

# Inspector General

United States  
Department of Defense



Internal Controls Over the  
Army Military Equipment  
Baseline Valuation Effort

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## Acronyms and Abbreviations

|            |  |
|------------|--|
| AIM        | Abrams Integrated Management   |
| ASA(ALT)   | Assistant Secretary of the Army (Acquisition, Logistics, and Technology) |
| HMEE       | High Mobility Engineer Excavator   |
| ITAS       | Improved Target Acquisition System                                       |
| OIG        | Office of Inspector General  |
| P&EPO      | Property and Equipment Policy Office                                     |
| PAC-3      | Patriot Advance Capability-3   |
| PEO        | Program Executive Office   |
| PMO        | Program Management Office  |
| QMD        | Quantitative Methods Directorate   |
| SFFAS      | Statement of Federal Financial Accounting Standards                      |
| SOCOM      | Special Operations Command   |
| USD(AT&L)  | Under Secretary of Defense for Acquisition, Technology, and Logistics    |
| USD(C)/CFO | Under Secretary of Defense (Comptroller)/Chief Financial Officer         |
| USMC       | U.S. Marine Corps  |



INSPECTOR GENERAL  
DEPARTMENT OF DEFENSE  
400 ARMY NAVY DRIVE  
ARLINGTON, VIRGINIA 22202-4704

August 29, 2008

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION,  
TECHNOLOGY, AND LOGISTICS  
UNDER SECRETARY OF DEFENSE (COMPTROLLER)/CHIEF  
FINANCIAL OFFICER  
AUDITOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Internal Controls Over the Army Military Equipment Baseline Valuation Effort  
(Report No. D-2008-126)

We are providing this report for information and use. We considered management comments on a draft of this report in preparing the final report.

Comments on the draft of this report conformed to the requirements of DoD Directive 7650.3 and left no unresolved issues. Therefore, no additional comments are required.

We appreciate the courtesies extended to the staff. Please direct questions to Mr. Jack L. Armstrong at (317) 510-4801, extension 274 (DSN 699-4801) or Ms. Kathleen Furey at (317) 510-4801, extension 257 (DSN 699-4801). The team members are listed inside the back cover.

*Patricia A. Marsh*  
Patricia A. Marsh, CPA  
Assistant Inspector General  
Defense Financial Auditing Service





# Results in Brief: Internal Controls Over the Army Military Equipment Baseline Valuation Effort

## What We Did

We assessed the effectiveness of the Property and Equipment Policy Office and Army internal controls over the valuation, rights and obligations, and completeness of military equipment programs contained in the Army military equipment baseline. This report is one in a series.

Statement of Federal Financial Accounting Standard No. 23, "Eliminating the Category National Defense Property, Plant, and Equipment," May 2003, classified military equipment as General Property, Plant, and Equipment and required that military equipment assets be capitalized and depreciated. The Under Secretary of Defense (Acquisition, Technology, and Logistics) and the Under Secretary of Defense (Comptroller)/Chief Financial Officer established the Office of the Secretary of Defense Property and Equipment Policy Office to achieve compliance with Statement of Federal Financial Accounting Standard No. 23.

Because systems and processes were not in place to allow for the calculation of the full cost of assets, the Property and Equipment Policy Office used a program-based valuation method to develop the baseline.

For the valuation assertion, we reviewed a statistical sample of 1,064 end items within 39 military equipment programs. The acquisition cost of these 39 programs was \$78.1 billion, and the acquisition cost of these 1,064 end items was \$46.8 billion. For the rights and obligations assertion, we reviewed a statistical sample of 800 end items within 24 average cost programs. For the completeness assertion, we reviewed a judgmental sample of 68 programs that were excluded from the baseline.

## What We Found

The Army military equipment baseline values were misstated by at least \$4.2 billion. In addition, the Army could not support ownership of at least 420 military equipment end items or the completeness of the military equipment program baseline. As a result, the Army cannot rely on the baseline to assert that military equipment is ready for audit.

## What We Recommend

We recommend that the Office of the Secretary of the Army (Acquisition, Logistics, and Technology):

- issue guidance requiring Program Management retain supporting documentation and
- request an independent organization perform a quality assurance review of supporting documentation.

## Client Comments and Our Response

The Assistant Secretary of the Army for Acquisition, Logistics, and Technology concurred with the recommendations and plans to begin implementation of the guidance by the 4th Quarter FY 2008. The client comments were responsive to the recommendations. Please see the recommendations table on the back of this page.



Apache AH-64A Helicopter

## Recommendations Table

| <b>Client</b>  | <b>Recommendations<br/>Requiring Comment</b> | <b>No Additional Comments<br/>Required</b> |
|--|--|--|
| Assistant Secretary of the Army<br>for Acquisition, Logistics, and<br>Technology |  | 1, 2                                       |

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# Introduction

## Objectives

Our overall objective was to determine whether internal controls over the Army's military equipment baseline valuation process were adequate. Specifically, we assessed the effectiveness of the Property and Equipment Policy Office (P&EPO) and the Army internal controls over the valuation, rights and obligations, and completeness of military equipment. See Appendix A for a discussion of the scope and methodology, the review of internal controls, and prior coverage.

## Background

The Under Secretary of Defense for Acquisition, Technology, and Logistics (USD[AT&L]) requested that the DoD Office of Inspector General (OIG) review the:

- process used to value military equipment,
- ability to demonstrate that DoD owns the military equipment being reported (rights and obligations), and
- completeness of the military equipment universe.

The DoD OIG is auditing the military equipment baselines of the Army, Navy, Air Force, U.S. Marine Corps, and Special Operations Command. This report addresses the Army's military equipment baseline.

As of September 30, 2006, Military Equipment was \$58.9 billion, approximately 70 percent of General Property, Plant, and Equipment reported in the Department of the Army General Fund Financial Statements, and 26 percent of Total Assets. The Army military equipment baseline contained 216 programs, with a total net book value of \$58.2 billion.<sup>1</sup> A military equipment program is the grouping of like assets that meet the military equipment criteria. Statement of Federal Financial Accounting Standards (SFFAS) No. 23, "Eliminating the Category National Defense Property, Plant, and Equipment," May 2003, classifies military equipment as General Property, Plant, and Equipment and requires that military equipment assets be capitalized and depreciated. Prior to SFFAS No. 23, DoD expensed military equipment acquisition costs in the period that they occurred. USD(AT&L) and the Under Secretary of Defense (Comptroller)/Chief Financial Officer (USD[C]/CFO) established the Office of the Secretary of Defense Property and Equipment Policy Office to achieve compliance with SFFAS No. 23. The P&EPO is responsible for leading the DoD implementation of SFFAS No. 23 and ensuring that DoD:

- develops and applies standard, consistent approaches and methodologies;
- modifies, coordinates, and communicates policies and procedures; and
- reports military equipment values that pass the audit community's test.

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<sup>1</sup> This is the net book value of the Army's military equipment. The total net book value of military equipment is the total acquisition cost minus the accumulated depreciation. The Army's financial statements also include its portion of Chemical and Biological Defense Programs.

## **Management Assertions**

Management assertions are representations by management about information in the financial statements. The primary management assertions for the Military Equipment line item are listed in Table 1.

| <u>Assertion</u>            | <u>Management Representation</u>   |
|-----------------------------|--|
| Valuation or Allocation     | All military equipment is properly valued.   |
| Rights and Obligations      | The Army owns all military equipment reported in the financial statements.                                 |
| Completeness                | All military equipment owned by the Army is reported in the financial statements                           |
| Existence or Occurrence     | All military equipment assets reported in the financial statements existed on the date they were reported. |
| Presentation and Disclosure | All military equipment assets are correctly reported in the financial Statements                           |

## **Baseline Valuation**

The military equipment valuation process consisted of two phases. During the first phase, the P&EPO developed an opening inventory of military equipment, called the baseline, for the period ending September 30, 2006. The military equipment baseline is updated using expenditure information and information related to acquisition and logistics to identify acquisitions and disposals. Because accounting systems and processes were not in place to allow DoD to calculate the full cost of assets as required by SFFAS No. 6, "Accounting for Property, Plant, and Equipment," the P&EPO used program-based valuation methods to develop the baseline. The P&EPO used two methodologies to value Army military equipment, Average Cost and Group and Composite.

### **Average Cost**

The Average Cost Methodology generally applies when major assets; such as combat aircraft, tanks, and ships; are acquired under programs with uniquely identifiable costs. The P&EPO used this approach, calculating total program costs through FY 2006 from budgetary and expenditure data sources provided by the program management offices (PMOs) and dividing that total by the estimated quantity of assets to arrive at unit acquisition cost.

### **Group and Composite**

Unlike the Average Cost Methodology, which assigns costs to individual end items, the Group and Composite Methodology treats the total expenditures for each year as a single asset. The Group and Composite Methodology is applied when at least some of the assets being acquired under an appropriation have a unit cost in excess of the capitalization threshold, when costs cannot be directly associated with end items, and when no single item is significant enough to represent the entire program. Examples include mobile hospitals and categories of construction vehicles. Using this approach, the P&EPO computed annual program costs through FY 2006 from budgetary and expenditure data sources provided by the PMOs. The unit acquisition cost in a group and composite program is equal to the annual program costs for each fiscal year.

### ***Fixed-Asset Accounting***

Fixed-asset accounting uses depreciation to distribute the original cost of a fixed asset, such as equipment, over its estimated useful life. Accumulated depreciation is the sum of the depreciation expense taken to date on an asset. An asset's net book value—the amount shown on the financial statements—is the asset's original cost minus its accumulated depreciation. The P&EPO used the mid-year convention method<sup>2</sup> to compute depreciation.

### ***Army Acquisition Structure***

A program executive office (PEO) directs several major Defense acquisition programs and major and non-major system acquisition programs. A PMO manages the development of major weapons systems and equipment and reports to a PEO. The PEOs report directly to the Assistant Secretary of the Army for Acquisition, Logistics, and Technology (ASA[ALT]), who is the single decision authority for all Army acquisition matters. The P&EPO met with Army PEOs and PMOs to discuss military equipment valuation, requirements, and methods.

### ***Accounting Standards for Property, Plant, and Equipment***

The Federal Accounting Standards Advisory Board and the USD(C)/CFO issue accounting standards for property, plant, and equipment. Appendix B contains a discussion of military equipment accounting policy.

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<sup>2</sup> Under the mid-year convention, 6 months of depreciation is recorded in the first and last year of an asset's useful life, regardless of the month the asset was placed into, or removed from, service.



# Valuation of Army Military Equipment Baseline

Army military equipment baseline values were misstated by at least \$4.2 billion. In addition, the Army could not support ownership of at least 420 military equipment end items<sup>3</sup> or the completeness of the military equipment program baseline. This occurred because the Program Executive Office (PEO) validations and attestations and the Program Management Office (PMO) maintenance of supporting documentation were insufficient to:

- prevent valuation errors,
- support the Army's rights to assets,
- exclude assets belonging to other DoD Components, and
- ensure that all programs that should be valued were included.

As a result, the Army cannot rely on the baseline to assert that military equipment is ready for audit.

## Army Military Equipment

The Army military equipment baseline contained 98,699 end items within 216 programs, with a total acquisition cost of \$113.9 billion. See Appendix D for a discussion of the methodology used to select the statistical sample of programs and end items. For the valuation assertion, we reviewed a statistical sample of 1,064 end items within 39 average cost and group and composite programs. The acquisition cost of the 39 programs was \$78.1 billion, and the acquisition cost of the 1,064 end items was \$46.8 billion. For the rights and obligations assertion, we reviewed a statistical sample of 800 end items within 24 average cost programs. For the completeness assertion, we reviewed a judgmental sample of 68 programs that were excluded from the baseline.<sup>4</sup> See Appendix C for a summary of the types of errors found in each program and the total misstatement for the program acquisition cost.

## Valuation Assertion

For the valuation assertion, management represented that the military equipment assets were correctly valued in the financial statements. The net book value of each asset was computed by subtracting the accumulated depreciation from the unit acquisition cost. To determine the accuracy of the baseline valuation, we reviewed the unit acquisition costs and depreciation computations for 1,064 end items in 39 programs. The P&EPO incorrectly valued at least 20,310 end items in the Army baseline.

## Unit Acquisition Cost

The P&EPO misstated the unit acquisition costs of end items in the Army baseline by at least \$4.2 billion. Of the 1,064 end items reviewed, the P&EPO misstated the unit acquisition cost for 461 end items and correctly stated the unit acquisition cost for

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<sup>3</sup> Military equipment end items, or assets, are the final combination of component parts and materials that are ready for their intended use (for example, tanks and helicopters).

<sup>4</sup> Judgmental sample results are not projectable across the universe.

574 end items. Because we could not locate sufficient documentation, we were unable to determine whether the P&EPO correctly stated the unit acquisition costs for the remaining 29 end items. Table 2 shows the results of this review.

| <u>Result</u>         | <u>Number of End items</u> | <u>Total Baseline Acquisition Cost</u> | <u>Total Misstatement</u> |
|-----------------------|----------------------------|--|---------------------------|
| No Misstatement Found | 574                        | \$38.0 billion                         | \$0                       |
| Understated           | 324                        | 3.5 billion                            | 1.3 billion               |
| Overstated            | 137                        | 1.5 billion                            | 0.9 billion               |
| Unable to Determine*  | 29                         | 3.9 billion                            | 0                         |

\* Due to insufficient supporting documentation

The P&EPO misstated the unit acquisition cost for 461 end items because it used incorrect total program costs, an incorrect number of total program end items, or both to compute the unit acquisition cost. The P&EPO and the Army PMOs did not provide adequate documentation to support the valuation of two (from Table 4) programs. The unit acquisition cost is computed differently for average cost and group and composite programs. For average cost programs, the unit acquisition cost is equal to the total program cost divided by the number of end items. As a result, all end items in an average cost program have the same unit acquisition cost. For group and composite programs, the total expenditures for each fiscal year are treated as a single asset. The unit acquisition cost is equal to the total expenditures for the year. Because the total expenditures can vary from year to year, end items in group and composite programs generally have different unit acquisition costs. Table 3 (on page 7) summarizes the misstatements we found for each military equipment program.

### **Average Cost Programs**

Of the 461 sample items with incorrect unit acquisition costs, 440 were part of average cost programs. Because the unit acquisition cost is computed by dividing the total program cost by the number of end items, errors in either the total program cost or number of end items resulted in a misstatement of the unit acquisition cost. The misstatements in the unit acquisition cost for the 440 average cost sample items resulted from errors in the total program cost for 180 sample items, in the number of end items for 160 sample items, and in both for 100 sample items.

### **Total Program Cost**

The P&EPO misstated the total program cost for 10 average cost programs. Because the unit acquisition cost is computed by dividing the total acquisition cost by the number of program end items, these misstatements resulted in incorrect unit acquisition costs for 280 sample items.

The P&EPO overstated the total program cost for the Improved Target Acquisition System (ITAS) Program because it incorrectly included costs that should have been excluded. The P&EPO incorrectly used \$962.9 million in costs from fiscal years prior to FY 2005 to compute the total cost for the ITAS Program. The program budget reports indicate that only \$424 million of these costs were for the ITAS Program. In addition, the P&EPO incorrectly included \$23.9 million in initial spares in the total ITAS Program cost. Because initial spares do not meet the military equipment criteria, their cost should

not be included in the total program cost. These errors resulted in a \$799,000 overstatement of the unit acquisition cost for each ITAS end item.

**Table 3. Military Equipment Programs with Unit Acquisition Cost Errors**

| <u>Program</u>                              | <u>Sample Items</u> | <u>Program Acquisition Cost</u> | <u>Number of End items</u> | <u>Misstatement</u>            |
|---|---------------------|---------------------------------|----------------------------|--------------------------------|
| Abrams M1A1<br>Abrams Integrated Management | 20                  | 20                              |                            | \$4.7 million understatement   |
| Armored Security Vehicle                    | 20                  | 20                              |                            | \$0.7 million understatement   |
| Blackhawk, model UH-60L (2001-2006)         | 20                  | 20                              |                            | \$52.7 million understatement  |
| Improved Target Acquisition System          | 40                  | 40                              |                            | \$32.0 million overstatement   |
| Longbow Apache AH-64D                       | 20                  | 20                              |                            | \$13.5 million understatement  |
| M88A2 Hercules                              | 20                  | 20                              |                            | \$2.2 million understatement   |
| Paladin                                     | 20                  | 20                              |                            | \$0.8 million understatement   |
| Palletized Load System                      | 20                  | 20                              |                            | \$0.6 million understatement   |
| Chinook CH-47D                              | 140                 |                                 | 140                        | \$5.1 million understatement   |
| M939 5-Ton Truck                            | 20                  |                                 | 20                         | \$4 thousand understatement    |
| Family of Stryker Vehicles                  | 80                  | 80                              | 80                         | \$10.5 million overstatement   |
| Patriot Advance Capability-3                | 20                  | 20                              | 20                         | \$753.0 million understatement |
| Family of Medium Tactical Vehicles*         | 45                  | 12                              |                            | \$4.2 million overstatement    |
| Fire Support Vehicle Modification*          | 18                  | 9                               |                            | \$372.8 million overstatement  |

\* Group and composite programs

The P&EPO understated the total program cost for three programs because it did not include all costs to bring the end items to a form and location suitable for their intended use. For example, the P&EPO did not include the net book value of all modified Patriot firing units in the total program cost of the Patriot Advance Capability-3 (PAC-3) Program. The P&EPO Business Rule, "Modifications, Modernizations, Upgrades, and Improvements," May 2005, states that the net book value of an existing asset should be added to the full cost of modifications that extend its useful life. Because the PAC-3 Program modified existing Patriot firing units to improve their capabilities and extend their useful lives, the net book value of the existing Patriot firing units modified under the PAC-3 Program should be included in the total program cost of the PAC-3 Program. This error resulted in a \$17.3 million understatement of the unit acquisition cost for each PAC-3 end item.

The P&EPO understated the total program cost for six programs because it did not use the most current program cost data. For example, the P&EPO used the program budget report from FY 2005 to calculate the unit acquisition cost for the Armored Security Vehicle Program. The FY 2005 program budget report showed a unit acquisition cost of \$770,000. The unit acquisition cost increased to \$804,000 in the FY 2006 budget report. This error resulted in a \$34,000 understatement of the unit acquisition cost for each Armored Security Vehicle end item.

### **Number of Program End Items**

The P&EPO misstated the unit acquisition cost for 4 average cost programs because it used the incorrect number of program end items to compute unit acquisition cost for 260 sample items. For example, the P&EPO incorrectly used 54 end items to calculate the unit acquisition cost for the PAC-3 Program. The December 2003 Selected Acquisition Report for the PAC-3 Program indicated that in September 1998, the PMO estimated that the Army would procure 54 PAC-3 end items under the program. However, the same document also indicated that in December 2000, the PMO estimated that the Army would procure 40 PAC-3 end items under the program. The P&EPO incorrectly used the FY 1998 estimate of 54 end items rather than the more current FY 2001 estimate of 40 end items. This error resulted in a \$14.3 million understatement of the unit acquisition cost for each PAC-3 end item.

### **Group and Composite Programs**

Of the 461 sample items with incorrect unit acquisition costs, 21 were part of group and composite programs. These misstatements resulted from errors in computing the annual expenditures for some of the fiscal years in these programs. For example, the P&EPO incorrectly included \$372.8 million in costs associated with another program in the total program cost of the Fire Support Vehicle Modification Program. As a result, the P&EPO overstated the unit acquisition cost for 9 years by \$41.4 million each.

## Program Costs Supporting Documentation

For 2 of 39 programs we reviewed, neither the P&EPO nor the Army PMOs provided support for the total program costs. Because of the lack of documentation, we were unable to determine whether the P&EPO correctly calculated the total program costs for these programs. Table 4 shows the two programs and the amount of unsupported costs.

| <u>Program</u>                | <u>Unsupported Program Costs</u> |
|-------------------------------|----------------------------------|
| Bradley A2                    | \$246.5 million                  |
| M9 Armored Combat Earth Mover | \$ 35.1 million                  |

## Depreciation

The P&EPO miscalculated depreciation for 59 end items in 9 of the 39 programs we reviewed. Depreciation is computed by dividing the unit acquisition cost by the estimated useful life. Depreciation begins from the date an end item is placed in service. Because the net book value is the amount shown on the financial statements, errors in calculating depreciation would cause the financial statements to be misstated. Table 5 shows the types of errors that caused the depreciation to be misstated in the nine programs.

| <u>Program</u>                           | <u>Sample Items</u> | <u>Useful Life Errors</u> | <u>Placed-in-Service Date Errors</u> |
|--|---------------------|---------------------------|--------------------------------------|
| Abrams M1A1 Abrams Integrated Management | 20                  |                           | 7                                    |
| Improved Target Acquisition System       | 40                  |                           | 1                                    |
| M88A2 Hercules                           | 20                  |                           | 11                                   |
| Paladin                                  | 20                  |                           | 8                                    |
| Chinook CH-47D                           | 140                 |                           | 3                                    |
| M939 5-Ton Truck                         | 20                  | 2                         |                                      |
| Javelin                                  | 20                  | 20                        |                                      |
| Abrams M1A2                              | 40                  |                           | 5                                    |
| Abrams M1A2 SEP                          | <u>60</u>           | <u>—</u>                  | <u>2</u>                             |
| <b>Total Number of End items</b>         | <b>380</b>          | <b>22</b>                 | <b>37</b>                            |

## **Useful Life**

The P&EPO used the incorrect useful life to compute the depreciation for 22 sample items in 2 programs (M939 5-Ton Truck and Javelin). The PMOs determined the useful life for each program. In FY 2004, the Javelin PMO notified the P&EPO that the useful life of the Javelin end items was 20 years. In FY 2006, the P&EPO changed the useful life for this program to 10 years, based on a request from the PMO. During our visit to Redstone Arsenal in August 2007, the Javelin PMO stated that the correct useful life was 20 years. Because the PMO incorrectly changed the useful life, the P&EPO overstated depreciation for the 20 Javelin end items we reviewed by \$318,000 and understated the net book values by the same amount.

## **Placed-in-Service Date**

The P&EPO used incorrect placed-in-service dates to compute the depreciation in 15 programs. An asset is considered placed in service when the Army receives it. The P&EPO used the mid-year convention to calculate the depreciation for Army military equipment end items. Under the mid-year convention, only errors that record the placed-in-service date in the wrong fiscal year cause depreciation to be misstated. The 15 programs contained 175 sample items with incorrect placed-in-service dates, 37 of which recorded the date in the wrong fiscal year. For example, the P&EPO used the wrong placed-in-service date for all 20 end items we reviewed in the Abrams M1A1 Abrams Integrated Management (AIM) program. Seven of those had the placed-in-service dates in the wrong fiscal year. Because the placed-in-service dates for these seven end items were in the wrong fiscal year, the P&EPO overstated depreciation by \$232,096, thus understating net book value by the same amount.

## **Other Issues**

In 2 of 39 programs, the P&EPO did not allocate expenditures correctly among the end items. When the Army receives the last end item in a program, there may be remaining expenditures in the Work-In-Process account, which records all costs related to the acquisition of constructed General Property, Plant, and Equipment. The P&EPO created an additional end item with a unit acquisition cost equal to the remaining expenditures for these two programs. For the unit acquisition cost to be correct, the P&EPO should have allocated the remaining expenditures among all of the end items in the programs. Because the P&EPO did not allocate the remaining expenditures, they understated the unit acquisition costs for the two programs. Understating the unit acquisition cost also resulted in a misstatement of the depreciation for each end item. For example, the Army received the final Paladin Program end item in FY 2005. The Paladin Work-In-Process account included expenditures of \$163.6 million. Rather than allocate these remaining expenditures among the 975 Paladin end items, the P&EPO created an additional end item in the Paladin Program valued at \$163.6 million. Because the P&EPO did not allocate the expenditures, it understated the unit acquisition cost for each Paladin Program end item by \$168,000.

The P&EPO also incorrectly created an additional end item for the Apache AH-64A Program. The end item represented \$293.5 million in initial spares, which did not meet the military equipment criteria. Because the P&EPO included the cost of the initial spares in the total program cost, it overstated the Army baseline value for this program by \$286.2 million, which is the net book value of the additional end item. Because the P&EPO did not allocate this cost among the 821 end items, the unit acquisition cost for these end items was incorrect.

In addition, the P&EPO did not include the FY 2006 program costs of \$542.5 million as an end item for the Family of Medium Tactical Vehicles Program, which is a group and composite program. Because there was no end item for FY 2006, the missing expenditures were not part of our statistical sample.

## **Rights and Obligations Assertion**

The Army could not support ownership of at least 420 military equipment end items. The Army baseline improperly contained 23 of 800 sampled average cost end items with an acquisition cost of \$462 million that were owned by other DoD Components. The Army also lacked documentation to support the ownership of 60 of 800 sampled average cost end items. In addition, we did not confirm the Army's rights to 264 sampled group and composite end items because the Group and Composite Methodology did not allow for the testing of the rights and obligations assertion.

### ***Non-Army End Items***

The Army baseline contained 23 of 800 sampled average cost end items, with an acquisition cost of \$462 million, which were owned by other DoD Components. Of the 23 non-Army end items, 19 were Chinook helicopters owned by the Special Operations Command (SOCOM), 2 were Blackhawk helicopters owned by SOCOM, and 2 were Abrams tanks owned by the U.S. Marine Corps (USMC).

The 19 Chinook helicopters were part of a program managed by the Army Aviation PEO. Under this program, older Chinook helicopters were modified for two distinct uses. One model was modified for Army use, and the other model was modified for SOCOM use. The P&EPO included both models in the Army baseline. However, the P&EPO also included the SOCOM model helicopters in the SOCOM baseline. Because only SOCOM uses the 19 Chinook helicopters, these assets were appropriately included in its baseline. As a result, the P&EPO incorrectly included these 19 end items, valued at \$442.7 million, in the Army baseline.

The P&EPO also included two Blackhawk helicopters in the both the Army and SOCOM baselines. Documentation provided by the PMO and the Defense Contract Management Agency indicated that these two Blackhawk helicopters were delivered to SOCOM. As a result, the P&EPO incorrectly included these two end items, valued at \$14.6 million, in the Army baseline.

The two Abrams tanks were part of a program that the P&EPO included in both the Army and USMC baselines. The Army originated the Abrams tank program, but Abrams tanks are used by both the Army and the USMC. The Army included all the Abrams tanks in their baseline and intended to remove the tanks that were being used by the USMC. Because these tanks were not removed by September 30, 2006, the Army baseline included USMC tanks. As a result, the P&EPO incorrectly included these two end items, valued at \$4.7 million, in the Army baseline.

## Army Ownership Supporting Documentation

For 8 programs, the Army PMOs did not provide adequate documentation to support the Army's ownership of 60 of the 800 sampled average cost end items we reviewed. The eight programs and the number of unsupported end items for each are provided in Table 6. The Army PMOs for two of the eight programs stated that they could not locate the DD 250s (Material Inspection and Receiving Reports)<sup>5</sup> for the requested sample end items. For the remaining six programs, the Army PMOs did not provide an explanation for why the DD 250s were not available. For end items received after FY 1999, we considered the rights and obligations assertion to be supported when the Army PMO provided receiving reports. Because record retention rules require documentation to be retained for at least 6 years and 3 months, the receiving reports were not always available for end items received prior to FY 2000. In these cases, we also accepted alternative documentation to support ownership, such as PMO asset lists and delivery schedules.

| <u>Program</u>                    | <u>Unsupported Sampled End items</u> |
|-----------------------------------|--------------------------------------|
| Armored Security Vehicle          | 20                                   |
| Avenger                           | 1                                    |
| Blackhawk Helicopters (1987-2000) | 1                                    |
| Chinook CH-47D                    | 1                                    |
| Javelin                           | 20                                   |
| Paladin                           | 1                                    |
| Palletized Load System            | 2                                    |
| Patriot Advanced Capability-3     | <u>14</u>                            |
| <b>Total</b>                      | <b>60</b>                            |

The Army baseline did not identify the individual assets included in each group and composite program. The Group and Composite Methodology reported expenditures by fiscal year as a single end item, rather than reporting expenditures by individual assets. Therefore, we were unable to develop a statistical sample of group and composite assets and did not test the rights and obligations assertion for these 15 programs.

## Completeness Assertion

The Army baseline was not complete. The P&EPO drafted an initial list of programs using the military equipment reports provided in response to a congressional requirement, budget line item reports, selected acquisition reports, and the Government Accountability Office Defense Acquisition Assessment of Major Weapon Program Reports. The P&EPO also used Component-specific reports to gather military equipment program data. These included the Army weapon system books, Chief Financial Officer equipment lists, Army system extracts, and PMO briefings and overview documents. After

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<sup>5</sup> DoD uses the DD 250 to establish receipt of an end item by the DoD Component.

developing the initial list of programs, the P&EPO reviewed it with Army financial and program managers to identify any required adjustments. The P&EPO required the Army managers to provide supporting documentation for adjustments to the initial list.

The initial list developed by the P&EPO included 981 programs. The P&EPO reviewed each program to determine whether it met the criteria for being classified as military equipment. Military equipment consists of tangible assets that meet the following criteria:

- have an estimated useful life of 2 years or more,
- are not intended for sale in the ordinary course of operations,
- are acquired or constructed with the intention of being used or being available for use by the entity, and
- have an initial acquisition cost or book value that equals or exceeds the DoD capitalization threshold of \$100,000.

If the programs did not meet all of these criteria at the time of the baseline, they were excluded from the valuation. The P&EPO will annually review programs for which procurement had not begun at the time of the baseline to determine whether their status has changed. Based on this review, the P&EPO excluded 765 of the initial 981 programs. If any of the excluded programs met the criteria, the Army baseline would be incomplete.

We reviewed the supporting documentation for a judgmental sample of 68 excluded programs to determine whether they met the military equipment criteria. We determined that 2 of these 68 programs were improperly excluded from the Army baseline. In addition, the documentation provided by the Army program managers was insufficient to support the exclusion of five programs.

### ***Excluded Programs***

The High Mobility Engineer Excavator (HMEE) Type III and the Utility Helicopter 60M Programs were incorrectly excluded from the Army baseline. The HMEE Type III is a backhoe loader that is capable of completing construction and loading tasks. The P&EPO incorrectly determined that end item cost for this program was \$92,000, which is below the military equipment capitalization threshold of \$100,000. The P&EPO excluded the FY 2005 programs costs from their calculation. The correct end item cost for this program was \$108,000. Because the end item cost exceeded the capitalization threshold, the P&EPO should have included this \$12.8 million program in the Army baseline.

The Utility Helicopter 60M is an improved version of the Blackhawk UH-60 utility helicopter. When the P&EPO developed the initial list, this program was in the research, development, testing, and evaluation phase, and the PMO did not expect any end items to be delivered prior to the baseline date. The Army received two UH-60M helicopters during FY 2006. Because the Army received these two UH-60M helicopters prior to the baseline date, the P&EPO should have included this program in the Army baseline. The P&EPO stated that it is the PMO's responsibility to inform them of program status changes and provide documentation to enable them to determine the program's unit acquisition cost. The P&EPO indicated that the PMO had not made any requests to change the status of the UH-60M Program.

## **Exclusion Support**

The PMOs for five programs did not provide sufficient support for the exclusion of the programs from the Army baseline. The PMO for the EO-5; a reconnaissance aircraft that integrates imagery sensors, communication intercept, and direction finding to support operations; did not support that the funding for this program was being included in another program. The PMO for the Hellfire Launchers; which are used to fire Hellfire missiles from Army aircraft, Navy aircraft, and Marine Corps aircraft; did not provide sufficient support that their end item cost was less than the military equipment capitalization threshold. The PMO for the Modular Base Petroleum Lab, a highly mobile petroleum lab used to test the quality of military petroleum products, did not provide evidence that the program was cancelled. The PMO for the AN/TSQ-73, a command control console used primarily for the Hawk missile system, did not have adequate support for the statement that the program was deactivated. The PMO for the PM Robotics System, Useful Life; which consists of unmanned robotic systems; did not provide support that the program's useful life was less than 2 years. Without sufficient support, we cannot verify that the programs were properly excluded from the baseline.

## **Internal Controls**

The P&EPO stated that they relied on validation and attestation by the DoD Components as the main control over the valuation and completeness assertions. ASA(ALT) requested that the program managers review the Army baseline and determine whether the P&EPO correctly included the information provided by the program managers during the development of the Army baseline. The control of seeking validation from the Components was not sufficient to prevent the errors we identified. Some program managers refused to confirm the Army baseline values because they did not understand how the P&EPO used the information they provided to compute the baseline values. The PEOs consolidated the results of the program manager reviews. The PEOs signed attestation memorandums that indicated whether the P&EPO accurately included the program manager input in the Army baseline information and whether any changes were necessary. Not all of the PEOs signed an attestation memorandum. For example, PEO Aviation did not sign an attestation memorandum. Because PEO Aviation did not sign an attestation memorandum, the P&EPO interpreted this to mean that no changes were needed for any PEO Aviation programs. Based on the identified errors, this interpretation was incorrect. In addition, not all program managers provided input into the PEO attestations. For instance, the PEO Missiles and Space attestation did not include information from the Patriot and PAC-3 program managers. The P&EPO understated the acquisition cost of 20 PAC-3 sample items by \$753 million.

For the rights and obligations assertion, the P&EPO relied on the PMOs to maintain documentation supporting Army ownership of the military equipment end items. Because program managers were unable to provide documentation to support the Army's ownership of 60 sample end items, this control was ineffective. In addition, this control was not sufficient to ensure that only Army assets were included in the baseline.

## **Management Actions**

ASA(ALT) personnel stated that the Army began storing military equipment receiving reports in Wide Area WorkFlow in FY 2007. Wide Area WorkFlow is a DoD-wide system designed to eliminate paper from the receipt and acceptance process for DoD contracts. The system enables authorized contractors and DoD personnel to create invoices and receiving reports and access contract documents. Wide Area WorkFlow maintains a historical file, which includes electronic copies of receiving reports.

ASA(ALT) personnel indicated that the Army goal is to reach 75 percent implementation by the end of 2008 and to complete fielding as soon as practicable after that. The use of Wide Area WorkFlow should increase the likelihood that documentation is available to support ownership and placed-in-service dates.

## **Conclusion**

The internal controls over the Army baseline valuation process were insufficient to prevent valuation errors, support the Army's rights to assets, exclude assets belonging to other DoD Components, and ensure that all programs that should have been valued were included. As a result, the Army baseline is unreliable and cannot be used for asserting that the Army's military equipment is ready for audit.

The DoD Financial Improvement and Audit Readiness Plan provides a strategy for achieving unqualified audit opinions on its financial statements. Under this strategy, management makes and validates incremental improvements to segments and asserts to the segments' audit readiness. Segments are formed either by bringing together closely related areas of financial management or by breaking apart areas into more manageable portions. The DoD Financial Improvement and Audit Readiness Plan identifies military equipment as a segment. Achieving audit readiness in the military equipment segment will improve asset management, operational and program cost transparency, vendor pay management, and data for financial reporting, budgeting, and decision making. Improved business capabilities are essential to reporting the full cost of military equipment assets, capturing the cost of major acquisition programs, tracking the useful life of military equipment, and using such information in the planning, programming, and budgeting process.

In the September 2007 DoD Financial Improvement and Audit Readiness Plan, USD(AT&L) stated that the military equipment baseline valuations were correct, all military equipment that should be capitalized has been valued, and DoD owns and has the rights to all capitalized military equipment. For military equipment to be auditable, there must be sufficient documentation to support the program balances, and this documentation must be readily available for auditors to review. Based on the control deficiencies identified in this report, the Army baseline is not supported. The Army cannot assert that the military equipment segment is audit ready until they correct the identified control deficiencies and the baseline values for all Army programs. The Army should have an independent organization perform a review to confirm that documentation is available to support the reliability of the Army baseline before asserting that the Military Equipment line item is audit ready.

## **Client Comments on the Finding and Our Response**

Although not required to comment, the Director, Acquisition Resources and Analysis, Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics provided the following comments on the finding. For the full text of Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics comments, see Client Comments.

**Under Secretary of Defense for Acquisition, Technology, and Logistics Comments.**

The Director stated that although the draft report identified at least \$4.2 billion in misstatements to the unit acquisition costs, the net effect of these misstatements on the Army Balance Sheet is only about \$120 million.

The Director stated that the P&EPO relied on expenditure and budget data in the total program cost of the Improved Target Acquisition System, which included the cost of initial spares. The Director indicated that the cost of the initial spares could not be separately identified in the expenditure data.

The Director stated the P&EPO is currently assessing military equipment baseline policies to determine whether adjustments are required. The Director also commented on some of the programs identified in the report and stated that they are in the process of correcting the errors.

**Audit Response.** The objective of the audit was to determine the adequacy of the internal controls over the Army's military equipment baseline valuation process. We performed our review to determine whether the internal controls were adequate to prevent or detect misstatements. Our audit report identified several types of internal control weaknesses and provided examples of these weaknesses and their impact on the end item valuations. We did not determine the net effect of these weaknesses on the Army financial statements. The Director's comments indicate that the valuation errors resulting from these weaknesses offset each other, resulting in minimal impact on the Army Balance Sheet. Expressing the results of the valuation errors as a net figure may cause a reader to incorrectly conclude that the controls are effectively preventing and detecting misstatements.

The weaknesses in computing the end item values will not only impact the current period Balance Sheet, but will also impact the Statements of Net Cost and Changes in Net Position, and future period Balance Sheets. For example, the P&PEO incorrectly included the cost of initial spares in the end item values for some programs. Because initial spares are assets reported on the Operating Materials and Supplies line of the Balance Sheet, the impact of this error on the Balance Sheet would be \$0 for the first year the asset was placed in service. However, because Operating Materials and Supplies are not depreciated, this error would cause accumulated depreciation and depreciation expense to be overstated in future years, which would result in errors on the Balance Sheet and Statements of Net Cost and Changes in Net Position. In addition, if the Army disposes of any of these military equipment end items, the gain or loss associated with the disposal would be misstated, which would also result in errors on the Balance Sheet and Statements of Net Cost and Changes in Net Position.

The primary goal of the military equipment baseline valuation should be to accurately compute the value of military equipment end items in compliance with Accounting Principles Generally Accepted in the United States of America (GAAP). Including the cost of initial spares in the valuation of military equipment end items does not comply with GAAP. It will also prevent the correct accounting for the use of spares in future periods. As spares are used, they should be removed from Operating Materials and Supplies, and either expensed or added to the book value of the military equipment end item under repair. By not recording all initial spares as Operating Materials and Supplies, the Army will have to track which spares are already included in the book value of military equipment and ensure that standard accounting procedures are not followed when those spares are used. We believe that following GAAP for all transactions will reduce the risk of misstatement in future periods.

## Recommendations, Client Comments, and Our Response

We recommend that the Office of the Assistant Secretary of the Army for Acquisition, Logistics, and Technology:

**1. Issue guidance requiring that program management offices retain documentation supporting the Army's ownership of and placed-in-service dates for military equipment assets when receiving reports are not available in Wide Area WorkFlow.**

**Client Comments.** The Office of the Assistant Secretary of the Army for Acquisition, Logistics, and Technology concurred and has drafted guidance, which it will issue during the 4<sup>th</sup> Quarter FY 2008.

**Audit Response.** The Office of the Assistant Secretary of the Army for Acquisition, Logistics, and Technology comments are responsive and meet the intent of the recommendation.

**2. Request that an independent organization perform a quality assurance review to confirm that documentation supporting the Army military equipment baseline is readily available for auditor review.**

**Client Comments.** The Office of the Assistant Secretary of the Army for Acquisition, Logistics, and Technology concurred and will coordinate with the Office of the Assistant Secretary of the Army for Financial Management and Comptroller and the Army Audit Agency to identify timelines to perform a quality assurance review.

**Audit Response.** The Office of the Assistant Secretary of the Army for Acquisition, Logistics, and Technology comments are responsive and meet the intent of the recommendation.



# Appendix A. Scope and Methodology

We conducted this financial-related audit from June 2007 through June 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The P&EPO requested that DoD Office of the Inspector General perform procedures to review the Military Equipment Baseline Valuation as of September 30, 2006. Officials from both offices discussed and agreed on objectives for the engagement. The agreed-upon objectives included evaluating the reliability of the internal controls over three of the financial statement assertions: valuation, rights and obligations, and completeness of the Military Equipment Program universe. Specifically, we reviewed the reasonableness and reliability of the estimated historical acquisition costs that were developed using numerous sources, including budget documents, financial reports, and equipment inventory reports. Our scope was limited to completeness at the program level and not the end item level by the P&EPO. As such, we were only concerned that every program that should have been classified as military equipment was included in the baseline and not whether every end item within a program was included.

The Quantitative Methods Directorate (QMD), Office of the Deputy Inspector General for Policy and Oversight provided a statistical sample of programs and program end items based on the universe of Army military equipment programs and end items we provided them. QMD provided a statistical sample of 39 programs and 1,064 end items to test. See Appendix D for a discussion of the methodology used to select the sampled programs and end items.

For completeness testing, we chose a judgmental sample of 68 programs that were excluded from the Army baseline to verify that they were correctly excluded. We used a judgmental sample of excluded programs because these programs were not a part of the Army baseline to determine the statistical sample. We chose our sample from the list of excluded programs located at Warren, MI, and Huntsville, AL. These two locations contained 438 of 765 (57.3 percent) of the population of excluded programs.

We met with the P&EPO, the Office of the Assistant Secretary of the Army (Acquisition, Logistics, and Technology), and the Office of the Assistant Secretary of the Army (Financial Management and Comptroller). We also met with representatives of the PEO Ground Combat Systems; Combat Support and Combat Support Services; and Integrated Logistics Support Center in Warren, MI, and PEO Missiles and Space and Aviation in Huntsville, AL. In addition, we contacted the PEO Simulation, Training, and Instrumentation and PEO Ammunition.

## Review of Internal Controls

We determined that material control weaknesses, as defined by DoD Instruction 5010.40, "Managers' Internal Control (MIC) Program Procedures," January 4, 2006, existed in the Army military equipment baseline valuation process. DoD Instruction 5010.40 states that internal controls are the organization, policies, and procedures that help program and financial managers achieve results and safeguard the integrity of their programs. The Army PMOs were not always able to provide documentation to support the baseline

valuation effort. Implementing the recommendations in this report will correct the Army's internal control weakness. Although we identified material weaknesses in the P&EPO process for valuing military equipment, we are making no recommendations to correct them in this report. This report is one in a series and the final report will summarize all findings in the series and recommend corrective actions for the P&EPO internal control weaknesses. A copy of the final report will be provided to the Army senior officials in charge of management controls.

## **Use of Computer-Processed Data**

We relied on computer processed data provided by the P&EPO and its support contractor, a public accounting firm. This computer-processed data was extracted from numerous DoD financial, acquisition, and logistics systems. These systems included the Capital Asset Management System - Military Equipment, Business Enterprise Information Services, and Standard Operation and Maintenance Army Research and Development System. Specifically, we used the computer-processed data to review program valuation calculations and examine supporting documentation adequacy. The objective of this audit was to examine the controls over the valuation process, not to determine the reliability of the financial data used in the process. We did not perform any detailed reliability testing of the Business Enterprise Information Services expenditure data. We performed limited testing and determined that the transfer of expenditure data between Capital Asset Management System - Military Equipment and Business Enterprise Information Services was completed correctly.

## **Use of Technical Assistance**

QMD provided technical assistance throughout the sample selection and the projection process. QMD provided a sample of programs and program end items to test for the Army in support of the internal control tests we performed. QMD also provided a projection of quantity discrepancies and associated values based on the results of the completed sample. See Appendix D for a detailed description of the assistance provided by QMD.

## **Prior Coverage**

During the last 5 years, the Department of Defense Inspector General (DoD IG) has issued two reports discussing the military equipment baseline. Unrestricted DoD IG reports can be accessed at <http://www.dodig.mil/audit/reports>.

### ***DoD IG***

DoD IG Report No. D-2005-114, "Report on Development of DoD Baseline for Military Equipment," September 30, 2005

DoD IG Report No. D-2005-112, "Report on the Review of the Development of the DoD Baseline for Military Equipment," September 30, 2005

# Appendix B. Military Equipment Accounting Policy

## Statements of Federal Financial Accounting Standards

SFFAS No. 6, “Accounting for Property, Plant, and Equipment,” June 1996, contains accounting standards for Federally owned property, plant, and equipment. SFFAS No. 6 defines property, plant, and equipment as tangible assets that:

- have estimated useful lives of 2 years or more,
- are not intended for sale in the ordinary course of operations, and
- have been acquired or constructed with the intention of being used or being available for use by the entity.

SFFAS No. 6 states that the cost of general property, plant, and equipment must include all costs incurred to bring the asset to a form and location suitable for its intended use. SFFAS No. 6 also allows entities to establish their own capitalization thresholds. The DoD established a capitalization threshold of \$100,000 for military equipment, except for wheeled vehicles which have a capitalization threshold of \$50,000.

SFFAS No. 23, “Eliminating the Category National Defense Property, Plant, and Equipment,” May 2003 is effective for periods after September 30, 2002. SFFAS No. 23 established generally accepted accounting principles for valuing and reporting military equipment in Federal financial statements. The standard included guidance for capitalizing the value of military equipment, including the requirement that the initial capitalization amount should be based on historical cost in accordance with the asset recognition provisions of SFFAS No. 6, as amended, and should be the initial historical cost for the items, including any major improvements or modifications. The standard provided for the use of estimated historical cost for valuing military equipment if obtaining actual historical cost information is not practical. DoD Components may use information such as budget, appropriation, or engineering documents and other reports reflecting amounts expended as the basis for estimating historical cost.

## DoD Financial Management Regulation

DoD Financial Management Regulation, DoD 7000.14-R, volume 4, chapter 6, “Property, Plant, and Equipment,” July 2006, requires that when acquiring a General Property, Plant, and Equipment asset, the purchase cost and other costs necessary to bring the asset to an operable condition are capitalized. The regulation also states that depreciation expenses must be calculated and accumulated using the straight-line method, based on the recorded cost less salvage value, and divided equally among accounting periods during the asset’s useful life. The event that triggers the calculation of depreciation is the date of receipt shown on the asset receiving document or the date installed and placed in service, regardless of whether it is actually used. For purposes of computing depreciation, military equipment assets do not have salvage values.



## Appendix C. Military Equipment Programs Reviewed

The following table summarizes the types of errors found in each program and the total misstatement for the program acquisition cost. Overstatements are indicated with positive numbers and understatements are indicated with parentheses.

| <b>Military Equipment Programs Reviewed</b> |                     |                              |                     |                                 |                                     |                                      |
|---|---------------------|------------------------------|---------------------|---------------------------------|-------------------------------------|--------------------------------------|
| <u>Program</u>                              | <u>Sample Items</u> | <u>Unit Acquisition Cost</u> | <u>Depreciation</u> | <u>Includes non-Army Assets</u> | <u>Army Ownership not supported</u> | <u>Misstatement (\$ in millions)</u> |
| Abrams M1A1 AIM                             | 20                  | X                            | X                   |                                 |                                     | \$(4.7)                              |
| Abrams M1A1 FOV                             | 60                  |                              |                     | X                               |                                     | 4.7                                  |
| Abrams M1A2                                 | 40                  |                              | X                   |                                 |                                     | 0                                    |
| Abrams M1A2 SEP                             | 60                  |                              | X                   |                                 |                                     | 0                                    |
| Abrams Modifications                        | 13                  |                              |                     |                                 |                                     | None Detected                        |
| Apache AH-64A                               | 20                  |                              |                     |                                 |                                     | None Detected                        |
| Armored Security Vehicle                    | 20                  | X                            |                     |                                 | X                                   | (0.7)                                |
| Avenger                                     | 40                  |                              |                     |                                 | X                                   | None Detected                        |
| BFVS Series Modifications                   | 21                  |                              |                     |                                 |                                     | None Detected                        |
| Blackhawk EH-60A/L                          | 20                  |                              |                     |                                 |                                     | None Detected                        |
| Blackhawk UH-60A                            | 20                  |                              |                     |                                 |                                     | None Detected                        |
| Blackhawk UH-60L (1987 – 2000)              | 20                  |                              |                     | X                               | X                                   | 14.6                                 |
| Blackhawk UH-60L (2001-2006)                | 20                  | X                            |                     |                                 |                                     | (52.7)                               |
| Bradley A2                                  | 9                   |                              |                     |                                 |                                     | None Detected                        |
| Bradley Base Sustainment                    | 64                  |                              |                     |                                 |                                     | None Detected                        |
| Chinook CH-47D                              | 140                 | X                            | X                   |                                 | X                                   | (5.1)                                |

### Military Equipment Programs Reviewed (cont'd)

| <u>Program</u>                            | <u>Sample<br/>Items</u> | <u>Unit<br/>Acquisition<br/>Cost</u> | <u>Depreciation</u> | <u>Includes<br/>non-Army<br/>Assets</u> | <u>Army<br/>Ownership<br/>not<br/>supported</u> | <u>Misstatement<br/>(\$ in millions)</u> |
|---|-------------------------|--------------------------------------|---------------------|---|---|--|
| Chinook CH-47D<br>Modifications           | 20                      |                                      |                     |   |   | None Detected                            |
| Chinook<br>CH-47F/MH-47G                  | 20                      |                                      |                     | X                                       |   | 442.7                                    |
| Combat Training<br>Centers BLI<br>MA6601  | 13                      |                                      |                     |   |   | None Detected                            |
| Engineer Mission<br>Module                | 9                       |                                      |                     |   |   | None Detected                            |
| EOD Equipment                             | 7                       |                                      |                     |   |   | None Detected                            |
| Family of Medium<br>Tactical Vehicles     | 45                      | X                                    |                     |   |   | 4.2                                      |
| Family of Stryker<br>Vehicles             | 80                      | X                                    |                     |   |   | 10.5                                     |
| Fire Support<br>Vehicle<br>Modification   | 18                      | X                                    |                     |   |   | 372.8                                    |
| GSTAMIDS                                  | 7                       |                                      |                     |   |   | None Detected                            |
| HMMWV (LTV)                               | 16                      |                                      |                     |   |   | None Detected                            |
| Improved Target<br>Acquisition System     | 40                      | X                                    | X                   |   |   | 32.0                                     |
| Javelin                                   | 20                      |                                      | X                   |   | X   | 0  |
| Longbow Apache<br>AH-64D                  | 20                      | X                                    |                     |   |   | (13.5)                                   |
| M113A2                                    | 12                      |                                      |                     |   |   | None Detected                            |
| M88A1 Med Rec<br>Vehicle Fleet –<br>Recap | 10                      |                                      |                     |   |   | None Detected                            |
| M88A2 Hercules                            | 20                      | X                                    | X                   |   |   | (2.2)                                    |
| M9 Armored<br>Combat Earth<br>Mover (CE)  | 20                      |                                      |                     |   |   | None Detected                            |
| M939 5-Ton Truck                          | 20                      | X                                    | X                   |   | X   | (0.0)                                    |
| Marine C4I<br>Upgrade                     | 10                      |                                      |                     |   |   | None Detected                            |

**Military Equipment Programs Reviewed (cont'd)**

| <u>Program</u>                             | <u>Sample<br/>Items</u> | <u>Unit<br/>Acquisition<br/>Cost</u> | <u>Depreciation</u> | <u>Includes<br/>non-Army<br/>Assets</u> | <u>Army<br/>Ownership<br/>not<br/>supported</u> | <u>Misstatement<br/>(\$ in millions)</u> |
|--|-------------------------|--------------------------------------|---------------------|---|---|--|
| Mod of In-Service<br>Equipment<br>(DA0924) | 15                      |                                      |                     |   |   | None Detected                            |
| Paladin                                    | 20                      | X                                    | X                   |   | X   | (0.8)                                    |
| Palletized Load<br>System                  | 20                      | X                                    |                     |   | X   | (0.6)                                    |
| PAC - 3                                    | 20                      | X                                    |                     |   | X   | (753.0)                                  |



# Appendix D. Statistical Sampling Methodology and Analysis

## Quantitative Plan

### ***Objective***

To determine whether acquisition valuations were correct and whether control procedures were correctly followed.

### ***Population***

The population consisted of an Excel file containing 216 programs, valued at \$113,893,900,857, and contained 98,699 end item transactions. The 216 programs were categorized by average cost and group composite method. There were 152 programs using average cost method that amounted to \$78,267,574,941 that contain 98,102 end item transactions. There were 64 programs using group composite method that amounted to \$35,626,325,916 that contained 597 end items.

### ***Measures***

The variable measure was the dollar difference between the stated item value and the audited value. The attribute measure of correct or incorrect was used to determine if the item audited met the required conditions.

### ***Parameters***

We used a 90 percent confidence level for the statistical estimate.

## Sample Plan

We used a two-stage sample design was used. Stage 1 was a probability proportional to size design by acquisition value. Stage 2 was a simple random sample of program end items. Programs were sampled separately based on the costing method: average cost and group composite.

Stage 1 average cost. We selected 40 programs using probability proportional to size with replacement. There were 24 unique programs selected.

Stage 1 group composite. We selected 20 programs using probability proportional to size with replacement. There were 15 unique programs selected.

Stage 2 average cost. We randomly selected 20 end items from each of the 40 average cost programs without replacement. Total sample size was 800.

Stage 2 group composite. We randomly selected 20 end items from each of the 20 group composite programs without replacement. If there were fewer than 20 end items in a program 100 percent of the items were selected. Total sample size was 264. We used the random number generator in SAS version 9.1 to select the random samples.

## Statistical Analysis and Interpretation

### Absolute Dollar Valuation:

Based on the audit results from the sample items provided to QMD analysts by the audit team, we calculated the following statistical projection:

| 90 % One-Tail<br>Confidence Interval | ABSOLUTE DOLLAR<br>VALUATION |
|--------------------------------------|------------------------------|
| Lower<br>Bound                       | Point<br>Estimate            |
| 4,218,814,173                        | 7,668,965,863                |

We are 90 percent confident the absolute dollar valuation error in the population is at least \$4,218,814,173.

### Number Valuation and Depreciation Errors:

Based on the audit results from the sample items provided to QMD analysts by the audit team, we calculated the following statistical projection:

| 90 % One-Tail<br>Confidence Interval | NUMBER VALUATION and<br>DEPR ERRORS |
|--------------------------------------|-------------------------------------|
| Lower<br>Bound                       | Point<br>Estimate                   |
| 20,310                               | 40,500                              |

We are 90 percent confident the number of valuation errors in the population is at least 20,310.

### Number not Army and Unsupported Errors:

Based on the audit results from the sample items provided to QMD analysts by the audit team, we calculated the following statistical projection:

| 90 % One-Tail<br>Confidence Interval | NUMBER NOT ARMY and<br>UNSUPPORTED ERRORS |
|--------------------------------------|---|
| Lower<br>Bound                       | Point<br>Estimate                         |
| 420                                  | 12,959                                    |

We are 90 percent confident the number of “Not Army and Unsupported” errors in the population is at least 420.

# Department of the Army Comments



DEPARTMENT OF THE ARMY  
OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY  
ACQUISITION LOGISTICS AND TECHNOLOGY  
103 ARMY PENTAGON  
WASHINGTON DC 20310-0103

JUL 07 2008

SAAL-RB

MEMORANDUM FOR DEPUTY INSPECTOR GENERAL FOR AUDITING,  
DEPARTMENT OF DEFENSE, 400 ARMY NAVY DRIVE,  
ARLINGTON, VIRGINIA, 22202-4704

SUBJECT: Reply to Draft Report on Internal Controls Over the Army Military Equipment  
Baseline Valuation Effort project No. D2007-DOOOFL-0204.000

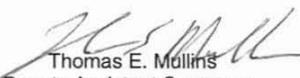
Attached is the ASA(ALT) reply to the subject report. We generally concur with both  
recommendations and have taken action to implement them.

Although we agree better internal controls can improve the Military Equipment Valuation  
process, we believe the improvements using the current process will be marginal because it is  
disconnected from the Army's property accountability and accounting processes, effectively  
creating a manually populated parallel accountability system (the Capital Asset Management  
System – Military Equipment) to meet an accounting need. Because we recognize this  
disconnect, we are working with other stakeholders in the equipment process, such as the Army  
Materiel Command, the Deputy Chief of Staff, G-4, the ASA(FMC), and organizations  
responsible for developing our key enterprise systems (Property Book Unit Supply Enhanced  
(PBUSE); Logistics Modernization Program (LMP), Global Combat Support System – Army  
(GCSS- Army) and the General Fund Enterprise Business system (GFEB)) to develop  
integrated processes that will ultimately result in an audit of our military equipment assets.

We believe the Army's Military Equipment Valuation process and that of the Department  
will continue to be troubled as long as it is dependent on manual processes that are parallel to  
and not integrated with mainstream accounting/accountability business processes. We  
discussed this at the face-to-face meeting with ASA(ALT) action officers and DoDIG auditors  
and are disappointed that it was not reflected in the audit report.

We believe that the Military Equipment Valuation objectives can only be met when all  
involved accounting and accountability systems (PBUSE, LMP, GCSS-Army and GFEB) are  
fully integrated and implemented so as to provide a mainstream accountability/accounting  
system that is free from manual intervention and parallel disconnected processes. We believe  
that the report would be more accurate, comprehensive and effective if it recognized this  
problem and supported the Army's plan for implementing PBUSE, LMP, GCSS-Army and  
GFEB as an integrated suite of accounting/accountability solutions that bring Military  
Equipment Valuation into the mainstream accounting process.

My point of contact for this report is Mr. Steve French. He can be reached by telephone  
at 703-604-7433 or by e-mail at Steve.French@us.army.mil.

  
Thomas E. Mullins  
Deputy Assistant Secretary  
for Plans, Programs and Resources

Attachment

**DoDIG Audit Report**  
**Draft Report on Internal Controls Over the Army Military Equipment Baseline Valuation**  
**Effort (Project No. D2007-DOOFL-0204.000)**

Here are comments to Recommendations 1 and 2.

**Recommendation 1.** Issue guidance requiring that program management offices retain documentation supporting the Army's ownership of and placed-in-service dates for military equipment assets when receiving reports are not available in Wide Area Work Flow.

**Management Comments.** We concur with this recommendation. We have drafted guidance directing that program management offices retain documentation supporting the Army's ownership of and placed-in-service dates for military equipment assets when receiving reports are not available in Wide Area Work Flow. We plan to issue that guidance during the 4<sup>th</sup> Quarter FY 2008.

**Recommendation 2.** Request that an independent organization perform a quality assurance review to confirm that documentation supporting the Army military equipment baseline is readily available for auditor review.

**Management Comments.** We concur with this recommendation. We will coordinate with the OASA(FM&C) and the Army Audit Agency to identify timelines to perform a quality assurance review to confirm documentation supporting the Army military equipment baseline is readily available for auditor review. We will ensure that we include these actions as milestone in the Army CFO Strategic Plan by 4<sup>th</sup> Quarter FY 2008.



DEPARTMENT OF THE ARMY  
OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY  
ACQUISITION LOGISTICS AND TECHNOLOGY  
103 ARMY PENTAGON  
WASHINGTON DC 20310-0103

JUL 07 2008

SAAL-RB

MEMORANDUM FOR See Distribution

SUBJECT: Internal Controls to Support to the Military Equipment Valuation Process

Reference: Draft Department of Defense Office of Inspector General Report: Internal Controls Over the Army Military Equipment Baseline Valuation Effort Project No. D2007-D000FL-0204.000

Your organizations have a crucial role in the accurate presentation of military equipment data within the Army's financial statement. You occupy a unique position in the system lifecycle: the point of creation, capture, and title of military equipment -- acquired as part of Major Defense Acquisition Programs -- being accepted by Army.

Although the referenced report is still in draft, and not available for distribution, I am directing that program management offices retain documentation supporting the Army's ownership of and placed-in-service dates for military equipment assets when receiving reports are not available in Wide Area WorkFlow.

Documentation should be maintained for the life of the asset in location and manner to facilitate efficient and effective availability. When a program passes into sustainment, the documentation must be transferred to the sustaining activity. Documentation is considered reasonably available if it is produced within twenty-four hours of request.

I am directing this action to support the Army and the Department of Defense's concerted effort to improve both Service and Departmental financial statements. This improvement is important enough to be included in the Army Campaign Plan. General Property, Plant and Equipment, of which military equipment is a substantial component, represents 42% of the assets as reported by the Department.

Your compliance will be tested by an independent organization who will perform a quality assurance review to confirm that documentation supporting the Army military equipment baseline is readily available for auditor review.

My point of contact for this action is Mr. Dan Adams, (dan.adams@us.army.mil), (703) 604-7492.

  
Thomas E. Mullins  
Deputy Assistant Secretary  
for Plans, Programs, and Resources

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# Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics Comments



ACQUISITION,  
TECHNOLOGY  
AND LOGISTICS

OFFICE OF THE UNDER SECRETARY OF DEFENSE  
3000 DEFENSE PENTAGON  
WASHINGTON, DC 20301-3000

JUL 07 2008

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL AND DIRECTOR,  
DEFENSE FINANCIAL AUDITING SERVICE, DoDIG

SUBJECT: Department of Defense Office of Inspector General Draft Report, *Internal Controls Over the Army Military Equipment Baseline Valuation Effort*, Project No. D2007-D000FL-0204.000

Thank you for the opportunity to meet with your audit team and review their findings. The draft report you sent for comment was changed to address several of the issues we raised during our discussion.

Your draft report identified several errors associated with the implementation of the military equipment valuation (MEV) methodology. Actions required of the Property and Equipment Policy Office (P&EPO) to correct these errors are nearing completion or are already completed. My staff will work with the Army on issues related to document retention identified in your report. However, there are several areas highlighted in the attached that we believe should be made so the final report provides a more accurate representation of your findings.

If you have any questions regarding these comments, please contact Mr. Harry Chelpon. He may be reached at 703-604-6350 x101 or at [Harry.Chelpon@osd.mil](mailto:Harry.Chelpon@osd.mil).

Nancy L. Spruill  
Director, Acquisition Resources  
and Analysis

Attachment:  
As stated

cc:  
OUSD(C)  
DASA-FM&C



## COMMENTS

**1. Unit Acquisition Cost** – The draft report states that the Policy & Equipment Policy Office (P&EPO) misstated the unit acquisition costs of end items in the Army baseline by at least \$4.2 billion. This amount represents the sum of absolute values of understatements and overstatements. The net impact, when understatements and overstatements are offset, is approximately 3 percent of this amount (\$120 million). The final report should note the net impact on the baseline value that would be reflected on the Army balance sheet.

**2. Total Program Cost** – The draft report uses information from program budget reports to break out the cost of initial spares for the Improved Target Acquisition System (ITAS) program. It is not clear how the report description of the error relates to the reported misstatement of \$32 million. However, it should be noted that the valuation methodology developed by the P&EPO uses expenditure data combined with budget information to develop its estimate of program costs. Since the cost of initial spares could not be separately identified using expenditure data, these costs would have been included in the unit cost of ITAS assets. The decision to rely on expenditure information was based on prior discussions with your office. Our understanding was that the DoD IG would require the use of transaction level detail to support reported military equipment (ME) values after October 1, 2002, the implementation date for Statement of Federal Financial Accounting Standards No. 23, *Eliminating the Category National Defense Property, Plant and Equipment*. The final report should recognize that the DoDIG used a different methodology in calculating its estimates.

Additionally, the draft report states that the P&EPO failed to include the net book value of Patriot firing units in the total program cost of the Patriot Advance Capability-3 (PAC-3) modification program when calculating the average cost of PAC-3 assets. The P&EPO acknowledges this error and is in the process of correcting the related acquisition values in the Capital Asset Management System – Military Equipment (CAMS-ME). The final report should acknowledge that these adjustments are being made.

**3. Number of Program End Items** – The draft report states that the unit acquisition cost of the PAC-3 program was understated by \$13.3 million per end item due to an error relating to the number of program end items. It should be noted that the number of end items was based on information provided by and attested to by the Army. The final report should make this point.

**4. Group and Composite Programs** – The draft report states that the Fire Support Vehicle (FSV) Modification program was overstated by \$372.8 million because the P&EPO had incorrectly included costs from another program in the FSV program.

Attachment

It should be noted that unless that amount is included in both the FSV program and the other unidentified program, the financial impact would be limited to depreciation associated with differences in useful life. The final report should acknowledge that this error would have no net impact on the Army balance sheet.

**5. Useful Life/Placed In Service Dates** – The draft report took issue with program useful lives and place in service dates. Program useful lives and asset placed in service dates were based on information provided by and attested to by the Army. The final report should make this point.

**6. Other Issues** – The draft report states that the P&EPO did not allocate residual costs remaining in the Work-In-Process account to delivered items after the last asset had been received. The P&EPO is currently assessing the implementation of the Contract Close Out Adjustment policy and determining whether any adjustments in valuations are required.

**7. Rights and Obligations** – The Report states that the Army baseline included 23 assets that were owned by other DoD Components. The P&EPO recognizes that many of these assets should have been excluded from the Army baseline and is revising the information in CAMS-ME accordingly. In addition, the P&EPO is assessing the preponderant use policy relating to which organization should report assets used by one organization but acquired by another organization. Decisions relative to this policy may impact the reporting of USSOCOM assets.

**8. Excluded Programs** – The Report states that two programs, the High Mobility Engineer Excavator (HMEE) and the Utility Helicopter (UH-60M) programs had been incorrectly excluded from the Army baseline. The P&EPO recognizes that these programs should have been included in the Army ME baseline and has corrected the baseline accordingly. The final report should acknowledge this.

Attachment



## **Team Members**

The Department of Defense Office of the Deputy Inspector General for Auditing, Defense Financial Auditing Service prepared this report. Personnel of the Department of Defense Office of Inspector General who contributed to the report are listed below.

Patricia A. Marsh  
Jack L. Armstrong  
Mark A. Ives  
Kathleen A. Furey  
Martin J. Radtke  
Thomas W. Shurman  
Donna J. Paterson  
James D. Hartman  
Lusk F. Penn  
Kandasamy Selvavel  
Ann Thompson



# Inspector General Department of Defense

