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Report to the Chairman, Committee on National Security, House of Representatives

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DEFENSE INVENTORY

Management of Surplus Usable Aircraft Parts Can Be Improved

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National Security and
International Affairs Division

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The Honorable Floyd D. Spence
Chairman, Committee on National Security
House of Representatives

Dear Mr. Chairman:

As requested, we reviewed selected aspects of the Department of Defense's (DOD) disposal process. When the military services no longer need aircraft parts, they turn them over to the Defense Logistics Agency, which manages DOD's disposal process. As one option within the disposal process, the Agency can either sell the parts intact to the public or destroy the parts and sell them as scrap. Also, if for some reason a military service later determines there is a new need for parts still in the disposal process, it can request their return. This report addresses whether (1) DOD destroyed usable aircraft parts during the disposal process that did not have military technology and flight safety implications and (2) the military services recalled aircraft parts from the disposal process to preclude unnecessary purchases or repairs. We will report separately on whether DOD properly destroyed aircraft parts with military technology and safety implications.

In fiscal year 1996, DOD sold about 3.3 million usable aircraft parts to the public through the disposal process' surplus sales program. These parts had an acquisition value of over $2.3 billion. Our review focused on a judgmentally selected sample of 271 surplus items at three disposal offices. These offices handle some of the largest volumes of surplus aircraft parts within the disposal process. The scope and methodology of our work are described in appendix I.

Background

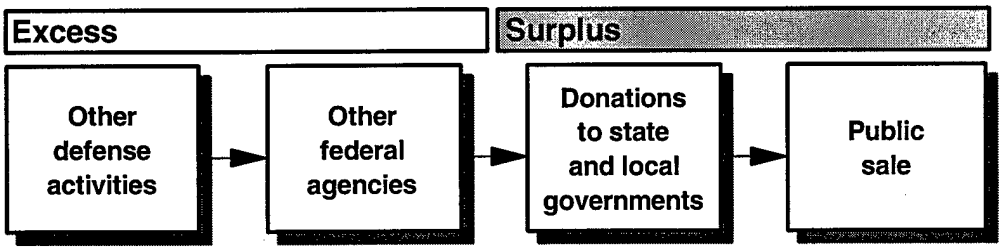
The Federal Property and Administrative Services Act of 1949, as amended (40 U.S.C. 471-486), places responsibility for the disposition of government real and personal property with the General Services Administration. The General Services Administration delegated disposal of DOD personal property to the Secretary of Defense, who in turn delegated it to the Defense Logistics Agency. The Defense Reutilization and Marketing Service, a component of the Defense Logistics Agency, carries out the disposal function. The complexity of DOD's disposal process is characterized by the massive volumes of surplus property. In fiscal year 1996, DOD disposed of millions of items with a reported acquisition value

(the amount originally paid for the items) of almost $24 billion. The focus of this report, aircraft parts, represents $2.3 billion of this total.

Aircraft Parts Disposal Process

DOD provides overall guidance for determining if aircraft parts should be disposed of. The military services and the Defense Logistics Agency determine if specific parts for which they have management responsibility are excess to their needs. Once the military services or the Defense Logistics Agency declares aircraft parts excess to their needs, they enter the disposal process. These parts are sent to one of 170 worldwide Defense Reutilization and Marketing Offices (DRMO), or disposal yards. Upon receipt, DRMO personnel inspect the parts for condition, acquisition value, and special handling requirements such as those for military sensitive items. DRMOs, consistent with legislative requirements, have disposition priorities to make the excess parts available for reutilization within DOD or transfer to other federal agencies. Parts that remain are designated as surplus and can be donated to eligible entities such as state and local governments, among many others. After these priorities have been served, parts that remain may be sold to the general public. Figure 1 shows the usual process for disposing of aircraft parts.

Figure 1: Usual Process for Disposing of Aircraft Parts



Surplus aircraft parts can generally be divided into four categories of condition: (1) new; (2) worn, but still working; (3) broken, but repairable; and (4) scrap. In this report, we refer to the first three categories of parts as potentially usable, since they can be repaired or used as is. The fourth category—scrap—refers to those parts that DOD does not intend to reuse and sells for their basic material content value.

Military Technology and Flight Safety Considerations

Because of concerns about safeguarding military technology and maintaining flight safety, DOD has specific policies and procedures relating to the disposal of aircraft parts. For parts that have military technology involving weapons, national security, or military advantages inherent in them, DOD requires the parts to be demilitarized so that the technology remains within DOD. Demilitarization makes the parts unfit for their originally intended purpose, either by partial or total destruction, before or as a condition of sale to the public. For parts that could cause an aircraft to crash if the parts fail during a flight, DOD components have local policies requiring the destruction of certain used parts with flight safety implications to prevent the parts from reentering the DOD supply system or being made available to the civil aviation industry. In our 1994 report,[1] we cited concerns from the Federal Aviation Administration and the Department of Transportation's Inspector General that DOD aircraft parts, sold as scrap, reentered civil aviation as usable. As a result, in July 1995, DOD initiated a departmentwide program to identify and prevent parts with potential flight safety risks from being sold intact through DRMOs. The services and the Defense Logistics Agency began identifying parts with flight safety characteristics so they could destroy the parts before they were sold.

Some usable aircraft parts DOD sells as surplus fit only on military aircraft but have no military technology implications. These parts are called "nonsignificant military unique" parts. Examples include bolts, fuel controls, engine parts, and airframe parts that have been strengthened to withstand rigorous military use. Companies buy military unique parts on the speculation that DOD may need these parts at a future date. Other usable aircraft parts DOD sells as surplus have applications to aircraft used in civil aviation or by other government agencies and foreign countries. These parts are called commercial-type parts. Examples include the Air Force's KC-135 air refueling tanker that has many of the same parts as a commercial Boeing 707 aircraft; the Air Force's C-130 cargo plane that has many of the same parts as a Lockheed 382 Hercules aircraft used by 49 foreign countries; and the Army's UH-1 Huey utility helicopter that has many of the same parts as a commercial Bell 205 helicopter. Companies buy commercial-type parts on the speculation that they can resell the parts to civil aviation, foreign countries, or DOD.

[1]Commercial Practices: Opportunities Exist to Enhance DOD's Sales of Surplus Aircraft Parts (GAO/NSIAD-94-189, Sept. 23, 1994).

Results in Brief

Management of the aircraft parts disposal process can be improved. DOD destroyed some usable aircraft parts and sold them as scrap. These parts were in new or repairable condition and did not have military technology or flight safety implications. The parts could possibly have been sold intact at higher than scrap prices. This situation occurred for several reasons. For example, disposal offices destroyed parts because the demilitarization codes the military services had assigned to the parts were inaccurate. The codes indicated the parts contained military technology when they did not. Our work showed that the Oklahoma City disposal office destroyed 62 of 71 sample items, even though they did not have technology implications, because the assigned codes required their destruction. Personnel responsible for assigning and reviewing the codes had not been sufficiently trained and guidance was not adequate. In addition, policies and practices designed to prevent the inadvertent or unauthorized release of parts with military technology and flight safety implications did not distinguish between parts with or without such implications. Parts without military technology and flight safety concerns were destroyed along with parts that had these characteristics.

Our work also showed that DOD could have purchased or repaired fewer aircraft parts if it would have recalled the needed parts from the disposal process. For example, the Army could have reduced current and planned purchases by about $200,000 by using Cobra helicopter parts scheduled for destruction. DOD regulations require the military services to know which parts they have placed in the disposal process. However, interface problems between service and disposal office computer systems precluded the services from knowing what parts were at the disposal offices. The military services had not instituted alternative ways to obtain this information on a routine basis.

Problems with the disposal process are likely not unique to the three disposal yards we visited because DOD, military service, and Defense Logistics Agency policies and procedures generally apply to activities being performed at all locations. Our past reviews and DOD internal studies have identified similar problems at these and other locations over the past 10 years and earlier.

Management of Surplus Aircraft Parts Can Be Improved

DOD could have avoided destroying certain usable aircraft parts that were in the disposal process. The parts were destroyed because (1) the military services improperly coded parts without military technology as having military technology implications and (2) policies and practices intended to

prevent an inadvertent sale of military technology or flight safety items did not adequately exclude parts without military technology or flight safety implications. Until DOD improves the accuracy of assigned demilitarization codes, adopts better management policies and practices, and moves to use private sector techniques, such as identifying highly marketable parts, some usable parts will be unnecessarily destroyed during the disposal process.

Assigned Demilitarization Codes Are Not Accurate

The three DRMOs we visited destroyed usable parts because the demilitarization codes the military services had assigned were inaccurate. For example, we evaluated 71 sample items at the Oklahoma City DRMO. We selected these items because they were commercial-type items but, at the time of selection, the military services had coded the parts as having military technology implications. We found usable quantities for 10 of our sample items that were marked for destruction at the DRMO. Records showed that the DRMO had previously destroyed quantities of the other 61 sample items.

We met with Air Force and Navy equipment specialists and policy officials and questioned the demilitarization codes assigned to each of the 71 items. The policy officials told us that they require equipment specialists to periodically review the demilitarization codes for accuracy and that equipment specialists had recently corrected the codes on nine items. The equipment specialists did not agree on the need to change the codes on the remaining 62 items until we pointed out that these were commercial-type parts. The equipment specialists confirmed that the assigned demilitarization codes—requiring the parts to be destroyed due to military technology content—were incorrect for each of the 62 sample items. The specialists revised each of the demilitarization codes to identify the parts as having no military technology implications.

At the San Antonio DRMO, the assigned demilitarization codes were inaccurate for 22 of 27 sample items because the parts had no military technology implications. Similarly, at the Corpus Christi DRMO, the assigned demilitarization codes were inaccurate for 13 of 17 sample items. Each of the military services and the Defense Logistics Agency were responsible for sample items with assigned codes that were inaccurate. Examples of parts destroyed because the assigned codes were wrong can be found in appendix II.

Inaccurate Coding Is a Long-standing Problem

DOD has had problems with the accuracy of assigned demilitarization codes for many years. In 1987, the Deputy Secretary of Defense directed the military services and the Defense Logistics Agency to review the assignment of demilitarization codes. The Deputy Secretary was concerned because a partial audit of seven weapon systems revealed that 43 percent of the items checked had been coded incorrectly. In 1994, the Defense Logistics Agency found that 28 percent of the assigned demilitarization codes it reviewed were incorrect. DOD officials told us that historically they assigned demilitarization codes to parts the first time the parts were purchased for a new weapon system. They said that for expediency purposes, they often assigned codes that showed military technology content for all parts on new weapon systems rather than evaluating individual items.

Recognizing the need for trained personnel to assign proper codes, DOD developed a course on demilitarization. Despite such efforts to correct the erroneous codes, in April 1997, the DOD Inspector General reported[2] that 52 percent of the demilitarization codes assigned to parts for new weapon systems it reviewed were incorrect. The Inspector General reported that training was not adequate for personnel responsible for assigning and reviewing demilitarization codes and that documentation showing the rationale for their decisions did not exist. According to the Inspector General, DOD's training course provided only general awareness of the demilitarization program and did not provide the specific details necessary to make decisions on selecting the appropriate demilitarization codes.

Guidance Could Be Improved

Our review shows that DOD could improve the accuracy of assigned demilitarization codes by providing its personnel with guidance on how to make prudent decisions on selecting the appropriate codes. For our sample items at Oklahoma City, the Air Force equipment specialists completed a demilitarization code assignment worksheet. The worksheet is a draft document the Air Force is developing for the equipment specialists to follow to identify the proper code and to document the rationale they use in assigning the code. We found that the draft worksheet was a useful tool that provided a step-by-step process in determining the correct demilitarization code. The worksheet also provided documentation supporting how the equipment specialist arrived at the demilitarization code. Moreover, the worksheet proved useful to equipment specialists that had not received recent training. Until DOD provides its personnel with the specific details necessary to make prudent decisions on selecting the appropriate demilitarization codes, inaccurate

[2]Coding Munitions List Items (DOD Inspector General Audit Report No. 97-130, April 16, 1997).

codes will continue to cause the unnecessary destruction of usable aircraft parts.

Policies and Practices Are Not Adequate

Policies and practices intended to prevent an inadvertent sale of military technology or flight safety items did not adequately exclude parts without military technology or flight safety implications. The policies and practices in question dealt with the destruction of usable parts categorized as (1) scrap when the parts were usable, (2) sensitive items when the parts were not sensitive, (3) flight safety items when the parts had no flight safety implications, and (4) causing a storage space problem when there was no storage space shortage.

Some Scrap Parts Are Usable

In 1994, the Defense Reutilization and Marketing Service directed the DRMOs to destroy all parts categorized as scrap or downgraded to scrap. The reason usable parts were destroyed involved DOD's categorization of parts as scrap. DOD defines scrap parts as material that has no value except for its basic material content, whereas DOD defines usable parts as material that has value greater than its basic material content and has potential to be used for the originally intended purpose. Commercial company officials told us that some parts that DOD considers scrap have value beyond basic material content and are repairable and reusable in the commercial sector. For the most part, this situation occurs because DOD labels containers of parts it does not want to repair for economic reasons as scrap. On the basis of their experience and independent analyses, commercial companies frequently did not agree with DOD's economic determinations. In such cases, the companies wanted to buy the used parts, repair them, and resell them for a profit.

For example, DOD pays the manufacturer $866 each for first stage turbine vanes used on the T-56 engine. Because DOD's cost to repair a turbine vane is $750, or 87 percent of the cost of a new vane, DOD considers the vane uneconomical to repair and categorizes it as scrap when worn or broken. However, the manufacturer sells the same first stage turbine vane to commercial customers for $2,020 each. Because of the higher commercial acquisition cost, commercial users can justify the repair cost, which is 37 percent of the commercial acquisition cost.

DRMO officials told us that usable parts without military technology were destroyed because of the policy to destroy items categorized as scrap. After receiving complaints from potential buyers and DRMOs that usable parts were needlessly destroyed, the Defense Reutilization and Marketing

Service revised its policy in June 1996 to state that only those items categorized both as scrap and as sensitive items are to be destroyed. The Service considers aircraft parts to be sensitive items if the assigned stock number corresponds to 1 of 18 federal supply classes or groups that frequently contain military technology. The classes or groups include weapons, rocket engines, and communication equipment. DRMOs destroyed items considered sensitive property when the items were received as scrap or downgraded to scrap, irrespective of whether the assigned demilitarization codes indicated the parts had military technology implications.

DOD officials stated that due to the time and resources required to destroy and document the destruction of material, it is not in DRMOs' best interest to destroy parts that do not contain military technology. However, the officials said destruction was necessary to prevent an inadvertent release of parts with military technology implications. We recognize the need for DOD to prevent the inadvertent sale of parts with military technology implications. However, DOD management policies and practices resulted in the destruction of commercial-type parts and nonsignificant military unique parts that did not have technology and safety implications.

We previously reported[3] that DOD could increase proceeds from the sale of surplus aircraft parts—not by destroying them—but by adopting private sector practices. Specifically, we stated that DOD should use techniques to enhance the marketability of its aircraft parts, including identifying highly marketable commercial-type parts that would yield the greatest benefits at the minimum cost. We pointed out that some commercial airlines identify parts that have a high demand or command a high price and place them on a special listing for marketing purposes. This review shows that DOD has not implemented similar procedures.

Parts Not on the Sensitive Items List

DRMO personnel also destroyed parts, even though they were not on the sensitive items list. According to DRMO officials, the personnel did this to increase sales proceeds. They explained that historically DRMOs received scrap value for usable parts. They stated that by destroying usable parts, surplus parts dealers would get what they paid for and nothing more. The officials reasoned that once surplus dealers realized that DRMOs destroyed the parts, they would be willing to buy the usable parts before they were destroyed and would pay higher than scrap value for them. As a result, sales proceeds would increase.

[3]Commercial Practices: Opportunities Exist to Enhance DOD's Sales of Surplus Aircraft Parts (GAO/NSIAD-94-189, Sept. 23, 1994).

We reviewed 83 sample items at the San Antonio DRMO that were not on the sensitive items list and that the disposal histories showed were categorized as scrap or downgraded to scrap after receipt. Our analysis identified instances where the DRMO offered usable parts for sale but did not sell them because bids did not exceed scrap value. The DRMO subsequently destroyed the parts and sold them as scrap. Some of the parts were worth more than scrap value and should have been held for another sale as usable parts. An example of parts destroyed because of the DRMO practice of destroying scrap not on the sensitive items list can be found in appendix II.

Flight Safety Parts

As a result of our 1994 report, DOD initiated a departmentwide program to identify and prevent parts with potential flight safety risks from being sold intact through DRMOs. The military services and the Defense Logistics Agency began identifying parts with flight safety characteristics so they could destroy the parts before they were sold. However, our review showed that aircraft parts were destroyed as flight safety risks when the parts had no flight safety implications. This destruction occurred because DRMO practices intended to prevent the inadvertent sale of parts with flight safety implications also caused the planned destruction of parts without these implications.

For example, in response to a potential buyer's complaint on September 20, 1996, that the San Antonio DRMO was destroying usable blades for the T-56 engine, the San Antonio Air Logistics Center investigated. The Center found 7,018 blades, originally costing $1.06 million, that the Air Force had incorrectly categorized as scrap because of a breakdown in inspection procedures and had sent them to the DRMO. San Antonio DRMO officials said the destruction was to prevent an inadvertent sale of flight safety items. However, Center officials said that these parts were incorrectly sent to the DRMO and did not have to be destroyed for flight safety reasons. DRMO officials said they preferred to err on the side of safety. We recognize the need for DRMOs to prevent the inadvertent sale of parts with flight safety implications. However, DRMO practices resulted in the planned destruction of commercial-type parts and nonsignificant military unique parts that did not have flight safety implications. An additional example of parts being unnecessarily destroyed as flight safety risks is in appendix II.

An interim Army Aviation and Troop Command instruction to destroy all parts with flight safety implications also resulted in the destruction of some helicopter parts without such implications. According to DRMO and

Army records, for example, on February 5, 1997, a potential buyer witnessed the destruction of between 200 and 300 UH-1 helicopter gear shafts and 10 turbine rotors at the Texarkana, Texas, DRMO. The destroyed parts were new, were in the original equipment manufacturer's boxes, had a manufacturer's list price totaling about $1 million, and were categorized as flight safety critical parts. After the buyer complained, the Army agreed that the parts were new and should not have been destroyed.

According to DRMO officials, the interim instruction resulted in the destruction of large quantities of new, unused parts that had no flight safety risks. After receiving complaints from DRMOs and potential buyers that new parts were being destroyed, the Command revised its instructions and authorized the sale of flight safety critical parts under certain conditions, such as when the parts are new and unused. To determine if the procedural change was working, we reviewed a sample of 73 items at the Corpus Christi DRMO that the Army had identified as having flight safety implications and that DRMO records indicated were new. Our analyses showed that the DRMO either offered each sample item for sale or had already sold it. We concluded that no unnecessary destruction of new parts occurred on the transactions we reviewed. Examples of flight safety items properly sold can be found in appendix II.

Storage Space

At the Corpus Christi DRMO, we observed quantities of 157 different usable parts for the AH-1 Cobra helicopter scheduled for destruction (see fig. 2). Specifically, we noted that there was a total of 1,972 usable, mostly new, helicopter parts in a DRMO warehouse. The parts originally cost $6.9 million. According to the DRMO Chief, these parts were to be destroyed beginning May 3, 1997, to free up storage space. We contacted the Defense Reutilization and Marketing Service and advised it of our concern with the scheduled destruction because the assigned demilitarization codes indicated no military technology was associated with 155 of the 157 different parts and because there were sufficient amounts of warehouse storage space for the parts.

Figure 2: Cobra Helicopter Parts Stored at Corpus Christi DRMO

Defense Reutilization and Marketing Service officials said that in February 1996, they placed a prohibition against selling Cobra parts at DRMOs because the Army-assigned demilitarization codes were inaccurate. The property disposal specialist responsible for the prohibition said the Army planned to review and validate the demilitarization codes for the Cobra helicopter parts and he wanted to be sure the codes were accurate before proceeding with a sale or destruction action. He said the Army had not completed its demilitarization code review. The specialist said he also instructed the DRMOs to destroy the parts if they started experiencing a storage impact. After a meeting with the Chief of the Corpus Christi DRMO, the Defense Reutilization and Marketing Service issued a memorandum directing the DRMOs not to destroy any Cobra parts unless they are in a scrap condition and to hold usable parts in storage until the Army completes the demilitarization code review.

Army Aviation and Troop Command officials who are responsible for reviewing and validating demilitarization codes for Cobra helicopter parts told us they were waiting to complete the demilitarization code review

until after Army headquarters makes a decision on whether or not to sell disarmed, surplus Cobra helicopters to the public for use in such purposes as fighting forest fires. In our opinion, accurate code assignments are required regardless of whether the helicopters are sold to the public.

DOD Components Needed Some Surplus Parts

The military services' inventory managers did not have adequate information on aircraft parts located in DRMOs. DOD Materiel Management Regulation 4140.1-R requires inventory managers to have information on parts transferred to DRMOs, to recall parts for reutilization to prevent concurrent procurement and disposal, and to prevent the repair of unserviceable items when serviceable items are available. However, we found that they did not have the needed information and that DRMOs destroyed quantities of parts DOD components needed.

For example, at the Corpus Christi DRMO, we compared the 157 different usable Cobra helicopter parts scheduled to be destroyed by the DRMO with Army budget and procurement records. The records showed that the Army needed quantities for 22 of the 157 parts, totaling $196,500. We discussed our findings with the Defense Reutilization and Marketing Service, which notified the Army Aviation and Troop Command of the need to return the parts to the DOD supply system. The Command had not responded to this notification at the time our field work was completed. Additional examples of parts needed by DOD components can be found in appendix II.

Air Force and Army officials said that, despite the requirements of the DOD regulation, they did not have adequate visibility over parts in DRMOs. They stated that interface problems between military service and DRMO computer systems precluded the services from knowing what parts were in DRMOs. Since the services did not have adequate visibility over parts in DRMOs, the DRMOs were destroying the same parts the services were purchasing or repairing. DOD headquarters officials commented that DOD was working to correct the computer interface problem as part of a Total Asset Visibility program, but it would be several years before the problem is fixed. The officials stated that DOD had neither established milestones for correcting the computer interface problem nor instituted alternative ways to obtain the needed information on a routine basis. For example, aircraft parts available at DRMOs can be identified by telephone calls, the Internet, or physical inspections.

Conclusions and Recommendations

The conditions described in this report result in an unnecessary expenditure of resources to destroy parts that do not actually require destruction. In some instances, the government also loses the increased revenue that could be derived from the sale of usable parts to prospective buyers and the opportunity to return usable parts to the DOD supply system to avoid unnecessary procurements or repairs. Accordingly, we recommend that the Secretary of Defense take the following actions to prevent the destruction of usable aircraft parts.

- Provide guidance on selecting appropriate demilitarization codes that includes the specific details necessary to make appropriate decisions. The guidance could take the form of the draft demilitarization code assignment worksheet being used by the Air Force.
- Exclude commercial-type parts and nonsignificant military unique parts that do not have military technology and flight safety implications from policies and practices intended to prevent an inadvertent sale of parts with these implications. Work closely with the private sector to identify and list commercial-type aircraft parts and nonsignificant military unique parts the private sector needs and require the DRMOs to check this list before destroying parts.
- Require the Army to complete its validation of the demilitarization codes assigned to Cobra helicopter parts so commercial-type parts and nonsignificant military unique parts can be sold.
- Establish milestones for correcting computer interface problems that preclude the military services from having visibility of parts located in DRMOs and from following regulations that require parts to be returned to the supply system when needed to prevent unnecessary procurements or repairs. In the interim, institute alternative ways to obtain this information on a routine basis. For example, aircraft parts available at DRMOs can be identified by telephone calls, the Internet, or physical inspection.

Agency Comments and Our Evaluation

DOD generally agreed with the report and stated that the concepts presented appear to be beneficial to the disposal of aircraft parts (see app. III). Concerning our first recommendation, DOD agreed that a code assignment sheet may be useful in assigning demilitarization codes and stated that it would work with the military services and the Defense Logistics Agency to determine the feasibility of departmentwide use of the Air Force, or a similar, worksheet. In response to our second recommendation, DOD agreed that, when properly coded by item managers, usable parts that do not have military technology and flight safety implications do not have to be destroyed. DOD noted that challenge

programs are available if parts are miscoded. With regard to our recommendation that the Army complete its validation of the demilitarization codes assigned to Cobra helicopter parts, DOD stated that it is monitoring the Army's validation process. The validation, which will determine which parts are commercially available and can be sold, is expected in November 1997.

DOD partially agreed with our recommendation that it work closely with the private sector to identify and list parts the private sector needs and require the DRMOs to check this list before destroying parts. DOD stated that it previously attempted to obtain private sector input but the response was minimal. DOD also stated that the identification of commercial-type aircraft parts should be incorporated into an existing database rather than utilizing a separate list. DOD added that, although it is DOD policy that DRMOs destroy parts only when demilitarization is required or they are identified as having flight safety implications, inaccurate information does occur and use of all available data to reduce unnecessary destruction should be used by the DRMOs.

We continue to believe that DOD should work closely with the private sector because DOD's previous inquiries were limited to the original equipment manufacturers. Officials from the companies we contacted, including the National Association of Aircraft and Communication Suppliers, told us that, although they are buyers of large quantities of aircraft parts at DRMO sales, DOD had not asked them for input to identify commercial-type aircraft parts. Our report documents examples where DRMOs destroyed usable parts that did not have military technology or safety implications. Because the current system for identifying commercial-type and nonsignificant military unique parts the private sector needs is not working, we also continue to believe that DOD needs to list these parts separately.

DOD also partially agreed with our recommendation that it establish milestones for correcting the computer interface problems that preclude the military services from having visibility of parts located in DRMOs and, in the interim, institute alternative ways to obtain this information on a routine basis. DOD stated that the interface problems are addressed as they arise and that a joint Total Asset Visibility office is working with the military services to finalize a functional description for automated visibility of disposal assets to prevent unnecessary buys and repairs. Once finalized, milestones for implementation will be developed based on the complexity of the information system changes required. DOD stated that

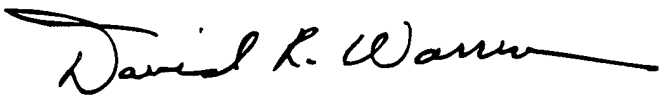
the earliest projected date for development of milestones is the first quarter of fiscal year 1998. DOD also stated that, in the interim, many other sources are available to the military services that provide visibility of parts at the DRMOs, including the Internet, an Interrogation Requirements Information System, and formal and informal contacts between DRMOs and item managers.

While we agree that the long-term solution rests with implementation of the Total Asset Visibility program, we continue to be concerned that routine interim procedures do not exist. Although DOD acknowledges that many other sources are available to the military services that provide visibility of parts in DRMOs, our report shows that DOD guidance is needed because the military services are not routinely checking with these sources.

We are sending copies of this report to the appropriate congressional committees; the Secretaries of Defense, the Army, the Navy, and the Air Force; the Director, Defense Logistics Agency; and the Director, Office of Management and Budget.

Please contact me at (202) 512-8412 if you or your staff have any questions concerning this report. The major contributors to this report are listed in appendix IV.

Sincerely yours,



David R. Warren
Director, Defense Management Issues

Contents

Abbreviations

DOD	Department of Defense
DRMO	Defense Reutilization and Marketing Office

Scope and Methodology

We reviewed policies, procedures, disposal histories, transaction histories and related records obtained from the Defense Reutilization and Marketing Offices (DRMO) and item managers and documented disposal practices. We interviewed policy officials, disposal office personnel, item managers, and equipment specialists. To determine the Department of Defense's (DOD) policies and practices for destroying aircraft parts during the disposal process, we held discussions and performed work at the Office of the Deputy Under Secretary of Defense (Logistics), Washington, D.C.; the Army, the Navy, and the Air Force Headquarters, Washington, D.C.; the Defense Logistics Agency, Fort Belvoir, Virginia; and the DOD Inspector General, Washington, D.C. and Columbus, Ohio.

To obtain information on how surplus parts are received and processed for sale, we documented procedures and practices at three DRMOs located in Oklahoma City, Oklahoma; San Antonio, Texas; and Corpus Christi, Texas. According to DOD officials, the Oklahoma City and San Antonio DRMOs handle the largest volumes of surplus aircraft parts. Since these DRMOs handle surplus parts used mostly on Air Force and Navy aircraft, we also selected the Corpus Christi DRMO, which handles large quantities of surplus parts used mostly on Army aircraft. We also collected budget, procurement, inventory, weapon system application, and disposal information from item managers, equipment specialists, and policy officials at the Oklahoma City Air Logistics Center, Tinker Air Force Base, Oklahoma; the San Antonio Air Logistics Center, Kelly Air Force Base, Texas; the Corpus Christi Army Depot, Corpus Christi, Texas; the Army's Aviation and Troop Command, St. Louis, Missouri; and the Naval Inventory Control Point, Philadelphia, Pennsylvania.

We also visited and collected data from members of the National Association of Aircraft and Communication Suppliers, Inc., Alamo Aircraft Supply, Inc., and Dixie Air Parts Supply, Inc., San Antonio, Texas; Jet Reclamation, Inc., Bulverde, Texas; and Rick's Mfg. and Supply, Choctaw, Oklahoma to identify specific problems they were having with DOD's disposal practices.

We judgmentally selected 271 surplus items for review to determine the adequacy of DOD's policies and procedures for ensuring that aircraft parts without military technology and flight safety implications are not unnecessarily destroyed. We selected 83 items at the San Antonio DRMO involving the disposal of usable parts as scrap material and 27 items involving the accuracy of assigned demilitarization codes; 73 items at the Corpus Christi DRMO involving flight safety and 17 items involving the

accuracy of assigned demilitarization codes; and 71 items at the Oklahoma City DRMO involving the accuracy of assigned demilitarization codes. We selected these items because they were commercial-type parts or nonsignificant military unique parts that were either coded for destruction due to military technology content or alleged by the Association to have been unnecessarily destroyed. We also reviewed the results of prior DOD internal studies.

To determine whether parts being destroyed at the three DRMOs were needed by the military services, we compared selected sample items with the services' budget stratification databases and requirements computations. We checked to see if there were current or future buy and repair requirements for the items. We informed the military services of any sample items that had current or planned requirements so the parts could be recalled from the DRMOs.

We performed our review between January 1997 and June 1997 in accordance with generally accepted government auditing standards.

Examples of Selected Aircraft Parts

Parts Assigned Inaccurate Demilitarization Codes

The Air Force decided that 184 TF-33 engine combustion chambers (Stock No. 2840008285214RV) (see fig. II.1) used on the KC-135 aircraft were surplus and sent them to the Oklahoma City DRMO. The parts originally cost $452,352. On April 15, 1997, the DRMO destroyed the 184 parts, although the parts were repairable. The DRMO destroyed the parts because the Air Force had assigned a demilitarization code to the parts requiring total destruction to protect military technology. The DRMO estimated that it spent $211 to destroy the parts and sold them as scrap for $3,450. After we pointed out that this was a commercial-type item, the Air Force equipment specialist said the assigned demilitarization code was incorrect because the parts contained no military technology. As a result, the DRMO destroyed parts that the private sector could have used. The equipment specialist corrected the demilitarization code.

Figure II.1: Engine Combustion Chamber

On April 9, 1997, we observed the destruction with a cutting torch of 20 nozzle rings (Stock No. 2840011611133RV) (see fig. II.2) used on the KC-135 aircraft engine. These parts originally cost $94,400. The Oklahoma City DRMO destroyed the parts because the Air Force had assigned a demilitarization code that required total destruction to protect military technology. According to the equipment specialist, the Air Force replaced the parts with a newer version. He said that the parts sent to the DRMO, although usable, were no longer needed by the Air Force. After we pointed out that this was a commercial-type item, the equipment specialist said the assigned demilitarization code was incorrect because the part contained no military technology. He also said the destroyed parts were usable on commercial Boeing 707 aircraft in the private sector. As a result, the DRMO destroyed parts that the private sector could have purchased. The equipment specialist corrected the demilitarization code.

Figure II.2: Nozzle Rings

On April 14, 1997, the Corpus Christi DRMO destroyed 53 circuit card assemblies (Stock No. 5998013370963) used on the UH-60 helicopter. The parts originally cost $54,392. The DRMO destroyed the parts because the Army had assigned a demilitarization code to the parts requiring total destruction to protect military technology. After we questioned if military technology was involved with this part, the Army equipment specialist said the assigned demilitarization code was incorrect because the part, although military unique, was nonsignificant and contained no military technology that needed to be protected. As a result, the DRMO destroyed

parts that the private sector could have purchased. The equipment specialist corrected the demilitarization code.

During fiscal year 1996, the San Antonio Air Logistics Center sent six usable support assemblies (Stock No. 2840011932157RW) used on the C-130 aircraft engine to the DRMO because the parts were no longer needed. The parts originally cost $19,660. The San Antonio DRMO destroyed the six parts because the Navy had assigned a demilitarization code to the part requiring total destruction to protect military technology. After we pointed out that this was a commercial-type item, the Navy equipment specialist said that the assigned demilitarization code was incorrect because the part contained no military technology. He said the destroyed parts were usable on commercial aircraft in the private sector. As a result, the DRMO destroyed parts that the private sector could have purchased. The equipment specialist corrected the demilitarization code.

Parts That Are Not Sensitive

On February 26, 1996, the San Antonio DRMO downgraded to scrap 13 nozzle assemblies (Stock No. 2840010668071RW) used on the T-56 engine and destroyed them. The parts were destroyed to prevent surplus dealers from buying usable parts at scrap prices. The parts originally cost $15,953. These parts did not appear on the Defense Logistics Agency's sensitive item list and had no military technology or safety implications. The destroyed parts sold for about $2 each. By contrast, on August 20, 1996, the DRMO sold 24 usable nozzle assemblies intact for $1,183, or over $49 each.

Parts Without Flight Safety Implications

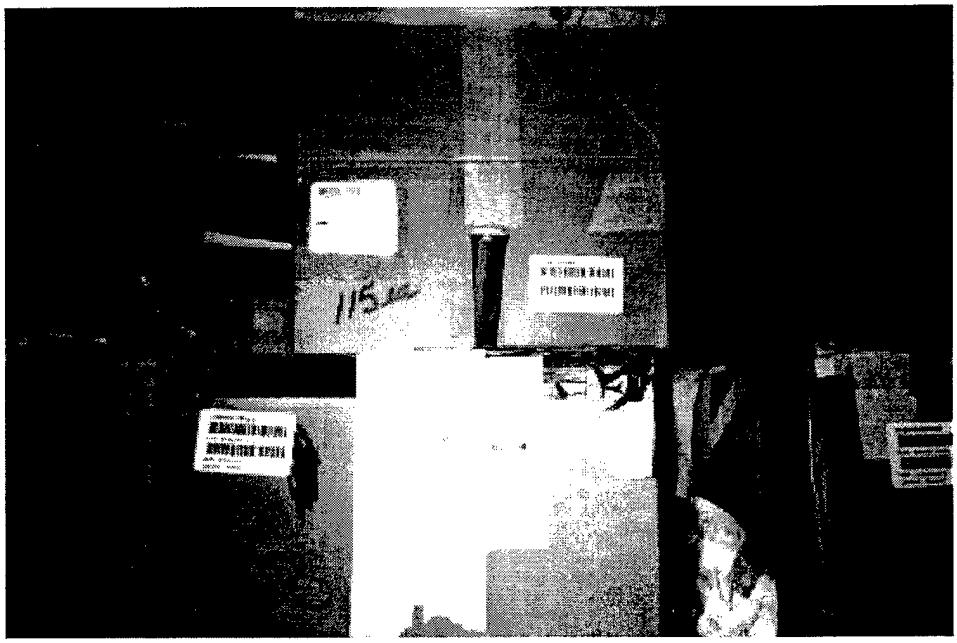
The San Antonio Air Logistics Center considered 72 turbine vanes (Stock No. 2840004262571RW) for the T-56 engine not usable because they were worn and cracked and sent them to the DRMO for disposal. These parts originally cost $200,000. The San Antonio DRMO Chief said that he decided to destroy these parts at his own management discretion strictly for flight safety reasons. He said that he would not want parts in such poor condition to be refurbished and installed on an aircraft that he or anyone else was a passenger on. However, Center officials said these parts had no safety implications. After reviewing this matter, the Center's Commander told the DRMO to sell the parts intact.

Flight Safety Parts Properly Sold

On October 7, 1996, the Corpus Christi DRMO received 1,101 turbine rotor blades (Stock No. 2840001523806) (see fig. II.3) used on the CH-47

helicopter for disposal. Since the Army had assigned demilitarization code F to the parts, indicating that they had flight safety implications, the DRMO requested disposition instructions from the Army Aviation and Troop Command. The Command instructed the DRMO to destroy the part unless it was (1) unused, (2) in serviceable condition, (3) physically marked with the manufacturer's code, and (4) in the manufacturer's original packaging. The DRMO decided that the parts met this exception and offered them for sale. DRMO records showed that the turbine rotor blades were sold in a lot with another turbine rotor blade for $13,796.

Figure II.3: Turbine Rotor Blades in Manufacturer's Original Packaging



On September 29, 1996, the Corpus Christi DRMO received notice that six transmission cartridge assemblies (Stock No. 1615011167083) used on the UH-1 helicopter were no longer needed by the Army. These parts originally cost $36,774. Since the Army had assigned demilitarization code F to the parts, the DRMO requested disposition instructions from the Army Aviation and Troop Command. On December 12, 1996, the Command instructed the DRMO to destroy the part unless it was (1) unused, (2) in serviceable condition, (3) physically marked with the manufacturer's code, and (4) in

the manufacturer's original packaging. The DRMO determined that these parts met this exception and on May 29, 1997, prepared a notice for the assemblies to be listed for sale in the International Sales Office catalog. At the completion of our fieldwork, the sales office had not set the date of sale.

Parts Needed by DOD Components

At the Oklahoma City DRMO, we observed two nozzle rings (Stock No. 2840009911048RV) for the TF-33 engine being destroyed with a cutting torch. The two nozzle rings, originally costing $7,000, were being destroyed at the discretion of a DRMO employee. We obtained documents that showed these parts were in usable condition and that the Air Force needed the parts and had recently placed orders to buy 107 new nozzle rings. After we pointed this situation out to the Oklahoma City Air Logistics Center, the Center implemented new procedures to prevent usable engine nozzle rings and other needed parts from being destroyed. The procedures require equipment specialists to periodically inspect parts sent to the DRMO. Within a month, the Center identified and prevented the destruction of 200 additional usable parts that were at the DRMO.

In response to a potential buyer's complaint on September 20, 1996, that the San Antonio DRMO was destroying usable blades (Stock No. 2840011123776RW) for the T-56 engine, the San Antonio Air Logistics Center investigated. The Center found 7,018 blades, originally costing $1.06 million, that the Air Force had incorrectly categorized as scrap because of a breakdown in inspection procedures and sent them to the DRMO. San Antonio DRMO officials said the destruction was to prevent an inadvertent sale of flight safety items. However, Center officials said that these parts did not have to be destroyed for flight safety reasons and were needed to satisfy depot maintenance requirements. The DRMO returned the blades to the Air Force.

Comments From the Department of Defense

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ACQUISITION AND TECHNOLOGY

12 SEP 1997

(L/MDM)

Mr. David R. Warren
Director, Defense Management Issues
National Security and International
Affairs Division
U.S. General Accounting Office
Washington, DC 20548

Dear Mr. Warren:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "DEFENSE INVENTORY: Management of Surplus Usable Aircraft Parts Can Be Improved," dated August 12, 1997 (GAO Code 709234/OSD Case 1435). The DoD generally concurs with the draft report.

The concepts presented in the draft report appear to be beneficial to the disposal of aircraft parts. However, practical considerations have caused the Department to present clarifications to some recommendations.

The DoD detailed comments are provided in the enclosure. The Department appreciates the opportunity to comment on the draft report.

Sincerely,

Roy R. Willis
Acting Deputy Under Secretary
of Defense (Logistics)

Enclosure

GAO DRAFT REPORT--DATED AUGUST 12, 1997
(GAO CODE 709234) OSD CASE 1435

"DEFENSE INVENTORY: MANAGEMENT OF SURPLUS USABLE AIRCRAFT PARTS CAN BE IMPROVED"

DEPARTMENT OF DEFENSE COMMENTS

Now on p. 13.

RECOMMENDATION 1: The GAO recommended that the Secretary of Defense provide guidance on selecting appropriate demilitarization codes that includes the specific details necessary to make appropriate decisions. The guidance could take the form of the draft demilitarization code assignment worksheet being used by the Air Force. (p. 17/GAO Draft Report)

DOD RESPONSE: Concur. The Department agrees that a code assignment sheet may be useful in assigning demilitarization codes. The Air Force developed their worksheet as a tool to assist equipment specialists in the code assignment decision process and to provide a documented record of the rationale for code assignment. Although the form being used at the time of the audit was in draft, it has now been refined and is projected to be published during October 1997. We will work with the Military Services and the Defense Logistics Agency (DLA) to determine the feasibility of Department-wide use of this, or a similar, worksheet. This matter is projected for completion during January 1998.

Now on p. 13.

RECOMMENDATION 2: The GAO recommended that the Secretary of Defense exclude commercial-type parts and nonsignificant military-unique parts that do not have military technology and flight safety implications from policies intended to prevent an inadvertent sale of parts with these implications. (pp. 17/GAO Draft Report)

DOD RESPONSE: Concur. When properly coded by the item managers, commercial-type parts and nonsignificant military-unique parts that do not have military technology and flight safety implications do not require demilitarization or mutilation for flight safety reasons. Challenge programs are available in the event of incorrect coding.

RECOMMENDATION 3: The GAO recommended that the Secretary of Defense should work closely with the private sector to identify and list commercial-type aircraft parts and nonsignificant military-unique parts the private sector needs, and require the

ENCLOSURE

Defense Reutilization and marketing Offices (DRMOs) to check this list before destroying parts. (p. 17/GAO Draft Report)

Now on p. 13.

DOD RESPONSE: Partially concur. The Department previously attempted to obtain private sector input to identify commercial-type aircraft parts in connection with the joint DoD and Federal Aviation Administration process action team in 1995. The response from the private sector was minimal. However, the Department agrees that the identification of commercial-type aircraft parts should be performed during the provisioning process and should involve the prime contractor and will continue to consult with the private sector. It should be noted that the identification decision should be based on DoD considerations as opposed to total acceptance of input from the contractor. The resulting identifications should be incorporated into an existing database rather than utilizing a separate list. It is DoD policy that the DRMO causes the destruction of parts only when demilitarization is required or they are identified as having flight safety implications. However, inaccurate information does occur and use of all available data to reduce unnecessary destruction should be utilized by the DRMO.

RECOMMENDATION 4: The GAO recommended that the Secretary of Defense require the Army to complete its validation of the demilitarization codes assigned to Cobra helicopter parts so commercial-type parts and nonsignificant military-unique parts can be sold. (p. 17/GAO Draft Report)

Now on p. 13.

DOD RESPONSE: Concur. The Department is monitoring the Army's validation of demilitarization codes for the Cobra helicopter. The Army's validation process, which will determine which parts are commercially available and can be sold, is expected in November 1997.

RECOMMENDATION 5: The GAO recommended that the Secretary of Defense establish milestones for correcting computer interface problems that preclude the military services from having visibility of parts located in DRMOs and from following regulations that require parts to be returned to the supply system when needed to prevent unnecessary procurements or repairs. In the interim, institute alternative ways to obtain this information on a routine basis. For example, aircraft parts available at DRMOs can be identified by telephone calls, the Internet, or physical inspection. (p. 17/GAO Draft Report)

Now on p. 13.

DOD RESPONSE: Partially concur. Computer interface problems may impact visibility of parts, these are addressed as they arise. The joint Total Assets Visibility office is actively working with

the Military Services to finalize a functional description for automated visibility of disposal assets to prevent unnecessary buys and repairs. Once finalized, milestones for implementation will be developed based upon the complexity of the information system changes required. The earliest projected date for development of milestones is during the first quarter of Fiscal year 1998. In the interim, many sources are available to the Military Services that provide visibility of parts in the DRMO. These include the Defense Reutilization and Marketing Service Home Page on the Internet, the Interrogation Requirements Information System, and both formal and informal contacts between DRMOs and item managers.

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