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SECRETARY OF THE AIR FORCE**

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**AIR FORCE RESERVE COMMAND
Supplement 1**

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Operations Support

**AEROSPACE VEHICLE PROGRAMMING,
ASSIGNMENT, DISTRIBUTION,
ACCOUNTING, AND TERMINATION**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AFPD 16-4, *Accounting for Units, Installations, and Aerospace Vehicle*. It provides procedures for worldwide programming, assignment, transfer, distribution, accounting, and termination of Air Force aerospace vehicles. It applies to the US Air Force, Air National Guard, Air Force Reserve, Civil Air Patrol, and US Air Force Aero Clubs. It implements that portion of Department of Defense (DoD) 4160.21-M, *Defense Reutilization and Marketing Manual*, March 1990, with Change 1, that directs the transfer and disposal of excess aircraft. A glossary of references, abbreviations, acronyms, and terms is at attachment 1. Attachment 2 contains a listing of aircraft inventory terms.

(AFRC) This supplement implements and extends the guidance of Air Force Instruction (AFI) 16-402, 1 July 1997. The AFI is published word-for-word without editorial review. Air Force Reserve supplementary material is indicated by “(AFRC)” in boldface type. This supplement describes Air Force Reserve procedures to be used in conjunction with the basic instruction. Upon receipt of this integrated supplement discard the Air Force basic.

SUMMARY OF REVISIONS

This instruction aligns with AFPD 16-4, adds standardized terminology for aircraft inventory management (e.g. definition of Backup Aerospace Vehicle Authorizations was changed), and restores the programming section of AFR 27-15. This revision also changes the appropriate office symbols to reflect the Air Staff reorganization.

(AFRC) There are no changes to previous supplemental text.

Section A—General Definitions

1. Definitions:

1.1. Aerospace vehicle includes the following :

- Aircraft in Federal Supply Classification (FSC) 1510 and 1520.
- Remotely piloted vehicles and aerial target drones in FSC 1550.
- Missiles in FSC 1410.
- Space systems (Boosters, Upper Stages, and Satellites).

1.2. Assignment. The basic command to which the vehicle belongs. It differs from **possession** which shows the aerospace vehicle's current usage and organizational control. AFI 21-103, *Equipment Inventory, Status, and Utilization Reporting* (formerly AFRs 65-110 and 66-121) specifies the procedures about possession.

1.2.1. Command includes:

- Major commands (MAJCOM).
- Field operating agencies (FOA).
- Direct reporting units (DRU).
- Air National Guard.
- US Air Force Reserve.

1.3. Aerospace Vehicle Authorization and Inventory. **Authorization** refers to the number and type of aircraft an organization is programmed to possess. **Inventory** refers to the number of aircraft actually assigned to a unit and identified against a corresponding authorization. Authorizations and Inventory include (Attachment 3):

- **Primary Aerospace Vehicle Authorized (PAA):** Aircraft authorized for performance of the unit's mission (e.g. Combat, Combat Support, Training, Test and Evaluation, etc). The PAA forms the basis for the allocation of operating resources to include manpower, support equipment, and flying hour funds. The operating command determines the PAA required to meet their assigned missions.
- **Primary Aerospace Vehicle Inventory (PAI):** Aircraft assigned to meet the PAA.
- **Backup Aerospace Vehicle Authorized (BAA):** Aircraft authorized over and above the PAA to allow for scheduled and unscheduled depot level maintenance, modifications, inspections and repairs, and certain other mitigating circumstances without reduction of aircraft available for the assigned mission. Other mitigating circumstances may include specialized maintenance requirements (e.g. RAM replacement on the F-117), medium duration home station modifications, and unique squadron sizing and location.
- **Backup Aerospace Vehicle Inventory (BAI):** Aircraft assigned to meet the BAA.
- **Attrition Reserve (AR):** Aircraft procured to replace anticipated losses of PAI due to peacetime accidents or wartime attrition.

- Total Active Aerospace Vehicle Inventory (TAI): Total of all aircraft, determined by adding PAI + BAI + AR.

1.4. Purpose Identifier Code. The two letter aerospace vehicle purpose identifier code identifies a specific use or mission for that aerospace vehicle. The Air Force Data Dictionary (ADE AE-630, HQ AFCA/XPXD, Scott AFB) contains a complete list of these codes and their meanings. See Attachment 2 for an extract of the most pertinent purpose identifier codes.

1.5. Mission/Design/Series (MDS). Refers to the system of identifying various weapons systems. For example, an F-15C is a fighter (mission), designated 15 (design), and the third, or “C” in the series.

1.6. Fighter Wing Equivalent (FWE). Fighter aircraft are grouped into Fighter Wing Equivalents (FWE) where one FWE equals 72 PAA Combat Coded fighter/attack aircraft. FWEs do not include OA-10 Forward Air Control aircraft or those Air National Guard F-15s and F-16s that make up the Air Defense Force (ADF) for the Air Sovereignty mission of the contiguous United States.

Section B— Guidance

2. General Programming Background:

2.1. Force programming is an iterative process assigning and balancing current and projected weapons systems against requirements.

2.1.1. The requirements process determines the resources required to match our strategy. The Air Force develops, procures, and maintains weapon systems based on an identified mission requirement. Strategic planning, using the Joint Strategic Planning System, evaluates the threat, assesses existing capabilities, identifies deficiencies, examines alternatives, and provides recommendations on needed forces. The MAJCOMs identify, state, and validate operational needs for their assigned mission areas. HQ USAF may also identify, state, and validate operational needs in Air Force-wide situations.

2.1.2. The basic force structure is derived from Defense Planning Guidance plus the necessary training, test, backup and attrition reserve to sustain that force. HQ USAF Mission Panels (e.g., Power Projection, Global Mobility) match resources to the stated requirements. They then balance complementary systems (e.g., F-16s and F-117s, C-5s and C-17s) based upon mission requirements, weapon system availability and service life, and acquisition programs.

2.1.3. Weapon systems programmers match system capabilities with wartime and peacetime mission requirements. The programmer then balances test, training, and attrition needs to support the weapons systems. This balance changes throughout the life-cycle of an individual system. A new MDS (e.g., F-22) will initially be 100% test to determine system capabilities and limitations, and to begin tactics development. As the system enters the operational phase, test authorizations give way to a high percentage of training authorizations needed to train aircrew and support personnel. Gradually the operational authorizations acquire the majority of the resources.

2.1.4. The BAI and attrition reserve authorizations are also cyclical based on system life-cycle. Initially each unit will receive its full PAI and BAI allowance. At the start of production, attrition reserve resources are available through the production line, negating the requirement to stock additional aircraft at operational units above PAI and BAI. As the production line terminates, sufficient airframes must be procured to sustain the force structure through its forecast life. These

attrition reserve aircraft are distributed to operational and training units to evenly spread life-cycle fatigue and ensure all aircraft receive periodic system upgrades and modifications. As a system nears the end of its life cycle, the attrition reserve will fade to zero. Finally, programmatic actions balance remaining airframes to unit requirements, ultimately resulting in unit conversions to follow-on weapon systems.

3. Force Programming Policies and Guidelines :

3.1. The US Air Force aerospace vehicle inventory has two major categories--**active** and **inactive**. HQ USAF force programmers determine the authorizations and HQ USAF/XPPE assigns **active** aerospace vehicles to commands for Air Force operational, support, training, and test missions. HQ USAF/XPPL assigns **inactive** aerospace vehicles to other than operational mission requirements.

3.2. Programming responsibilities include both the number of PAA, BAA, and AR assigned per unit and the designation of the purpose identifier code for which those aerospace vehicles are assigned.

3.3. The "USAF Program, Aerospace Vehicles, and Flying Hours" (PA) program document reflects the allocation assignment, mission, and program element code (PEC) of all aerospace vehicles in the inventory. Active inventory totals permitting, the PA loads as primary aircraft inventory (PAI) a number equal to primary aircraft authorization (PAA).

3.4. If the inventory of active aerospace vehicles is more than needed to fill the PAA plus BAA, the excess becomes AR. If AR exceeds 10% of the total of PAI plus BAI, force programmers may consider storing the excess in AMARC. However, costs for AMARC storage and AMARC regeneration times must be considered before choosing this option. NOTE: BAI vehicles supporting PAI depot maintenance requirements will have the same purpose identifier code and PEC as the PAI vehicles.

3.4.1. If the inventory is less than the PAA, the PAI will be less than PAA and there will be no BAI or AR.

3.5. Force programmers will use standardized terminology and purpose identifier codes for programming, identifying and reporting aircraft (see Attachment 2).

3.5.1. Each aerospace vehicle authorization has a purpose identifier code that describes the predominant mission for which aircraft are assigned against that authorization. In general, all aerospace vehicles possessed by a squadron will all have the same purpose identifier code, determined by the primary mission of that squadron (e.g. Combat, Training, Test, etc.). Inventory groupings by purpose identifier codes are:

- Primary Mission Aerospace Vehicle Inventory (PMAI): Aircraft assigned against a unit PAA for the performance of its wartime mission. Includes Purpose Identifiers CC, CA and IF.
- Primary Training Aerospace Vehicle Inventory (PTAI): Aircraft assigned against a training unit PAA primarily for technical and specialized training for crew personnel or leading to aircrew qualification. Includes Purpose Identifier TF.
- Primary Development/Test Aerospace Vehicle Inventory (PDAI): Aircraft assigned against a test unit PAA primarily for testing of the aircraft or its components for purposes of research, development, test and evaluation, operational test and evaluation, or support for testing programs. Includes Purpose Identifiers EI, CB, and EH.

- Primary Other Aerospace Vehicle Inventory (POAI): Aircraft required for special missions not elsewhere classified. Includes Purpose Identifiers CF, ZA and ZB.

3.6. HQ USAF force programmers will program active aerospace vehicles (PAA, BAA, and AR) IAW the below guidelines. These determining factors and the resultant authorizations will be reevaluated during each annual budget cycle to ensure they continue to meet mission requirements.

3.6.1. Primary Aerospace Vehicle Authorization (PAA). Program for sufficient numbers of PAA based upon validated MAJCOM needs and fiscal guidance. Unit size is a function of mission effectiveness, span-of-control, facility size and availability, airfield capacity (both peacetime operations and deployability throughput), total projected PAA, and Active and Reserve Component mix. For certain MDSs comprised of different blocks (i.e., different engines, avionics capabilities...), efforts should be made to regionalize these assets to ease maintenance and minimize cost.

3.6.2. Backup Aerospace Vehicle Authorization (BAA). Program sufficient BAA to allow for scheduled and unscheduled depot level maintenance, modifications, inspections and repairs, and certain other mitigating circumstances without reduction of aircraft available for the assigned mission. Other mitigating circumstances may include specialized maintenance requirements (e.g. RAM replacement on the F-117), medium duration home station modifications (e.g. FALCON UP), and unique squadron sizing and location. Typically, each unit will have at least 1 BAA.

3.6.3. Attrition Reserve (AR). Attrition reserve is calculated based upon the number of PAA multiplied by the forecast (or historical) peacetime attrition rate to find the number of aircraft lost each year. That number is then multiplied over the expected service life of the weapon system to determine the required attrition reserve. Initially programmers will flow new production aircraft directly to fill unit PAA and BAA requirements. As new production nears completion, aircraft delivered above PAA and BAA requirements will be distributed by MAJCOMs to all operational and training units to hold as attrition reserve. Programmers must monitor actual attrition to update the projected force structure.

3.7. Purpose Identifier Code Specifics. Force Programmers will follow the below general guidelines for programming forces based upon the purpose identifier code for the unit of assignment.

3.7.1. Mission Aircraft. Program PAA as follows (plus the appropriate number of Backup and Attrition Reserve as specified above):

- Combat (CC-coded):
 - Establish a total force mix of the required number of Fighter Wing Equivalent (FWE) of air superiority, interdiction, close air support, long range and deep attack aircraft as directed in Defense Planning Guidance (DPG) and Congressional language.
 - Program sufficient CC-coded OA-10 aircraft to support the required FWE total force mission requirements.
 - Program sufficient number of aircraft to support the approved Air Defense Force requirement.
 - Program sufficient CC-coded bombers to provide the approved number of deployable aircraft.
 - Special Operations Forces (SOF) – Program according to AF SOF Master Plan to support CINC requirements as approved by the Air Force Council.

- Combat Support (CA and IF-coded). Program aircraft to satisfy mission requirements:
 - Strategic Airlift – Airlift required to provide the Million Ton-Miles per Day (MTM/D) specified in DPG or in the Mobility Requirements Study Bottom-Up Review Update (MRS BURU).
 - Tactical Airlift – Sufficient assets to support theater airlift requirements as directed by Joint Forces Commander.
 - Aerial Refueling -- Sufficient assets to support the demands of deployment, employment and redeployment IAW the DPG. The Air Force is the executive agent for air refueling and must meet all Services' requirements.
 - Aeromedical Airlift – Sufficient assets to support wartime patient movement.
 - C4I/Surveillance/Reconnaissance Aircraft -- Sufficient assets to meet two nearly simultaneous Major Regional Conflict (MRC) scenarios with an acceptable level of risk.
 - Operational Support Aircraft – Program sufficient assets for wartime movement of passengers and priority cargo.
 - Search and Rescue – Program assets according to Rescue Force Structure Plan to support CINC requirements as approved by the Air Force Council.
 - Special Operations Forces (SOF) -- According to AF SOF Master Plan to support CINC requirements as approved by the Air Force Council.

3.7.2. Training Aircraft (TF). Training aircraft requirements are determined by the annual number of students to train, the number of syllabus sorties required to train each student and the sustainable aircraft utilization (UTE) rate. The student requirements are determined from a combination of new aircrews, re-qualification training for re-entering aircrews (e.g., from staff assignments, other type aircraft...), students in the Foreign Military Sales (FMS) program, Air National Guard and Air Force Reserve requirements. This category includes both Undergraduate Flight Training assets (e.g. T-37, T-38) and Replacement Training Unit aircraft (e.g. F-16s assigned to AETC at Luke AFB). HQ USAF force programmers will validate MAJCOM training aircraft requirements during each budget cycle. Program sufficient TF-coded PAA (plus the appropriate number of Backup and Attrition Reserve aircraft as specified above) to support AETC and MAJCOM programmed flying training requirements. The exact percentage of TF to CC/CA-coded aircraft will vary by weapon system type and projected training load.

3.7.3. Test Aircraft (EI, EH, CB). Test aircraft programs support two broad categories: Development Test and Evaluation (DT&E) and Operational Test and Evaluation (OT&E). DT&E is developmental testing for new weapons systems and follow-on testing on modifications to weapons systems, and assessing hardware and/or software specifications. OT&E entails operational testing of software and hardware designs to ascertain their acceptability in their operationally defined environment, and impacts of new or developing capabilities on employment doctrines. System Program Offices (SPOs) determine the number of each type of aircraft needed to accomplish ground, flight, and structural testing, as well as initial OT&E, according to the Test and Evaluation Master Plan (TEMP). Likewise, AFOTEC and MAJCOMs determine aircraft required to accomplish follow-on OT&E requirements as specified by the using commands. Some DT&E test aircraft have unique modifications that would prevent them from returning to the operational fleet. Force programmers will validate test requirements during each budget cycle. Program Test aircraft as follows.

- DT&E Aircraft. Program appropriate number of initial production aircraft to accomplish developmental testing of a new weapon system. HQ AFMC, the Weapons System Program Office (SPO), and the appropriate contractor will determine the number of aircraft required for initial and follow-on DT&E. Program appropriate number of follow-on DT&E aircraft to accomplish DT&E on modifications to weapon systems.
- AF/XPPL will receive DT&E test aircraft changes for follow-on test requirements from HQ AFMC/DOO, and will coordinate the appropriate amount of EH, EI and EJ test aircraft per weapon system with the respective force programmer and AF/TER. HQ AFMC/DOOR will coordinate new requirements and receive concurrence for the additional test aircraft from the owning MAJCOM prior to submitting aircraft Program Change Requests (PCRs) to HQ USAF.
- OT&E Aircraft. Coordinate with ACC/XP to determine the appropriate amount of CB-coded aircraft.
- HQ AFMC/DO and MAJCOM FMC/DO and MAJCOM XPs will determine test PAA and flying hour authorizations according to the TEMO, validated test program requirements, and fiscal reality.

3.7.4. Other Aircraft (CF, ZA, ZB). Program PAA as necessary to meet the MAJCOM validated mission requirements for other Operational Support and Special missions (e.g. missile field operational support, Presidential support, and priority personnel airlift support).

3.7.5. Strategic Missile Weapon Systems. Strategic intercontinental ballistic missile (ICBM) backup aerospace vehicle inventory (BAI) is defined by the number to be deployed plus the number required for a robust testing program and the number required for the aging and surveillance testing.

3.8. HQ USAF/XPPL, in conjunction with AF force programmers, assigns **inactive** aerospace vehicles to other than operational mission requirements. These requirements include ground training, storage for future aircraft use to include parts, and lease/loan. HQ USAF/XPPL will coordinate with HQ USAF/XO/IL, and SAF/IA prior to any reassignment of aircraft from inviolate storage. HQ USAF/XPPL assigns a purpose identifier code to each inactive aerospace vehicle describing its status, such as:

- Storage (XS, XT, XV, XX).
- Lease-loan (XY, NY).
- Contractor Test Government Furnished Property (EB).
- Permanently grounded (cannot practicably return to flyable condition) (TX).

Section C— Procedures for Transferring and Terminating Aerospace Vehicles

4. Approval. The following actions require HQ USAF/XPP approval with HQ USAF/XO/IL coordination:

- Assigned command changes.
- PEC and active purpose identifier code changes.
- Inactive purpose identifier code changes

4.1. Assignment Transfer Procedures:

4.1.1. HQ USAF/XPPE issues AF Form 913 (**Aerospace Vehicle Project Action**) to HQ AFMC/LGMM-AVDO. HQ AFMC is the AF Aerospace Vehicle Distribution Office (AVDO), and implements vehicle allocations directed by HQ USAF approved AF Form 913.

4.1.2. The HQ AFMC/LGMM-AVDO will provide copies of this form to the applicable System Program Director (SPD) and other activities as required. HQ AFMC/LGMM-AVDO also issues an assignment directive on reported aerospace vehicles available for transfer (See AFI 21-103).

4.1.3. Commands will report reassignment of aerospace vehicles to HQ AFMC/LGMM-AVDO not earlier than 30 days before transfer. Upon receipt of this directive, the losing command AVDO will send the information to the releasing command AVDO by message. The losing and gaining activities will follow the reporting requirements in AFI 21-103.

4.2. Change of Possession:

4.2.1. A command needing additional aerospace vehicles for short-time mission requirements (nine months or less) can obtain a "possession only" change. A request exceeding nine months may require both assignment and possession changes. Depot maintenance of nine months or more with no change in vehicle MDS requires no change to possession or assignment.

4.2.2. Air Force Materiel Command (AFMC) will assume assignment and possession of aerospace vehicles undergoing an MDS conversion at an AFMC depot or contractor facility. The gaining command will assume assignment of an aircraft requiring programmed depot maintenance (PDM) immediately upon input to PDM.

4.2.3. A "possession only" change arranged by inter-command coordination is appropriate when:

- The assigned command, purpose identifier code, and assigned PEC remain unchanged.
- The affected commands jointly arrange and agree on maintenance and logistical support.
- Both commands comply with AFI 21-103 possession reporting requirements at the time of the actual change in possession.

4.3. Redistribution and Termination of Excess Aerospace Vehicles. Commands will report all excess aerospace vehicles by MDS and serial number to HQ USAF/XPPL with info copies to HQ USAF/XPPE, HQ AFMC/LGMM-AVDO, and the Weapon System SPD, (RCS: HAF-XPPL(AR)7304 – Table 2).

4.3.1. Losing MAJCOM and Weapon System SPD identify excess aerospace vehicles by serial number, and identify all known US Air Force operational requirements for these aerospace vehicles to include spares support.

4.3.2. Lead Command will (when requested) assist HQ USAF/XPPL in:

- Collecting MAJCOM requirements for the excess aircraft.
- Prioritizing requirements for the excess aircraft.
- Recommending serial numbers to fulfill specific requirements.

4.3.3. HQ USAF/XPPL coordinates with the HQ USAF Force Programmers, XO, IL, and SAF/IA on the reassignment of excess aerospace vehicles on the AF Form 913, and develops an air-

craft disposition plan for HQ USAF/CC approval (Attachment 4), when required, to fill other requirements in the following priority:

- Replacement of flyable and operational US Air Force aerospace vehicles.
- Mission support needs (to include spares support, ground and aircraft battle damage repair trainers).
- United States Air Force Museum (USAFM) needs for historical purposes and static display.
- Other Military Services and DoD agencies needs.
- Foreign Military Sales and Security Assistance Program needs.
- Other Federal Government Agencies. Transfers are through General Services Administration.

4.3.4. HQ USAF/XPPL will:

- Screen those aerospace vehicles excess to US Air Force operational needs with the other Military Services and DoD agencies and issues instructions to HQ AFMC/LGMM-AVDO to screen those noncombat aircraft located on the operational ramp with GSA, when required. Upon notification by the respective SPD for aircraft disposal, AMARC will screen the noncombat type aircraft with GSA. Combat and combat-type aircraft are not offered to GSA.
- Issue transfer or status change instructions and authorizations on an AF Form 913 through HQ USAF/XPPE for all aerospace vehicles excess to the US Air Force operational forces needs.
- Provide instructions to reclaim aerospace vehicles at operational locations. For the AMARC-stored aircraft, HQ USAF/XPPL will initiate the code change to XX and will request the AFMC/LGMM-AVDO to issue a reclamation project. Reclamation-type actions will be coordinated with the HQ USAF force programmer, HQ USAF/ILMY and SAF/IAW, as required.

4.3.5. HQ USAF Force Programmers will:

- Advise HQ USAF/XPPL of the number of aircraft and timeframe that aircraft will become excess to operational requirements.
- Provide initial coordination on HQ USAF/XPPL developed disposition plans for the excess aircraft.
- Perform an annual review of AMARC-stored aircraft, in conjunction with HQ USAF/ILMY, the Weapon System SPD, and SAF/IAW with the objective to place the aircraft currently in storage on reclamation to alleviate spare parts buy requirements or to release stored noncombat aircraft for screening for GSA needs. HQ USAF/XPPL will initiate disposition plan changes or code changes based on the results of the review.

4.3.6. HQ USAF/ILMY, as the single focal point for HQ USAF/IL, will:

- Be the IL focal point for the Air Force Reclamation Program and all reclamation issues.
- Provide reclamation potential savings to HQ USAF/XPPL for aircraft disposition plans.
- Develop and oversee metrics to monitor the progress of the Air Force Reclamation Program.
- Ensure the SPDs develop and/or update migration plans for the AMARC-stored aircraft with emphasis on reclamation. The respective Migration Plans will be coordinated by HQ USAF/ILMY through the Air Staff. Migration plans will include the current fiscal year plus a projection for the

following ten years. Identification of the specific aircraft serial numbers are required in order to effect current year aircraft storage code changes.

- Provide advice on parts reclamation requirements for each weapon system.
- Take the lead to ensure that the Weapon System SPDs, HQ USAF force programmers, and SAF/IAW perform an annual review of the aircraft in inviolate, spares support, and excess storage categories with the objective to place the aircraft on reclamation to alleviate spare parts buy requirements.
- Provide oversight and coordination on HQ USAF/XPPL developed plans for the excess aircraft.
- In coordination with the appropriate weapon system SPO, conduct a cost-benefit analysis to determine the feasibility of transferring excess attrition reserve aircraft to AMARC for storage until needed.
- Coordinate requests from the weapon system SPD for removal of parts to satisfy operational mission needs from aircraft stored in the inviolate purpose codes (XS and XT) with HQ USAF Force Programmer/XO/XPPL and SAF/IAW (only for XT).

4.3.7. SAF/IAW, as the single focal point for SAF/IA, will:

- Identify security assistance/foreign military sales aircraft needs for aircraft disposition plans prepared by HQ USAF/XPPL.
- Provide oversight and coordination on HQ USAF/XPPL developed plans for the excess aircraft identified for security assistance.
- Begin all actions dealing with transfer of aerospace vehicles (new production, active and inactive inventory) to foreign governments.
- Provide a signed copy of the legal SA case to HQ USAF/XPPL for preparation of project action authorizing aircraft transfer.
- In conjunction with AFMC SPDs annual review of the AMARC-storage aircraft, SAF/IAW will perform an annual review of the Security Assistance Hold Storage category with the objective to have HQ USAF/XPPL recategorize the aircraft to another storage category if FMS and SAP market no longer needs the aircraft.

4.3.8. The AFMC Weapon System SPD will:

- Advise HQ USAF/XPPL on condition of excess aircraft to include modification, additional operational requirements and any spares needs and restrictions on export of aircraft or aircraft components.
- Recommend to HQ USAF/XPPL the required storage codes for those aerospace vehicles requiring storage at the Aerospace Maintenance and Regeneration Center (AMARC).
- Review the overall plans for aircraft stored at AMARC and recommend storage code changes to HQ USAF/XPPL to satisfy operational mission needs to include reclamation.
- Review and update their migration plans for the AMARC-stored aircraft at the end of each fiscal year. The Migration Plans will be submitted to HQ USAF/ILMY for coordination through the Air Staff. Migration plans will include the current fiscal year plus a projection for the following ten

years. Identification of the specific aircraft serial numbers are required in order to effect current year aircraft storage code changes.

- Perform an annual review, in conjunction with the HQ USAF force programmer, HQ USAF/ILMY and SAF/IAW to determine when the aerospace vehicles stored at AMARC need to be reclaimed.
- Determine disposition of aerospace vehicle residue and associated support equipment assigned to that aircraft in the event of aircraft destruction.
- When parts are needed from the AMARC-stored aircraft coded XS and XT to satisfy operational mission needs, initiate a formal request to HQ USAF/ILMY for approval to remove specific parts from these aircraft. The request should address the issue driving the part(s) removal, and subsequent actions that will be taken to replace the part or recode the aircraft accordingly.

4.4. Request for Aircraft for Historical Display:

4.4.1. Organizations authorized under AFI 35-204, *Air Force Art and Museum Programs* to receive display aircraft should submit a written request to USAFM/MUS, 1100 Staatz Street, Wright Patterson AFB OH 45433-7102. The MAJCOM must coordinate on the request before submission and include the type aircraft desired, serial number (if applicable), a point of contact, and telephone number. The museum then formally agrees to request the aircraft from HQ USAF/XPPL and accept accountability when the aircraft is available. The US Air Force Museum (USAFM) maintains all requests and fills them in the order received. Requesting organizations must be sure they can reclaim, demilitarize, perform hazardous material removal, and fund the aircraft transfer before submitting a static display request.

4.4.2. All other requests for static display aircraft should be processed in accordance with procedures for the disposition of excess aircraft in AFMAN 23-110, Volume 6, Chapters 8 and 9. The Commander, AMARC, may exercise Air Force authority to provide those organizations with excess condemned or obsolete aerospace vehicles. AMARC/CC will:

- Ensure requesting organizations qualify under 10 U.S.C. 2572.
- Comply with all provisions of DoD Manual 4160.21-M.

Section D— Responsibilities

5. Responsibilities:

5.1. HQ USAF/XPPE, with concurrence of the affected HQ USAF force programmer, will

- Initiate and issue AF Form 913, **Aerospace Vehicle Project Action**, to assign aerospace vehicles to commands to meet operational requirements.
- Approve and authorize active purpose identifier codes, program element codes (PEC), and changes to these codes.

5.2. HQ AFMC is the Air Force Aerospace Vehicle Distribution Office (AVDO) and implements aerospace vehicle allocations directed by HQ USAF.

5.2.1. HQ AFMC LGMM-AVDO will:

- Issue implementing instructions on HQ USAF assignment directives and ensure prompt action on each assignment.

- Start reimbursement action for aerospace vehicles delivered in support of the Security Assistance Program and other reimbursable programs. Report the information as required by AFI 16-101, International Affairs and Security Assistance Management (formerly AFRs 50-50, 75-43, 130-1, 130-2, and 200-5).
- Maintain a centralized record of assignment and possession for each aerospace vehicle in the Air Force inventory.
- Maintain the stock record account (FA2303) for aerospace vehicles procured by or assigned to active and reserve force organizations.
- Submit the RCS: HAF-XPPE(M)7201, HQ USAF Aerospace Vehicle Inventory, report listed in Table 1.

Table 1. Report Required From AFMC.

Prepare	As of	Description	Recipient	Due In
RCS: HAF-XPPE(M) 7201, HQ USAF Aerospace Vehicle Inventory, Report	Last day of each month	Basic US Air Force aerospace vehicle inventory and net change to date for the month	SAM/GAPM	The 10th work day after the first of each month

5.3. Commands will:

- Carry out the assignments directed by HQ USAF and implemented by HQ AFMC.
- Recommend actions to HQ USAF force programmers that will yield a better distribution of aerospace vehicles at each Air Force base under the command.
- Contact HQ AFMC/LGMM-AVDO when a vehicle transfer or an assignment directive will take longer than 30 days, or when the transfer cannot meet the assignment instruction.
- Inform HQ USAF force programmers and data base managers (information copy to HQ AFMC/LGMM-AVDO) no later than 30 days before an assignment end or a vehicle becomes excess to command requirements.
- Report to AMARC/FMW and HQ AFMC/LGPW, 30 days before each fiscal year quarter, the aircraft scheduled for input during the forthcoming quarter (Use format in Table 2.). Update the forecast by message when necessary.
- Ensure the organization delivering the aircraft coordinates the delivery date with AMARC/FMW within 7 days before delivery to AMARC (required during MINIMIZE). The delivery organization will:
 - Send a message to AMARC/FMW, MAJCOM/AVDO, HQ AFMC/LGPW and HQ AFMC/LGMM-AVDO stating the name, office symbol, and telephone number of the AMARC action officer who coordinated the delivery date.
 - Coordinate with AMARC/FMW on any change to the agreed delivery date.
- Ensure the aircraft delivered to AMARC are in an operational condition as stated in the excess message to HQ USAF/XPPL.

Table 2. Sample RCS: HAF-XPPL(AR)7304, Forecast of Flight Delivery of Excess/Storage Aircraft to AMARC.

Command	Date	MDS	Serial No	US Air Force Project
ANG	27 Jul	F-4D	660076767	STT 3F-097
	5 Aug	F-4D	68005959	STV 3F-190

NOTE:

This report is designated Emergency Status Code (ESC) D. Discontinue reporting during emergency conditions. Do not send this report by message during MINIMIZE.

5.3.1. Command AVDO will:

- Request initial assignment or assignment extension from HQ USAF/XPPE/XPPL, 1070 Air Force Pentagon, Washington DC 20330-1070 with an information copy to HQ AFMC/LGMM-AVDO, 4375 Chidlaw Road, Suite 6, Wright Patterson AFB OH 45433-5006. Send the request as soon as possible, but no later than 60 days before the required date. Send excess aircraft notification to HQ USAF/XPPL, info HQ USAF/XPPE and HQ AFMC/LGMM-AVDO.
- Check the distribution of aerospace vehicles within the command.
- Monitor aircraft reassignments.
- Change a specific vehicle purpose identifier code or PEC under the following conditions:
 - When the command follows the reporting requirements in AFI 21-103 at the time of actual change in purpose identifier code or PEC.
 - When the command notifies HQ USAF/XPPE and HQ AFMC LGM-AVDO by message or mail of the purpose identifier code or PEC change within 2 duty days after the date of change. Include the following in the notification:
 - Assigned command.
 - Mission design series (MDS).
 - Serial number, old purpose identifier code and PEC.
 - New purpose identifier code and PEC.
 - Date of change

NOTE:

During periods of MINIMIZE, mailing this information is appropriate.

5.3.1. (AFRC) HQ AFRC/LGQRA is designated aerospace vehicle distribution officer (AVDO) for all AFRC aerospace vehicles. Numbered air force (NAF) commanders designate an AVDO for each NAF headquarters. Commanders of units having aerospace vehicles assigned to the unit, designate an AVDO for their respective units. When two units have the same type aerospace vehicles assigned and are located on the same base, the wing commander designates an AVDO to represent both units.

5.4. HQ AFMC/LGMM-AVDO will monitor each termination action consistent with AFI 21-103 and adjust the inventory file, as appropriate.

5.4.1. Unit AVDO will:

- Coordinate with the persons responsible for preparing the reports required by AFI 21-103 on all transfers of aerospace vehicles.
- Prepare and distribute DD Forms 1149, Requisition and Invoice/Shipping Document. Get the signature of aircraft delivery pilots and distribute documents per AFI 21-103.
- Ensure the maintenance officer certifies each transferred aerospace vehicle for condition, completeness of equipment, and serviceability (see Technical Order 00-20-1 and AFI 21-103).

5.4.1. (AFRC) The AVDO at each unit is responsible for accomplishing transfers directed by AFRC within 5 days after receipt of notification unless otherwise specified. If transfer cannot be made within the specified time, furnish a request for authority to delay the transfer with full explanation, to the NAF AVDO. If delay request is acceptable at NAF level, send with an indorsement to HQ AFRC/LGQRA. Where time is a factor, use telephone conversation, but follow with written communication.

5.4.2. (Added-AFRC) Handle intracommand transfers between AFRC units as follows:

5.4.2.1. (Added-AFRC) Assignment. Do not reassign aircraft between AFRC units without the approval and receipt of an assignment directive from Headquarters Air Force Reserve Command. Send requests for reassignment of aircraft between AFRC units to HQ AFRC/LGQ/DOT.

5.4.2.2. (Added-AFRC) Possession. Change of aircraft possession between squadrons in the same wings is at the discretion of the wing commander. On all changes of possession, advise HQ AFRC/LGQRA/DOTSF whenever allocated flying hours are to be charged to the unit where the aircraft is assigned or the unit which currently possesses the aircraft. Comply with AFI 21-103 reporting procedures on all possession changes.

5.4.2.3. (Added-AFRC) Coordination. Each unit AVDO coordinates with the AVDO at NAF level who will, in turn, coordinate with HQ AFRC/LGQRA. Refer all inquiries or problems concerning aircraft transfers to HQ AFRC/LGQRA via the NAF AVDO.

6. Form Prescribed. AF Form 913, **Aerospace Vehicle Project Action.**

JOHN W. HANDY, Maj General, USAF
Director of Programs and Evaluation

Attachment 1

GLOSSARY OF REFERENCES, ABBREVIATIONS, ACRONYMS, AND TERMS

References

DoD 4160.21-M, *Defense Reutilization and Marketing Manual*, March 1990, with Change 1
CJCSI 4410.01A, *Standardized Terminology for Aircraft Inventory Management*, 10 April 1996
AFPD 16-4, *Accounting for Units, Installations, and Aerospace Vehicles*
AFPD 23-5, *Reusing and Disposing of Materiel*, 16 April 1993
AFM 16-101, *International Affairs and Security Assistance Management* (formerly AFRs 50-50, 75-43, 130-1, 130-2, and 200-5)
AFMAN 23-110, Volume 6, *Excess and Surplus Personal Property*, 14 November 1994
AFI 21-103, *Equipment Inventory, Status, and Utilization Reporting* (formerly AFRs 65-110 and 66-12)
AFI 35-204, *Air Force Art and Museum Programs* (formerly AFRs 190-1 and 190-4)

Abbreviations and Acronyms

AFI—Air Force Instruction
AFM—Air Force Manual
AFMC—Air Force Materiel Command
AFPD—Air Force Policy Directive
AMARC—Aerospace Maintenance and Regeneration Center
AVDO—Aerospace Vehicle Distribution Office
DoD—Department of Defense
DRU—Direct Reporting Unit
DT&E—Development Test and Evaluation
FOA—Field Operating Agency
FSC—Federal Supply Class
MAJCOM—Major Command
MDS—Mission Design Series
OT&E—Operational Test and Evaluation
PEC—Program Element Code
PDM—Programmed Depot Maintenance
RCS—Report Control Symbol
RDT&E—Research, Development, Test, and Evaluation
SECDEF—Secretary of Defense

SPD—System Program Director

T&E—Test and Evaluation

USAFM—US Air Force Museum

U.S.C.—United States Code

Terms

Attrition Reserve—Aircraft required to replace primary aircraft inventory losses in a given year.

Backup Aerospace Vehicle Inventory—Aircraft above the primary mission inventory to permit scheduled and unscheduled depot level maintenance, modifications, inspections and repair and certain other mitigating circumstances without reduction of aircraft available for the assigned mission. Other mitigating circumstances may include specialized maintenance requirements (e.g. RAM replacement on the F-117), medium duration home station modifications, and unique squadron sizing and location.

Bailment—Aircraft furnished to and under the controlling and physical custody of a non-government organization pursuant to the requirements of a government contract. Purpose Identifier Codes EB, ED, DN, VN, and XU.

Drones—An unmanned aircraft remotely controlled for testing or target training.

Foreign Military Sales—Aircraft in storage, bailment, used as government furnished property, on loan or lease outside the Defense establishment, or otherwise not available to the military services for the purpose of sale to foreign governments. Purpose Identifier Code XT.

Lease—Military aircraft provided to agencies and organizations outside the Federal Government on a temporary basis. Purpose Identifier Code XY.

Loan—Military aircraft provided to other Federal Government departments and agencies on a temporary basis. Purpose Identifier Code NY.

Maintenance Training—Aircraft employed for ground training which do not require airborne operations. Purpose Identifier TX.

Primary Aerospace Vehicle Authorization (PAA)—Aircraft authorized for performance of the unit's mission (e.g. Combat, Combat Support, Training, Test and Evaluation, etc). The PAA forms the basis for the allocation of operating resources to include manpower, support equipment, and flying hour funds. The operating command determines the PAA required to meet their assigned missions.

Primary Aerospace Vehicle Inventory (PAI)—Aircraft assigned to meet the primary aircraft authorization. Includes PMAI, PTAI, PDAI and POAI.

Primary Development/Test Aerospace Vehicle Inventory (PDAI)—Aircraft assigned primarily for the test of the aircraft or its components for purposes of research, development, test and evaluation, operational test and evaluation, or support for testing programs. Purpose Identifiers EI, CB, and EH.

Primary Mission Aerospace Vehicle Inventory (PMAI)—Aircraft assigned to a unit for performance of its wartime mission. Purpose Identifiers CC, CA, and IF.

Primary Other Aerospace Vehicle Inventory (POAI)—Aircraft required for special missions not elsewhere classified. Purpose Identifiers CF, ZA, and ZB.

Primary Training Aerospace Vehicle Inventory (PTAI)—Aircraft required primarily for technical

and specialized training for crew personnel or leading to aircrew qualification. Purpose Identifier TF.

Reclamation—Aircraft removed from operational service due to damage, depreciation, administrative decision, or completion of projected service life.

Reconstitution Reserve—Aircraft stored or on the ramp which are planned for return to the operating forces in the event of mobilization, replacement, or reconstitution.

Storage—Aircraft removed from the active inventory and held in a preserved condition. Purpose Identifier Codes XS, XV, and XX.

Total Active Inventory (TAI)—Aircraft assigned to operating forces for mission, training, test, or maintenance functions. Sum Total of PAI + BAI + AR.

Total Inactive Inventory (TII)—Aircraft in storage, bailment, loan or lease outside the defense establishment, used as Government Furnished Property, or otherwise not available for military service.

Total Overall Aerospace Vehicle Inventory (TOAI)—The sum of the total active inventory and the total inactive inventory.

Attachment 2

PURPOSE IDENTIFIER CODES

A2.1. Active Inventory.

Code	Short Title	Use Description
CA	Combat Support	Direct support of units engaged in conflict
CB	Combat Tactics OT&E	Developing and evaluating operational employment ability
CC	Combat	Delivering munitions or destructive material against or engaged in direct contact with enemy forces
CF	Combat Auxiliary Support	Accomplish essential functions that cannot be performed economically by CC or CA units
EH	Test Support	Participation in test programs
EI	Test	Complete systems evaluation or testing to improve the capabilities of the weapon system
IF	Industrial Fund	Accomplishment of single manager operations for airlift services. Funded through DBOF(T)
NY	Non-Appropriated Fund	On loan to non-appropriated fund activities, e.g. flying clubs
TF	Training	Formal course primary student or combat crew training
ZA	Special Activity	Special Missions, e.g. Embassy Liaison, Presidential Support
ZB	Operational Support	Air Force directed support airlift, e.g. priority personnel or cargo

A2.2. Inactive Inventory.

Code	Short Title	Use Description
DN	Depot Assignment	Depot level work resulting in an MDS change
EB	Contractor Test	Government Furnished Property for contractor use for a major command directed funded and operated maintenance program
ED	Prototype Test	Unaccepted prototype, experimental, or preproduction aircraft
EJ	Ground Test	Nonflying ground test of the vehicle or systems
NY	Non-appropriated Fund	Vehicles or trainers on loan to USAF non-appropriated funded activities (e.g. aero clubs)
TX	Ground Instruction	Nonflyable vehicle specifically for ground instruction

XJ	Excess to Command	Vehicles or trainers which have been reported to HQ/XPPL as excess to the requirements of the possessing command, or vehicles designated by HQ USAF as not required by a command and on which the possessing command is awaiting disposition instructions. The possessing command will maintain these vehicles in a servicable condition.
XS	Inviolable Storage	Stored in anticipation of specific future AF operational requirements. Parts may only be removed with approval of AF/ILM and only if serviceable replacement part is ordered. If parts are removed, the weapon system SPD and engine PGM will take concurrent action to acquire serviceable replacements, which need not be reinstalled, but which must be earmarked for the specific aerospace vehicles from which removed. Parts need not be stored at AMARC if inventory managers can assure accountability by MDS and aircraft serial number at an alternate storage location. Weapon system SPD and engine PGM will take concurrent action to acquire serviceable replacements, which need not be reinstalled, but which must be earmarked for the specific aerospace vehicles from which removed. Parts need not be stored at AMARC if inventory managers can assure accountability by MDS and aircraft serial number at an alternate storage location. If it is not feasible to acquire replacement parts, the SPD will submit a waiver request to HQ USAF/ILM or a request to reclassify the aircraft to another storage category to HQ USAF/XPPL. Aerospace vehicles or trainers will not be moved from other storage categories to "XS" until all replacement parts are acquired to restore the aircraft to a flyable condition. Aircraft are under the authority of HQ USAF.

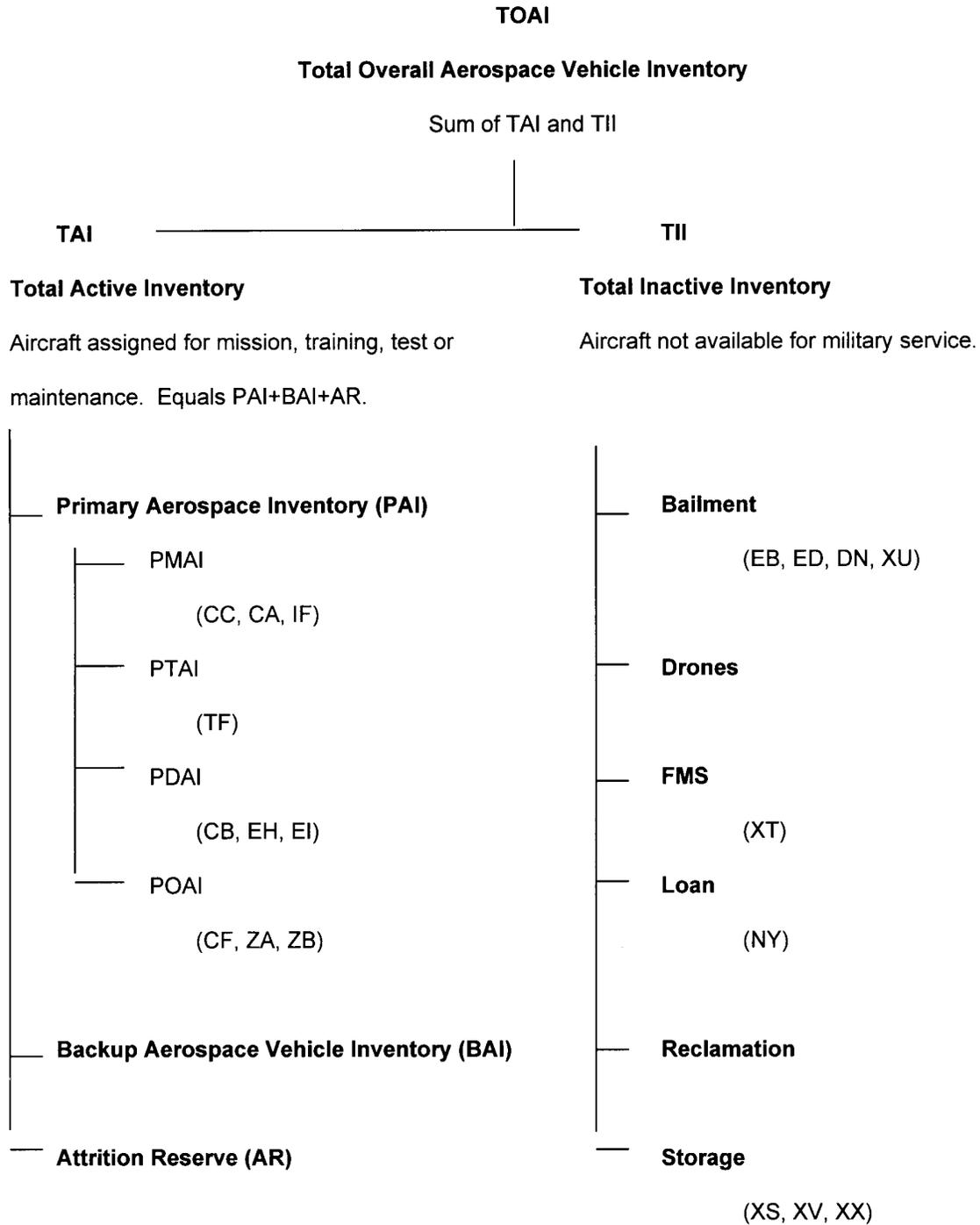
- XT Security Assistance (SAP) Hold Storage Inactive aerospace vehicles or trainers stored in anticipation of specific future SAP requirements for transfer to foreign governments either as a foreign military sale (FMS) or at no cost as excess defense articles (EDA). Aerospace vehicles and trainers in this category are excess to DoD needs as flyable aircraft, but may not be excess to DoD spare parts or component requirements. Aerospace vehicles in this category will normally be prepared for a storage period in excess of 90 days and in a manner which will provide maximum aircraft preservation (AMARC 1000 type storage). The SPD 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 SPD will coordinate parts removal actions with SAF/IA through HQ USAF/ILMY. Acquisition of replacement parts will be initiated if the aircraft is reclassified to "XS" or designated for withdrawal in other than "as is, where is" condition. Before aerospace vehicles and trainers in this category may be offered for transfer as EDA (i.e. Foreign Assistance Act (FAA) Section 516, 517, 519, etc.), HQ USAF/ILMY shall coordinate with HQ USAF/ILS to determine if DoD spare parts or components must be removed to support DoD needs as required by Federal Property Management Regulations (41 CFR 101-43.102) and DoD policy (DoD 4160.21-M).
- XV USAF Storage (Note 1) Inactive aerospace vehicles or trainers stored to provide spare parts and components for the remaining operational mission aircraft. 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 (AMARC 2000 type storage). The weapon system SPD may direct selected parts removal on input to storage, and priority removals during storage, with no parts procurement or replacement action required unless the aircraft are recategorized 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.

XX	Excess Storage (Note 1)	<p>Inactive aerospace vehicles or trainers placed in economical storage with no preservation of airframe and engines (AMARC 4000 type storage). The weapon system SPD may direct selected parts removal and/or preservation upon input to storage, and priority removals during storage, with no parts reprourement or replacement action required unless the aircraft are recategorized to "XS" or designated for withdrawal in other than "as is, where is" condition. HQ USAF/XPPL will ensure aircraft in this category are excess to DoD operational needs. Components and repair parts are not excess until DoD reclamation requirements have been satisfied. Aircraft remain in this category until HQ USAF/XPPL directs reclamation or other disposition.</p>
XY	Lease/Loan	<p>Lease or loan to commercial or government agencies for tests or other projects.</p>

Attachment 3

AEROSPACE VEHICLE INVENTORY RELATIONSHIPS

Figure A3.1. Total Overall Aerospace Vehicle Inventory.



Attachment 4 SAMPLE STAFF SUMMARY SHEET

Figure A4.1. Sample Staff Summary Sheet.

Staff Summary Sheet							
	To	Action	Signature (Surname), Grade, Date		To	Action	Signature (Surname), Grade, Date
1	PE	APPR		4	SAF/LA	COORD	
2	XO	COORD		5	AF/CC	APPR	
3	IL	COORD					
Grade and Surname of Action Officer			Symbol	Phone		Suspense Date	
GS Lee Dronsfield			PES	6142176			
Subject						SSS Date	
Disposition Plan for Excess F-XX Aircraft						21 November 1996	
Summary							
1. Purpose. Provide a proposed disposition plan for those F-XX aircraft becoming excess during Fy 96 through 98.							
2. Background. Current Total Active Inventory: 172.							
Current Inactive Inventory: XS XT XV XX Reclaim RIT Total							
25 14 35 15 10 5 104							
3. F-XX aircraft identified as excess to operational requirements:							
		FY 96	FY 97	FY 98	Total		
ACC		4	5	3	12		
AFRES		1			1		
PACAF				8	8		
TOTAL					21		
- USAF Requirements							
	Request	Disposition	Purpose	Storage Cost	Reclamation		
			ID Code	(per afct)	Potential Lost		
					(per afct)		
--Replacement Flyable Acft	5	5	CC	--	\$ 1.3M		
--Ground Maintenance Trainer	3	3	TX	--	\$.7M		
--ABDR Trainer	1	1	--	--	\$.7M		
--Spares Requirements	5	5	XV	\$13.2K	\$.7M		
--Nonoperation; AF Museum	1	1	--	--	\$.7M		
--Reclamation	5	5	XX	\$ 5.6K	\$.7M		
-Military Services/DoD	1	1			\$ 1.3M		
-FMS (Potential)	8	0			\$ 1.3M		

Figure A4.1. Continued.

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4. Discussion. (Provide additional details for proposed disposition plan as necessary.)

5. Recommendation. AF/CC approve plan.

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695-0675