code using <b>Figure A5.3</b> cross reference.</p> <p>After implementation, reason code will be required.</p>
--	--	--	--	--

**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	
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 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 Repairable 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, Defense Logistics Agency, 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, Defense Logistics Agency, 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, 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, and Y	(Various Supply delays)	N/A	Supply

**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 DAF 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 DAF 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. If applicable, enter the following as a **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.

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.

**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 five 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:

A8.14.2.1. Verify all equipment on AF Form 2692 is installed or aboard.

A8.14.2.2. After verifying the equipment being transferred is installed or aboard, signs all four copies.

A8.14.2.3. Return copy 1 to the accountable function.

A8.14.2.4. Mail copy 2 to the PS&D of the gaining organization.

A8.14.2.5. Place copy 3 in the aerospace vehicle records binder for the aerospace vehicle being transferred.

A8.14.2.6. 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.***

**Note:** DAFI 24-602V2 requires users to fill out the DD Form 1149 through the Logistics Tool Suite.

**A9.1. Box 1 .** Enter organization, for example, Command and base, Defense Plant Representative Office possessing the aerospace vehicle.

**A9.2. Box 2.** Enter HQ AFMC USAF-AVDO, Wright Patterson AFB, OH 45433.

**A9.3. Box 3.** Enter the name and address of the recipient indicated in the assignment directive.

**A9.4. Box 4.** Enter the FMS case designator, grant aid Reports Control Number, if known.

**A9.5. Box 5, 6, 7 and 8.** Leave blank.

**A9.6. Box 9.** Enter HAF project number, for example, FMS 9F-35 or MAP9T-47 and the assignment directive number, for example, 79-635.

**A9.7. Box 10.** If shipment is by airlift or surface, make sure the person shipping the aerospace vehicle signs. Otherwise leave blank.

**A9.8. Box 11a.** Leave blank.

**A9.9. Box 11b.** Leave blank.

**A9.10. Box 12.** For shipment by airlift or surface, enter the date of shipment. Otherwise leave blank.

**A9.11. Box 13.** Indicate airlift or surface. Otherwise leave blank.

**A9.12. Box 14.** For shipment by airlift or surface, enter the initial bill of lading or manifest number.

**A9.13. Box (a).** Leave blank.

**A9.14. Box (b).** Enter MDS and serial number. If being ferried, enter the signature block of the ferry pilot and date of signature.

**A9.15. Box (c) - (i).** Leave blank.

**A9.16. Box 15 - 17.** Leave blank.

**A9.17. Box 18.** Self-Explanatory. Use is optional.

**A9.18. Box 19.** Leave blank.

***Section A9B—Preparing and Processing DD Form 1149.*****A9.19. Accountable Officer:**

A9.19.1. Make enough copies of DD Form 1149 to complete all steps.

A9.19.2. Sends all copies to the transportation office with the items being shipped.

**A9.20. Transportation Officer:**

A9.20.1. Transportation Officers will follow DAFI 24-602v2 for DD Form 1149 completion and distribution procedures.

A9.20.2. DELETED.

A9.20.3. DELETED.

**A9.21. Accountable Officer:**

A9.21.1. Sends two copies to the appropriate PS&D.

A9.21.2. Keeps one copy in suspense.

**A9.22. PS&D:**

A9.22.1. Sends one copy to the PS&D of the gaining unit.

A9.22.2. Holds one copy for 60 days in case the gaining unit needs help finding the equipment within transportation channels.

## Attachment 10

## SAMPLE GAIN MESSAGES UNCLASSIFIED

**Figure A10.1. Sample Aerospace Vehicle Gain Message (Unclassified). (See paragraph 2.17.)**

TO: Losing Organization  
CC: Losing Command and intermediate Command  
Gaining Command and intermediate Command  
Appropriate AFLCMC PM  
AFMC/USAF-AVDO  
SUBJECT: DAFI 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 Command.
11. Command gaining aerospace vehicle.
12. Date of next major scheduled inspection due (time/date and type, for example, phase, periodic, major or minor isochronal), (Command 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 the AVDO initiating message.

**Figure A10.2. Sample Aircraft Pod Gain Message (Unclassified).**

TO: Losing Organization  
CC: Losing Command and intermediate Command  
Gaining Command and intermediate Command  
Appropriate AFLCMC PM  
AFMC/USAF-AVDO  
SUBJECT: DAFI 21-103 Avionics Pod Change Report, GAIN

Required Information:

1. Serial number of the Pod.
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. Gaining MAJCOM.
6. Reason for movement (for example, assignment change, Programmed Depot Maintenance, Analytical Condition Inspection).
7. Current Condition Status Code Asset.
8. Name and DSN telephone number of the AVDO initiating meeting.

## 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 Command and intermediate Command

Losing Command and intermediate Command

Appropriate AFLCMC PM

AFMC/USAF-AVDO

SUBJECT: DAFI 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 Command.
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 Command.
11. Command losing aerospace vehicle.
12. Date of next major scheduled inspection due (time/date and type, for example, phase, periodic, major or minor isochronal, HSC), (Command 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 the 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/USAF-AVDO

CC: Possessing and assigned Command AVDO

CEMS PM (AFLCMC/LPZ)

AF/A4LM Aerospace Vehicle Disposition Manager

Appropriate AFLCMC PM

SUBJECT: DAFI 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 Command.
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.

## Attachment 13

## SAMPLE POSSESSION PIC CHANGE MESSAGE UNCLASSIFIED

**Figure A13.1. Sample Possession PIC Change Message (Unclassified). (See paragraph 2.20.)**

TO: Command/USAF-AVDO  
CC: Intermediate Command  
Appropriate AFLCMC PM  
AFMC/USAF-AVDO  
SUBJECT: DAFI 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 Command.
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 Command.
12. Remarks: Reason for change.
13. Name and DSN telephone number of the 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: Command AVDO  
CC: Intermediate Command  
Appropriate AFLCMC PM  
AFMC/USAF-AVDO  
SUBJECT: DAFI 21-103, Aerospace Equipment MDS/Configuration Identifier Change Message

Required Information:

1. Serial number of the aerospace vehicle.
2. Date of MDS 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 Command.
5. Assignment purpose identifier.
6. Possessing organization.
7. Station location code.
8. MDS from which the aerospace vehicle is changing.
9. Type action code (LF).
10. MDS to which aerospace vehicle is changing.
11. Possessing Command.
12. Remarks: Reason for change.
13. Name and DSN telephone number of the AVDO initiating change and message.

**Attachment 15****STATUS REPORTING FOR WEATHER METEOROLOGICAL EQUIPMENT**

**Note:** The information within this attachment does not include equipment status reporting requirements for all weather equipment. If the system is not listed below, please consult the respective system's requirements document.

**A15.1.** All fielded fixed and tactical automated meteorological observing systems (for example, AN/FMQ-19/22/23 and AN/TMQ-53) will follow the below Equipment Status Reporting (ESR) guideline:

A15.1.1. If the data acquisition unit (data logger) is inoperative, report system NMC (Red).

A15.1.2. If any sensor necessary to report ceilings is inoperative, report the system as NMC (Red).

A15.1.3. Report FMC (Green) when system is operating normally.

A15.1.4. If any sensor necessary to report visibility, winds, altimeter setting and/or discontinuity group sensor is inoperative, report the system as PMC (Amber).

A15.1.5. If all system meteorological sensors are inoperative such that the system is not providing any usable data, report system NMC (Red).

**A15.2.** All fixed and tactical weather radars, for example, Next Generation Weather Surveillance Radar (WSR-88D/NEXRAD) and AN/TMS-2 (PDR) will follow the below ESR guidelines:

A15.2.1. Report FMC (Green) when system is operating normally.

A15.2.2. 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).

A15.2.3. Radar system is inoperative and unable to detect and display meteorological targets locally, report system NMC (Red).

**Attachment 16****LOADING SERIAL NUMBERS FOR WEATHER SERVICE SYSTEMS**

**A16.1.** Equipment outlined in this attachment will be input into the approved MIS (for example: IMDS) and the Accountable Property System of Record (APSR) (for example: DPAS) unless otherwise stated

A16.1.1. AN/FMH-5 Joint Environmental Toolkit (JET) - Use the Asset Part number from the Identaplate tag, (for example: 000000JETXXXXXX) as the system serial number. This equipment is only loaded to the APSR.

A16.1.2. AN/FMH-5 Sensor Collection Alliance (SCA) - Use the Asset Part number from the system's Identaplate tag, (for example: 000000JETXXXXXX) as the system serial number.

A16.1.3. AN/FMQ-7 Solar Observing Optical Network (SOON) - Use the serial number affixed to the processor cabinet, (for example: 7407AFE00000005) as the system serial number.

A16.1.4. 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 (for example: 000000000000001).

A16.1.5. 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.

A16.1.6. 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.

A16.1.7. 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.

A16.1.8. AN/FRR-95 Radio Solar Telescope Network (RSTN) - Use the serial number affixed to the processor cabinet, (for example: 7000HAF00A00003) as the system serial number.

A16.1.9. AN/TMQ-53 Tactical Meteorological Observing System - Use the system or TAC number (for example: 000000000TAC003) affixed to AN/TMQ-53 transit cases, as the system serial number.

A16.1.10. AN/TMS-2 Portable Doppler Radar (PDR) - Use the system number (for example: 000000000PDR003) affixed to the PDR server transit case and or bottom of the antenna base plate, as the system serial number.

A16.1.11. AN/UMQ-13 Meteorological Data Station - Use the system number (for example: 000000000000012) 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.

A16.1.12. WSR-88D, Next Generation Weather Radar/Weather Surveillance Radar-88D (NEXRAD)- Use the serial number from the klystron nameplate located on the klystron tube (for example: 000000000000801).

A16.1.13. ML658, Digital Barometer/Altimeter Setting (DBASI)- Use the serial number (for example: 000000000000181).

A16.1.14. FBLCL000, Automated Surface Observing System (ASOS)-Use the serial number (for example: 000000000000055).

## Attachment 17

### AEROSPACE VEHICLE AND TRAINER PICS

**Note:** PICS are used to designate assignment and possession mission activities, refer to AFI 16-402 for additional information. Commands 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 and use of “B” PIC will be reserved for work stoppage aircraft and no additional field level maintenance or CANN actions will be worked while an aircraft is in a “B” PIC. **Note:** Non-flyable “B” coded aerospace vehicles are not available for mission generation or deemed taskable to fulfill missions. **Exception:** For F-35 units ALIS/SOU, Squadron Status screen, will be used in place of PICS.

**A17.1. 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. Command AVDOs 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 Command HQs prior to use.

**A17.4. BL - Extended Transit Maintenance.** Applies to aerospace vehicles when transient maintenance requires more than seven 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 - Maintenance Assistance Request- Awaiting Decision/Action.** Aerospace vehicles and trainers for which a depot (Organic or Contract) assistance has been submitted 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 AFMC Program Manager PM/PSM has determined decision is provided or possession transferred to Organic or Non-Organic authority. **Exception:** 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 Command Headquarters.

**A17.10. BU - Depot Level Maintenance performed by possessing/owning unit.** A Depot-level Maintenance Assistance Request (IAW TO 00-25-107 or AFMCMAN 63-1202) has been submitted. After reviewing the -107 request, the AFMC Program Manager PM/PGM has determined that the most efficient way to carry out the work/repair is by having the possessing/owning unit perform the work directly when the unit has the technical expertise, the necessary equipment and is qualified to do so. This code is subject to agreement between the operating Major Command and the Program Manager. It will continue until the repair is completed or the aircraft is designated as flyable again. BU will not be used if repair instructions are outlined in field level Technical Orders. Aircraft will remain in BU only until the depot level workload performed by the unit is completed.

**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 Command 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 Command 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 that are awaiting depot-level work at an Organic or Contract facility, or at the aerospace vehicle location, that will be performed by a depot field team (Organic or Contract FT). "DJ" is to be used when AFMC assistance has been requested, and AFMC has officially accepted responsibility to repair the aerospace vehicle in accordance with TO 00-25-107.

**A17.21. DK - Contract Work.** Applies to aerospace vehicles and trainers undergoing depot level maintenance at a contractor depot repair facility for Programmed Depot Maintenance, modification, modernization, time compliance technical order, or repair. If an aerospace vehicle is receiving maintenance as "DK," it will be reported as being possessed by AFMC.

**A17.22. DL - Depot Delivery Flight.** Applies to aerospace vehicle flights for delivery to or from depot facilities, including training flights prior to entering the depot.

**A17.23. DM - Depot Level Maintenance Possession--Depot Level Work by Depot Field Team or Contract Field Team.** Applies to Aerospace vehicles undergoing depot level maintenance that is beyond organizational and/or intermediate level capability. The work is performed by Depot Field Teams (Organic or Contract) at the aircraft's location.

**A17.24. DN - Depot Level Assignment--Depot Level Work Resulting in MDS Change.** Applies to Aerospace vehicles undergoing an MDS change (Conversion) at an Organic or Contract depot repair facility. This depot-level work involves performing maintenance, modification, modernization, technical order compliance, and reconditioning tasks that result in a change in the Mission Design Series (MDS)—for example, converting a C-130H to an AC-130H. These aerospace vehicles are reported as both assigned and possessed by AFMC.

**A17.25. DO - Depot Level Maintenance Possession--Depot Work.** Applies to Aerospace vehicles and trainers undergoing Depot-level Maintenance, repair, modification, modernization, instrumentation, time compliance technical order (TCTO), or reconditioning at an Organic depot repair facility. Aerospace vehicles in "DO" are reported as possessed by AFMC.

**A17.26. DR - Post Depot/Contractor Maintenance.** Applies to aerospace vehicles after Organic depot work ("DO" or "DN"), Contract depot work ("DK" or "DN"), or Depot field team (Organic or Contract) work ("DM") maintenance has been completed and the vehicle is in

preparation for delivery to the organization that will possess it. (Preparation does not include FCF/OCF as that is part of the depot maintenance workload package.)

**A17.27. DT - Depot Possessed Test.** Aerospace vehicles provided to depot facilities (organic or contractor) to perform ground operational checks and flight test activities (FCF/OCF) that are not part of or related to official depot workload. This code typically applies when a flight-testing unit is collocated at a contractor depot facility which is developing a new capability or weapon system for USAF but can also be used for organic depot facilities who are providing flight test support for the new capability or weapon system per contractual agreement.

**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. Aircraft can be assigned EJ after being divested and approved by the AFMC fleet board for structural and other ground test requirements. For temporary ground tests the possession code only be changed to EJ and only for the duration of the ground test. Will be returned to appropriate possession code before resuming flight operations.

**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 in accordance with 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 DAF active 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. Commands 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 timeline 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 HAF 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 DAF Form 913. The assigned command determines how these aerospace vehicles will be used however, no change in external configuration is authorized and disposal requires HAF 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 HAF.

**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 an 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 will 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 be 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** DELETED.

**Attachment 19** DELETED.

## ATTACHMENT 20

## SAMPLE ICBM AND RSLP TERMINATION MESSAGE UNCLASSIFIED

**Figure A20.1. Sample ICBM and Rocket System Launch Program Termination Message (Unclassified). (See paragraph 3.6.3.)**

TO: AFMC/USAF-AVDO  
CC: Possessing and assigned Command, if applicable, intermediate Command  
AF/A4LM  
Appropriate AFLCMC PM  
SUBJECT: DAFI 21-103, ICBM or RSLP 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 Command.
5. Assignment PIC.
6. Possessing organization.
7. Possessing organization station location code.
8. Possession PIC.
9. Type termination code for ADN message.
10. Possessing Command.
11. Current Condition Status Code of Asset.
12. Name and rank of Operations Group Commander or designated representative.

**Attachment 21****SAMPLE ICBM AND RSLP 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: Command AVDO  
CC: Intermediate Command  
Appropriate AFLCMC PM  
AFMC/USAF-AVDO  
SUBJECT: DAFI 21-103, ICBM or RSLP 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 Command.
5. Assignment PIC.
6. Possessing organization.
7. Station location code.
8. Possession PIC from which the ICBM or RSLP is changing.
9. Type action code ("LF").
10. Possession to which ICBM or RSLP is changing.
11. Possessing Command.
12. Current Condition Status Code of Asset.
13. Remarks: Reason for change.
14. Name and DSN telephone number of the AVDO initiating change and message.

**Attachment 22** DELETED.

**Attachment 23** DELETED.

**Attachment 24** DELETED.

## 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 Command AVDO will retain forecast factors a minimum of 5 years. Due to differentiating mission requirements across the Command s, utilization of the unconstrained flying hour requirement (pre-President's Budget) is authorized as the Command deems applicable for each MDS. Command s 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 or similar study to determine operational requirement = Operational Requirement (OR)). Command A4s will request waivers for deviations of equation 1 from the MDS lead command. Additionally, approved deviations will be forwarded to AF/A4LM at AF.A4LM.Maintenance.Policy@us.af.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) – (So), (St). These are the number of sorties established by A3 needed to complete all aircrew contingency (So) and training (St) 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) – (FHo), (FHt). 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) – (ASDo), (ASDt): These are the average number of expected flying hours consumed during each contingency and training sortie.

Days Available to Fly (operational/contingency and training) – (Fdo), (Fdt): 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:

$$\frac{OR}{TAI} = AA_{std}$$

### 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.

## Attachment 26

TEMPLATE FOR ANNUAL PHYSICAL INVENTORY COMMAND AVDO AF AVDO  
MEMORANDUMFigure A26.1. Template for Annual Physical Inventory COMMAND AVDO AF AVDO  
Memorandum.

DEPARTMENT OF THE AIR FORCE HEADQUARTERS AIR FORCE RESERVE COMMAND	
	21 Mar 2022
MEMORANDUM FOR AFMC/AF AVDO AF/A4LM	
FROM: AFRC/A4MM 549 Pine Street Robins AFB GA 31098	
SUBJECT: Military Equipment Out of Cycle Aircraft Inventory	
1. All AFRC assigned aircraft have been physically inventoried and accounted for.	
a. Completed "eyes on" physical inventory of all assigned tail numbers on and off station	
b. Verified all deployed and depot possessed aircraft	
c. All inventory was verified in the MIS and in REMIS	
d. No errors found during reconciliations	
2. POC is NAME, OFICE SYMBOL, DSN, EMAIL	
	NAME, RANK, USAF Command

## Attachment 27

## AEROSPACE VEHICLE STATUS DETAIL CODE

Figure A27.1. Aerospace Vehicle Status Detail Code Reporting.

Detail Code	Category	Narrative
AC	Aircrew Certification	Captures time of unavailable certified aircrew (i.e., OCF or FCF qualified aircrew).
AL	Alert Status	Captures time spent waiting while aircraft is on alert or to go on/off.
BR	Backshop Repair	Captures time back shops are required to perform minor repairs/assessments.  Example: Discrepancy requires metal repair.
CF	Conflicting Maintenance in Progress	Captures time spent where another maintenance doesn't allow another maintenance activity to occur for safety reasons.
CU	Cure	Captures time spent in complete work stoppage due to manufacturer/technical data directed cure times for paints, sealants, and other items as required.
ED	Engineering Disposition	Captures time spent preparing, transmitting, and awaiting response for engineering disposition.  Example: Awaiting PIM to submit 107  Example: Delays in transmission (disconnected Ops or engineering not available)
EQ	Tools/ CTK	Captures time spent at a complete work stoppage due to unavailability of tools.
ET	Education/Training	Captures time spent conducting training.
FA	Facilities/Hangar/Spot Restriction	Captures time spent not performing maintenance due to hangar and/or isolated parking location availability.

		Example: Fuel cell maintenance, trim pads, hangars or Low Observable facility unavailable.
IE	Impounded Equipment	Captures time spent while equipment is impounded.
IM	Industrial Material	Captures time for mold release, B1/2, etc.
MF	MRT/Forward Support	Captures time spent awaiting remote maintenance personnel, equipment, or approval for alternate location maintenance.  Example: Awaiting approval for one-time flight.
MU	Munitions Support	Captures time spent awaiting munitions delivery/maintenance.
NS	Non-Standard Work Schedule	For ANG/AFRC/Contract non 24/7 shift operations/maintenance.
OT	Other	Captures time not already covered in other categories. Status notes will clearly state why other codes do not apply.  Example: Exercises, ramp freeze, FO searches, etc.
PA	Personnel APG/Crew Chief	Captures time at a complete work stoppage because of unavailability of maintenance APG/Crew Chief personnel.
PE	Personnel EE	Captures time at a complete work stoppage because of unavailability of maintenance EE personnel
PF	Personnel Fuels	Captures time at a complete work stoppage because of unavailability of maintenance Fuels personnel.

PH	Personnel Hydraulics	Captures time at a complete work stoppage because of unavailability of maintenance Hydraulics personnel.
PI	Personnel Avionics	Captures time at a complete work stoppage because of unavailability of maintenance Avionics personnel.
PJ	Personnel Jets/Propulsion	Captures time at a complete work stoppage because of unavailability of maintenance Jets/Propulsion personnel.
PM	Personnel Metal Tech/Sheet Metal	Captures time at a complete work stoppage because of unavailability of maintenance Metal Tech/Sheet Metal personnel.
PN	Personnel NDI	Captures time at a complete work stoppage because of unavailability of maintenance NDI personnel.
PO	Personnel All Others	Captures time at a complete work stoppage because of unavailability of maintenance all other personnel.
PS	Personnel Special Cert Roster	Captures time at a complete work stoppage because of unavailability of maintenance special cert roster personnel.
PW	Personnel Weapons	Captures time at a complete work stoppage because of unavailability of maintenance Weapons personnel.
PX	Personnel Security Forces	Captures time at a complete work stoppage because of unavailability of Security Forces personnel.
QH	Quiet Hours	Captures time spent where operations can't occur for local quiet hours for noise reduction.
RC	Repair Cycle	<p>Captures time spent performing on/off equipment repairs, operational checks, and associated follow-on maintenance.</p> <p>Note: This is not to be used for troubleshooting.</p> <p>Example: Maintenance personnel have moved past troubleshooting, have all</p>

		required parts, equipment/tools and are actively repairing the aircraft to return to a mission capable status.
RP	Production	<p>Captures time spent performing resource prioritization, NMC discrepancy identification and assignment of personnel. This code will apply to backshops when they are the primary owner of aircraft/component(s) that affect non-mission capable status aircraft.</p> <p>Example: Aircraft maintenance prioritized lower than others due to flying schedule.</p>
SC	Security	Captures pauses in work due to security threats to the mission.
SE	Support Equipment	<p>Captures time awaiting delivery of available support equipment.</p> <p>Example: Maintenance repairs on hold due to unavailability of hydraulic mule, re-fuel/de-fuel truck, AGE, or any other aviation support equipment profiled in DPAS.</p>
SP	Spot Restrictions	Captures time spent in location where they can't run engines, etc.
SU	Supply	<p>Captures time spent awaiting on supply processing/delivery once part arrives on station and/or traveling to and from supply warehouses. Starts at completion of AF Form 2005 by maintenance. Stops at arrival of part to decentralized materiel support (DMS)/flight line.</p> <p>Note: Does not apply to parts not available that drive NMCS status.</p> <p>Example: Maintenance personnel deliver AF Form 2005 to DMS /Supply, DMS /Supply requisition's asset from warehouse, DMS/Maintenance personnel travel to retrieve part from warehouse and</p>

		deliver/return to aircraft to continue repair action on aircraft.
SV	Awaiting Servicing	Captures time spent waiting on servicing, fuel, Lox, etc.
TD	PMC Home Station Return	Captures time spent in PMC status while TDY.
TE	Test Equipment	Captures complete work stoppage time because of test equipment such as TTU-205, fuel quality testers, etc.
TR	Transportation	Captures time spent waiting for vehicle support.
TS	Troubleshooting	<p>Captures time spent troubleshooting and identifying a discrepancy's root cause.</p> <p>Note: This is not to be used for repair.</p> <p>Example: Maintenance personnel are utilizing troubleshooting manuals, fault isolation manuals, bit logs, or wiring diagrams to determine a failed component or section of wiring that requires repair.</p>
TT	TCTO	Captures time spent waiting to accomplish a TCTO.
WA	Delay Due to Aircraft Wash	Captures time spent in non-FMC status, while waiting for an aircraft to be washed.
WX	Weather	Captures complete work stoppage time because of weather conditions.