USE OF FUNDS APPROPRIATED FOR
MAJOR DEFENSE SYSTEMS

Report No. 99-012

October 14, 1998

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MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION
AND TECHNOLOGY
UNDER SECRETARY OF DEFENSE (COMPTROLLER)
ASSISTANT SECRETARY OF THE NAVY (FINANCIAL
MANAGEMENT AND COMPTROLLER)
ASSISTANT SECRETARY OF THE AIR FORCE
(FINANCIAL MANAGEMENT AND COMPTROLLER)
AUDITOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Audit Report on Use of Funds Appropriated for Major Defense Systems
(Report No. 99-012)

We are providing this audit report for your information and use. This report discusses the primary areas in which selected program offices spent their program funding for other than weapon-systems hardware and software. We do not identify by name the 10 major Defense programs that we used to develop our analysis. We considered management comments on a draft of this report in preparing this final report.

We appreciate the courtesies extended to the audit staff. For additional information on this report, please contact Mr. John E. Meling at (703) 604-9091 (DSN 664-9091) (jmeling@dodig.osd.mil) or Mr. Jack D. Snider at (703) 604-9087 (DSN 664-9087) (jsnider@dodig.osd.mil). See Appendix E for the report distribution. The audit team members are listed inside the back cover.

Robert J. Lieberman
Assistant Inspector General
for Auditing
Executive Summary

Introduction. Senior DoD officials have expressed concern about an increase in the use of program funds for expenditures other than the acquisition of weapon-systems hardware and software from prime contractors. As DoD spending declines, risk increases that a higher percentage of program funds will go to fund program office efforts, such as program management, systems engineering, logistics, and test and evaluation, rather than to the prime contractor to acquire weapon systems. Further, DoD is using funds appropriated for weapon-systems-acquisition programs as bill payers for congressional deductions and other unbudgeted DoD costs. Accordingly, we examined the use of FY 1997 program funding, totaling $1.9 billion, at 10 major Defense system program offices to determine where the program offices spent the program funds.

Audit Objectives. The audit objective was to determine the use of funds appropriated for the acquisition of major Defense systems. In addition, we evaluated the management control program as it related to the audit objective.

Audit Results. General Accounting Office Testimony No. GAO/T-NSIAD/AIMD-98-122, “Defense Management: Challenges Facing DoD in Implementing Defense Reform Initiatives,” March 13, 1998, states that DoD cannot accumulate reliable information on its business activities’ costs. We noted a similar situation for 9 of the 10 major Defense systems reviewed. The nine program offices did not have cost-accounting systems established to track and report program costs by functional categories, such as systems engineering, program management, logistics, departmental assessments, test and evaluation, and acquisition of weapon-systems hardware and software from prime contractors. Because the nine programs that we reviewed did not have cost-accounting systems, we used budget-execution reports to identify functional cost categories within the various appropriations and detailed cost activities associated with those cost categories (see Appendix A).

For FY 1997, the program offices for the 10 major Defense systems reviewed used an average of about 69 percent of their program dollars to fund prime contractors for the development and acquisition of weapon-systems hardware and software. Those program offices also used an average of about 31 percent of their program funds for other than weapon-systems hardware and software acquisition. The program offices used funds to perform program office functions required in DoD Regulation 5000.2-R, “Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs,” Change 3, March 23, 1998, and to accomplish weapon-system mission-support requirements. Congress and DoD organizations levied assessments on program offices to fund activities, such as

\(^1\)We categorized congressional deductions and reductions for other unbudgeted DoD costs as “assessments” for the purposes of our review; however, DoD commonly refers to the costs as “taxes.”
small business innovative research; the Defense Business Operations Fund; Bosnian disaster relief; a Presidential request for anti-terrorism, counter-terrorism, and security enforcement; and other unbudgeted DoD costs. We cannot compare the reasonableness of the percentages with other DoD programs because no benchmark had been established. Our results are based on a review of the 10 programs, and the results should not be extrapolated to all programs in DoD (see Part I).

Management Comments. We provided a draft of this report on September 4, 1998. Although no comments were required, we received comments from the Chief, Program Integration Division, Office of the Assistant Secretary of the Air Force (Acquisition), addressing departmental assessments. See Part I for a summary of the management comments and Part III for the complete text of the management comments.
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Part I - Audit Results
Audit Background

Senior DoD officials have expressed concern about an increase in the use of program funds for expenditures other than the acquisition of weapon-systems hardware and software from prime contractors. As DoD spending declines, a higher percentage of program funds may go to fund program office efforts, such as systems engineering, program management, logistics, and test and evaluation, rather than to prime contractors to acquire weapon systems. Further, DoD is using funds appropriated for weapon-systems-acquisition programs as bill payers for congressional deductions and other unbudgeted DoD costs. Historically, we have not reviewed the DoD use of program funding for costs other than weapon-systems hardware and software with the same scrutiny that we applied to program funds that DoD provided to prime contractors for the acquisition of weapon systems. Accordingly, we examined the use of FY 1997 program funding, totaling $1.9 billion, at 10 major Defense system program offices to determine the primary functional cost categories where the program offices spent program funding. In this report, we refer to the 10 programs reviewed as Programs A through J. Because the programs had unique acquisition strategies and varied degrees of program complexity, the results should not be extrapolated to all programs in DoD. Appendix B provides definitions of technical terms used in this report.

Audit Objective

The audit objective was to determine the use of funds appropriated for the acquisition of major Defense systems. In addition, we evaluated the management control program as it related to the audit objective. In Appendix A, we discuss the scope and methodology used to accomplish the objective as well as management controls.
Uses of Program Funds for Other Than Weapon-Systems Hardware and Software

For FY 1997, the program offices for the 10 major Defense systems reviewed used an average of about 69 percent of their program dollars to fund prime contractors for the development and acquisition of weapon-systems hardware and software. Those program offices also used an average of about 31 percent of their program funds for other than weapon-systems hardware and software acquisition. Excluding departmental assessments, the program offices used funds for expenditures other than the acquisition of weapon-systems hardware and software to perform program office functions required in DoD Regulation 5000.2-R, "Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs," Change 3, March 23, 1998, and to accomplish mission-support requirements. Congress and DoD organizations also levied assessments on the program offices to fund activities, such as small business innovative research; the Defense Business Operations Fund; Bosnian disaster relief; a Presidential request for anti-terrorism, counter-terrorism, and security enforcement; and other unbudgeted DoD costs.

Use of Program Funds

The General Accounting Office testified that DoD cannot accumulate reliable information on its business activities' costs. We noted a similar situation for 9 of the 10 major Defense systems reviewed. The program offices for the nine systems did not have cost-accounting systems established to track and report program costs by functional categories, such as systems engineering, program management, logistics, departmental assessments, test and evaluation, and weapon-systems hardware and software acquisition. Because the nine programs that we reviewed did not have cost-accounting systems, we used budget-execution reports to identify functional cost categories within the various appropriations and the detailed cost activities associated with those cost categories.

For FY 1997, the program offices for the 10 major Defense systems reviewed used an average of 31 percent of total program funds in functional cost categories other than the acquisition of weapon-systems hardware and software. The cost categories included funding for systems engineering, program

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1We categorized congressional and other unbudgeted DoD costs as "assessments" for the purposes of our review; however, DoD commonly refers to the costs as "taxes."

Uses of Program Funds for Other Than Weapon-Systems Hardware and Software

management, logistics, departmental assessments, and test and evaluation. Table 1 provides details concerning the cost categories and activities as a percentage of total program dollars for the 10 programs reviewed. Table 2 ranks the 13 cost activities identified in the 6 cost categories in descending order of cost importance.

Table 1. Cost Categories and Activities as a Percentage of Total Program Dollars for the 10 Programs Reviewed

<table>
<thead>
<tr>
<th>Cost Category and Activity</th>
<th>Army</th>
<th>Navy</th>
<th>Air Force</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>Technical and engineering support</td>
<td>6.32</td>
<td>5.27</td>
<td>5.31</td>
<td>2.63</td>
</tr>
<tr>
<td>Product improvements</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Software upgrades and licenses</td>
<td>0</td>
<td>4.09</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Program management</td>
<td>2.82</td>
<td>5.03</td>
<td>3.65</td>
<td>3.09</td>
</tr>
<tr>
<td>Military and civilian pay and benefits</td>
<td>1.46</td>
<td>1.04</td>
<td>0.28</td>
<td>1.25</td>
</tr>
<tr>
<td>Program and technical support</td>
<td>1.15</td>
<td>3.73</td>
<td>2.78</td>
<td>0.27</td>
</tr>
<tr>
<td>Travel, training, and administration</td>
<td>0</td>
<td>0</td>
<td>2.66</td>
<td>0.59</td>
</tr>
<tr>
<td>NULO³ reconciliation</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Logistics</td>
<td>1.37</td>
<td>0</td>
<td>2.55</td>
<td>2.94</td>
</tr>
<tr>
<td>Storage, maintenance, and parts</td>
<td>0</td>
<td>0</td>
<td>1.10</td>
<td>0</td>
</tr>
<tr>
<td>Technical and engineering support</td>
<td>1.37</td>
<td>0</td>
<td>2.55</td>
<td>1.84</td>
</tr>
<tr>
<td>Launch support and integration</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Departmental assessments³</td>
<td>1.69</td>
<td>12.71</td>
<td>0.79</td>
<td>1.14</td>
</tr>
<tr>
<td>Test and evaluation</td>
<td>6.31</td>
<td>1.27</td>
<td>2.90</td>
<td>5.71</td>
</tr>
<tr>
<td>Weapon-systems hardware and software acquisition</td>
<td>81.49</td>
<td>71.63</td>
<td>84.80</td>
<td>84.49</td>
</tr>
<tr>
<td>Total</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

¹For an explanation of the variances in the cost categories and activities, see the section entitled "Significant Cost Variances in the Cost Categories," page 7.

²The average is weighted by dividing the total cost for each cost category and activity by the overall total program dollars for the 10 programs reviewed.

³Accounting costs to fund program office and contractor support costs to reconcile negative-unliquidated obligations (NULOs).

⁴DoD commonly refers to the costs as "taxes."
Table 2. Ranked Cost Activities as a Percentage of Total Program Dollars for the 10 Programs Reviewed

<table>
<thead>
<tr>
<th>Cost Activity</th>
<th>Percentage of Total Program Dollars¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weapon-systems hardware and software acquisition</td>
<td>69.01</td>
</tr>
<tr>
<td>Technical and engineering support (systems engineering)</td>
<td>6.98</td>
</tr>
<tr>
<td>Departmental assessments²</td>
<td>4.96</td>
</tr>
<tr>
<td>Product improvements</td>
<td>3.36</td>
</tr>
<tr>
<td>Test and evaluation</td>
<td>2.99</td>
</tr>
<tr>
<td>Military and civilian pay and benefits</td>
<td>2.82</td>
</tr>
<tr>
<td>Storage, maintenance, and parts</td>
<td>2.79</td>
</tr>
<tr>
<td>Technical and engineering support (logistics)</td>
<td>2.41</td>
</tr>
<tr>
<td>Program and technical support</td>
<td>2.41</td>
</tr>
<tr>
<td>Travel, training, and administration</td>
<td>1.29</td>
</tr>
<tr>
<td>Software upgrades and licenses</td>
<td>0.48</td>
</tr>
<tr>
<td>Launch support and integration</td>
<td>0.46</td>
</tr>
<tr>
<td>NULO³ reconciliation</td>
<td>0.04</td>
</tr>
</tbody>
</table>

¹Our results are based on a review of 10 major Defense programs, and the results should not be extrapolated to all programs in DoD.
²DoD commonly refers to the costs as “taxes.”
³Accounting costs to fund program office and contractor support costs to reconcile negative-unliquidated obligations (NULOs).

Cost Drivers for Other Than Weapon-Systems Hardware and Software Cost Categories

In consultation with program office personnel, we identified the primary functional cost-drivers for other than weapon-systems hardware and software cost categories for the 10 programs reviewed. The cost drivers for the cost categories and the 12 associated cost activities were primarily requirements in DoD Regulation 5000.2-R and for weapon-systems mission support on deployed weapon systems. Appendix C details the DoD Regulation 5000.2-R requirements that were cost-drivers for systems engineering, program management, logistics, and test and evaluation functional cost categories. Appendix D details the departmental assessments.

Systems Engineering. The systems engineering cost category represented an average of 10.82 percent of the total program dollars reviewed (see Table 1).
Uses of Program Funds for Other Than Weapon-Systems Hardware and Software

The primary cost-drivers were mission support and requirements in DoD Regulation 5000.2-R for acquisition strategy, cost management incentives, joint-program management, systems engineering, software engineering, environmental compliance, and human-systems integration.

Program Management. The program management cost category represented an average of 6.56 percent of total program dollars reviewed. The primary cost-drivers were for weapon-systems mission support and requirements in DoD Regulation 5000.2-R for production, fielding, deployment, and operational support; affordability; joint-program management; support resources; software engineering; and integrated product teams. In addition to DoD Regulation 5000.2-R requirements, the Defense Finance and Accounting Service issued guidance for reconciling negative-unliquidated obligations. On April 12, 1994, the Defense Finance and Accounting Service issued the guidance to implement Under Secretary of Defense (Comptroller) direction in a March 31, 1994, memorandum on “Negative Unliquidated Balances/Disbursements In Excess of Obligations.” The memorandum highlighted the problem with negative-unliquidated balances and disbursements in excess of obligations and directed actions to reconcile adverse accounting conditions concerning funding status, obligations, disbursements, and collections.

Logistics. The logistics cost category represented an average of 5.66 percent of total program dollars reviewed. The primary cost-drivers were requirements in DoD Regulation 5000.2-R for production, fielding, deployment, and operational support; cost-management incentives; joint-program management; acquisition logistics; and mission support.

Departmental Assessments. DoD was using funds appropriated for weapon-systems-acquisition programs as bill payers for congressional deductions and unbudgeted DoD costs. We categorized congressional deductions and other unbudgeted DoD costs as “departmental assessments” for the purposes of our review. The departmental assessments cost category represented an average of 4.96 percent of total program dollars reviewed for the 10 program offices. Of the 4.96 percent, 2.37 percent were assessments against procurement funds; 1.82 percent were assessments against research, development, test, and evaluation funds; and 0.77 percent were assessments against operations and maintenance funds.

Procurement. Congress assessed appropriated procurement funds to reduce DoD funding of Federally funded research and development centers and to fund the Defense Business Operations Fund; force protection; Bosnian disaster relief; a Presidential request for anti-terrorism, counter-terrorism, and security enforcement; and general reductions to procurement appropriations. Additionally, the program executive offices assessed procurement funds appropriated for the 10 programs reviewed to fund other unbudgeted DoD costs, such as program executive office support, staff support, and Joint Service hardware needed to expand overall mission capability. Comptroller personnel also reprogrammed appropriated funds because actual inflation rates were lower than initial program-budget projections for FY 1997.
Research, Development, Test, and Evaluation. Congress assessed program office appropriated research and development funds to reduce DoD budgeted funding of Federally funded research and development centers and non-Federally funded research and development centers. Congress also assessed appropriated research and development funds to fund small business innovative research, small business technical transfer, force protection, the Defense Business Operations Fund, and general reductions. Resource sponsors, who are responsible for the management of specific appropriations, and command comptrollers also reprogrammed appropriated research and development funds to fund reconnaissance integration and support, Bosnia, program executive office support, and shared common support costs, and to adjust annual program office inflation projections downwards. Additionally, the Office of the Assistant Secretary of the Air Force (Acquisition) assessed research and development funds for long-range planning.

Operations and Maintenance. Congress assessed program office appropriated operations and maintenance funds to reduce funding of General Services Administration leases, information resource management, non-Federally funded research and development centers, the Pentagon Reservation Fund, acquisition initiatives, acquisition integrity, the acquisition work force, and the National Defense Stockpile Fund. Congress also assessed operations and maintenance funds of the program offices to fund the Defense Business Operations Fund, Bosnia, force protection, and general reductions. Additionally, program executive offices assessed operations and maintenance funds for program executive office support.

Test and Evaluation. The test and evaluation cost category represented 2.99 percent of total program dollars. The primary cost-drivers were requirements in DoD Regulation 5000.2-R for operational support, cost-management incentives, joint-program management, test and evaluation, test and evaluation strategy, systems engineering, quality management, and mission support.

Significant Cost Variances in the Cost Categories

As shown in Table 1, the percentage of total program dollars spent by functional cost category and activity varied from program to program reviewed. We could not compare the reasonableness of the percentages with other DoD programs because no benchmark had been established. The reasons for significant cost variances in the following functional cost categories follow.

Systems Engineering. For the systems engineering cost category, the cost activities included technical and engineering support, software upgrades and licenses, and product improvements. The average systems engineering cost for the 10 programs reviewed was 10.82 percent of total program costs. Of the 10 programs, 3 programs had significantly higher systems-engineering costs. Two programs, F and I, had high systems-engineering costs because the programs were undergoing major modernization efforts to improve overall
system performance. Program G incurred higher costs because the program office had increased systems-engineering efforts to prepare for a follow-on production contract.

**Program Management.** For the program management cost category, the cost activities were technical support; military and civilian pay and benefits; travel, training, and administration; and the accounting cost to reconcile negative-unliquidated obligations. The average program management cost for the 10 programs reviewed was 6.56 percent of total program costs. Of the 10 programs, 5 programs significantly exceeded the average percentage for program management cost as follows.

**Program and Technical Support.** The program and technical support cost activity included technical support that program office personnel provided, management of system integration efforts, and preparation of studies and special reports required for various modernization and product improvement initiatives. Program B used more funding in this cost activity because it provided funding to field activities in support of the Army Force 21 initiative. Program F had higher costs because the program office obtained contract support to conduct requirements analyses and to prepare technical designs and concept studies for system product improvements. Program G also incurred increased costs for programming and budgeting actions for a follow-on production contract. Program H had higher costs because the program office, which did not have a prime contractor in FY 1997, performed systems-integration management with in-house personnel rather than including the task on the prime contract when the contractor bid far exceeded available program funding. The program office concluded that it had the necessary in-house expertise or could obtain the services at less cost to the Government than the prime contractor wanted to charge to perform the efforts. We did not determine whether the use of in-house staff was more efficient and effective than the use of contractor personnel. The program office noted that it would have included the integration-management costs in the weapon-systems hardware and software acquisition cost category instead of the program and technical support cost activity if it had a prime contractor.

**Military and Civilian Pay and Benefits.** The military and civilian pay and benefits cost activity included program office staff and staff matrixed to the program office from other organizations. Overall, the three Air Force programs spent more in this cost activity than did the four Army and the three Navy programs reviewed. Of the three Air Force programs reviewed, Program H spent more in this cost activity because the program office performed the systems-integration effort using in-house staff. We did not determine whether the use of in-house staff was more efficient and effective than the use of contractor personnel. Programs I and J spent more in this cost activity primarily because the program offices were joint program offices and had increased program oversight responsibility for systems engineering, program management, and testing and evaluation.

**Travel, Training, and Administration.** The travel, training, and administration cost activity included costs associated with consolidation efforts,
office-equipment maintenance, local-area-network support, integrated product teams, and funds set aside for management reserve or economic risk. Overall, the three Air Force programs spent more in this cost activity than did the four Army and the three Navy programs reviewed. Of the three Air Force programs reviewed, Program H was significantly higher in this cost activity because of the high volume of travel that was required to monitor contractor performance and to provide oversight at remote contractor locations and Government sites. Additionally, Program H had a high employee-turnover rate and had to rely heavily on contractor support to maintain its local-area networks and business systems.

**Negative-Unliquidated Obligations.** For the negative-unliquidated obligations cost activity, we determined how much each program that we reviewed spent to manage its negative-unliquidated obligations. The four Army programs reviewed did not have a problem with negative-unliquidated obligations and reported no costs for the cost activity. The three Air Force and the three Navy programs spent less than 1 percent of their total program dollars on the cost activity.

**Logistics.** For the logistics cost category, the cost activities included technical and engineering support; storage, maintenance, and parts; and launch support and integration. The average logistics cost for the 10 programs reviewed was 5.66 percent of total program costs. One of the programs, B, had no logistics costs because it only acquired software and did not spend any money for logistics support in FY 1997. Of the 10 programs, 3 programs had significantly higher logistics costs than the weighted average. For Programs E and F, the program offices obtained integrated logistics support from other Navy organizations rather than tasking the prime contractor for the support. Program F also obtained operations and maintenance funding to perform organizational-level and intermediate-level maintenance for deployed weapon systems. Program H launched a satellite in FY 1997, provided software maintenance for orbiting satellites, and provided depot storage and maintenance for satellites awaiting launch.

**Departmental Assessments.** Each of the 10 programs that we reviewed reported cuts in their appropriated funds because of congressional and DoD assessments. At the program offices, the comptroller personnel were able to provide only a general description of the various congressional and DoD reductions to their appropriations. Of the 10 programs, 4 programs incurred a disproportionate share of reductions to their program funding. For Program B, the program executive office assessed program funds to acquire joint-Service hardware support for other weapon-system platforms to enable Program B to have a joint-Service mission capability. Congress and Military Department comptroller personnel reprogrammed appropriated funds for Programs F, G, and H because actual inflation rates were lower than initial program-budget projections for FY 1997. Appendix D breaks out the departmental assessments for the 10 programs reviewed.

**Test and Evaluation.** The test and evaluation cost category included test support, equipment testing, and verification and validation. For the
Uses of Program Funds for Other Than Weapon-Systems Hardware and Software

10 programs reviewed, the average cost for test and evaluation was 2.99 percent of total program costs. Test and evaluation costs varied among the 10 programs based on the extent of program testing planned and conducted during FY 1997. Program A varied significantly from the average because the system was undergoing testing required for the program's full-rate production milestone decision. Programs D and J had higher test and evaluation costs because the programs were joint multi-Service programs, requiring multi-Service developmental and operational testing. Further, Program D was undergoing initial test and evaluation for new configurations of the system ground-station.

Weapon-Systems Hardware and Software Acquisition. The weapon-systems hardware and software acquisition cost category included tasks that the prime contractor usually performed, such as installation, integration, testing, and systems engineering. Of the 10 programs reviewed, 6 programs spent greater than 70 percent of their total program funding for weapon-systems hardware and software acquisition. Of the remaining four programs, Program G spent less than 70 percent because production rates had declined pending the award of a follow-on production contract. In addition, Program G obtained systems engineering from Navy organizations to support the follow-on production contract. Program H spent less than 70 percent because all systems were acquired before FY 1997, and program office funds were obtained to support fielded systems. Further, Program H personnel performed many of the tasks that the prime contractor normally performs and primarily dealt with support contractors instead of prime contractors. Programs F and I spent less than 70 percent because modernization efforts and product improvement studies were ongoing during FY 1997. To accomplish the modernization efforts and studies, the two program offices obtained integration assistance from sources within DoD and non-prime-contract sources.

Observations

During our audit, we observed three areas that warrant comment: the lack of program cost-accounting systems, review of the cost drivers associated with the 12 cost activities, and a Navy command initiative to reduce system operations and support costs.

information becomes available, program managers would be able to use the information to control and reduce costs and to make management decisions. Federal agencies have not been able to implement the standard because most of the agencies do not have adequate cost-accounting systems in place. As a result, the Board deferred the effective date for agencies to implement Standard No. 4 to FY 1998.

The General Accounting Office also testified that DoD cannot accumulate reliable information on its business activities' costs. We substantiated that condition during our review. Only 1 of 10 program offices reviewed had a cost-accounting system to track and report program costs by functional categories, such as systems engineering, program management, logistics, departmental assessments, test and evaluation, and weapon-systems hardware and software acquisition. Additionally, each program office used a different budget execution system to gather budget data. The one program office that had a cost-accounting system obtained support services from a management-consulting firm to establish and maintain its cost-accounting system. The consulting firm based its cost-accounting system on DoD Instruction 5000.2-R requirements and established cost categories similar to the ones used in this report. The cost-accounting system enabled the program office to more effectively monitor its costs and identify areas for greater efficiencies. For example, the program office used the cost data within the cost categories to make tradeoff decisions concerning the program's acquisition strategy.

In 1997, the Vice President designated the DoD acquisition community as a National Performance Review Reinvention Impact Center. In response, DoD established a set of 3-year goals for the Reinvention Impact Center to obtain. One of the goals is to:

Define requirements and establish an implementation plan for a cost accounting system that provides routine visibility into weapon system life-cycle costs through activity based costing and management. The system must deliver timely, integrated data for management purposes to: permit understanding of total weapon costs; provide a basis for estimating costs of future systems; and feed other tools for life cycle cost management.

The Director, Acquisition Program Integration, and the Director, Program Analysis and Evaluation, along with the Deputy Under Secretary of Defense (Logistics), are working on achieving the above goal, which requires a plan for a cost-accounting system by January 2000. Therefore, we make no recommendation that DoD establish a cost-accounting system, including standard cost categories, to track and report program costs.

Cost Drivers. The 12 cost activities for other than weapon-systems hardware and software identified in Table 2 and the related cost drivers in DoD Regulation 5000.2-R accounted for about 31 percent of the total program costs in FY 1997 for the 10 programs reviewed. The Office of the Under Secretary of Defense for Acquisition and Technology is working through various working
Uses of Program Funds for Other Than Weapon-Systems Hardware and Software

groups to reduce the cost drivers associated with the cost activities. Therefore, we make no recommendation that DoD study the cost drivers associated with the 12 cost activities discussed in this report.

Operations and Support Costs. The Naval Air Systems Command (the Command) began a Command initiative in FY 1998 to reduce operations and support costs. In FY 1998, the Command assessed funds appropriated to each of its assigned program offices to fund unmatched disbursements and negative-unliquidated obligations. Instead of returning a proportionate amount of the funds that were not needed to fund unmatched disbursements and negative-unliquidated obligations to each program office, the Command decided to establish a Command reserve fund. The purpose of the Command reserve fund is to fund promising program office proposals to reduce system operations and support costs. To implement the initiative, the Command directed subordinate program offices to submit proposals for potential initiatives that would lead to reductions in operations and support costs. The Command reviewed the proposals, selected the proposals with the greatest potential for reductions, and funded the proposals with monies from the reserve fund. The Command began the effort in FY 1998 and plans to have all of its programs participating in the initiative in FY 1999.

Management Comments on the Audit Results and Audit Response

Chief, Program Integration Division, Office of the Assistant Secretary of the Air Force (Acquisition), Comments. Although no comments were required, the Chief, Program Integration Division, Office of the Assistant Secretary of the Air Force (Acquisition), provided comments concerning the departmental assessments cost category. He stated that the departmental assessments numbers in this report were not completely representative of the assessments associated with the accounts that the Office of the Assistant Secretary of the Air Force (Acquisition) manages. He noted that our results were based on a review of 10 major Defense programs and, therefore, would not necessarily be representative of other DoD programs. Further, he stated that the departmental assessment cost category average of 4.96 percent of total program dollars reviewed for the 10 program offices was very close to the assessments for the aircraft procurement; missile procurement; and research, development, test, and evaluation appropriations that the Office of the Assistant Secretary of the Air Force (Acquisition) manages. However, he stated that the 2.37 percent assessment against procurement funds and the 1.82 percent assessment against research, development, test, and evaluation funds discussed in the report were considerably lower than the actual assessments against his office's appropriations for FYs 1997 and 1998.

Audit Response. We agree with the Air Force comments that the departmental assessments identified in this report may not be completely representative of the assessments by appropriation for all programs in DoD. As noted in the draft of this report, we qualified this report to indicate that the audit results were not
Uses of Program Funds for Other Than Weapon-Systems Hardware and Software

representative of all programs in DoD. Overall, the Air Force comments lend support to the report results concerning the percent of total appropriation dollars that the 10 program offices reviewed spent on departmental assessments.
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Part II - Additional Information
Appendix A. Audit Process

Scope and Methodology

We conducted this audit from January through August 1998 and reviewed documentation dated from November 1997 through July 1998. To accomplish the audit objective, we:

- discussed FY 1997 appropriation funding uses with personnel in the Office of the Under Secretary of Defense for Acquisition and Technology, the Military Department financial management and comptroller offices, and the program offices for the 10 major Defense systems selected for review;

- reviewed FY 1997 budget-execution reports for procurement; research, development, test, and evaluation; operations and maintenance support; and civilian and military-pay appropriation funding that totaled $1.9 billion for the 10 selected program offices;

- determined the functional cost categories and activities within the various appropriations using budget documents and provided those cost categories and activities to the applicable program office for its review;

- interviewed program office personnel to determine the uses of FY 1997 program funding;

- determined whether the 10 selected program offices had implemented a process to reduce program costs for other than weapon-systems hardware and software acquisition;

- determined the in-house and contractor personnel costs incurred at the 10 program offices to handle unmatched disbursements and negative-unliquidated obligations;

- determined the total congressional and DoD assessments in FY 1997 for the 10 programs reviewed;

- determined the percentage of FY 1997 program dollars used for program office cost categories and activities as a percentage of total FY 1997 program dollars for the 10 selected programs; and

- determined the percentage of FY 1997 program dollars spent for congressional and DoD assessments as a percentage of total FY 1997 program dollars for the 10 selected programs.

In accomplishing the objective, we selected 10 major Defense systems to review during the audit: four from the Army, three from the Navy, and three from the Air Force. We subjectively selected the programs to provide a variety of
weapon types and a cross-section of DoD acquisition organizations while considering the amount of prior audit coverage. The programs were in production, were deployed, or were in the operational support phase of the acquisition process. Of the 10 programs reviewed, 4 were in early production, 2 were in mid-production, and 4 were in late production. We refer to the 10 major Defense systems as programs A through J in this report. Those programs include command and control, intelligence, communications, satellites, and weapon systems.

Foreign Country Participation. The DoD Regulation 7000.14-R, Volume 15, "DoD Financial Management Regulation," March 1993, discusses administrative charges for foreign-military sales and requires DoD organizations that provide general administrative support of the foreign-military sales program to recoup the full cost, excluding a pro-rata share of fixed-base operations costs, of providing such support. We did not include foreign-military sales costs in our program calculations. To ensure that the costs associated with foreign-military sales were not included in the costs reviewed, we determined whether the selected programs had any foreign-military sales. If the program had foreign-military sales, we subtracted funds associated with those sales from the applicable program funding.

Auditing Standards. We conducted this program audit in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD. We included such tests of management controls as we deemed necessary.

Use of Computer-Process Data and Technical Experts. We used computer-processed data in the form of budget-execution reports to analyze the program funding and costs associated with the 10 major Defense systems reviewed. We did not establish the reliability of the source data used for the budget-execution reports because that degree of precision was not necessary for categorizing program office expenditures. Technical experts from the Quantitative Methods Division of the Analysis, Planning, and Technical Support Directorate, Office of the Inspector General, DoD, assisted in the audit.

Contacts During the Audit. We visited or contacted individuals and organizations within DoD. Further details are available upon request.

DoD-Wide Corporate-Level Government Performance and Results Act Goals. In response to the Government Performance and Results Act, the DoD has established 6 DoD-wide corporate-level performance objectives and 14 goals for meeting these objectives. This report pertains to achievement of the following objective and goal.

Objective: Fundamentally reengineer DoD and achieve a 21st century infrastructure.

Goal: Reduce costs while maintaining required military capabilities across all DoD mission areas (DoD-6).
Appendix A. Audit Process

DoD Functional Area Reform Goals. Most major DoD functional areas have also established performance improvement reform objectives and goals. This report pertains to achievement of the following acquisition functional issue area objective and goal.

Objective: Internal reinvention.

Goal: Define requirements and establish an implementation plan for a cost-accounting system that provides routine visibility through activity-based costing and management (ACQ-3.2).

General Accounting Office High-Risk Area. The General Accounting Office has identified several high-risk areas in the DoD. This report provides coverage of the Defense Weapons Systems Acquisition high-risk area.

Management Control Program Review

The DoD Directive 5010.38, "Management Control (MC) Program," August 26, 1996, requires DoD managers to implement a comprehensive system of management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of the controls.

Scope of Review of the Management Control Program. In accordance with DoD Directive 5000.1, "Defense Acquisition," March 15, 1996, and DoD Regulation 5000.2-R, acquisition managers are to use program cost, schedule, and performance parameters as control objectives to implement the DoD Directive 5010.38 requirements. Accordingly, we limited our review to management controls directly related to program costs that directly and indirectly support the 10 major Defense programs selected for review.

Adequacy of Management Controls. Management controls were adequate for the 10 major Defense programs reviewed in that we did not identify any material systemic management-control weakness applicable to the audit objective.

Summary of Prior Coverage

During the last 5 years, the Inspector General, DoD, and the Military Department audit agencies have not issued reports specifically addressing program costs that directly and indirectly support major-Defense-system acquisitions.
Appendix B. Definitions of Technical Terms

Acquisition Category. An acquisition category is an attribute of an acquisition program that determines the program's level of review, decision authority, and applicable procedures. The acquisition categories consist of I, major Defense acquisition programs; IA, major automated information systems; II, major systems; and III, all other acquisition programs. Acquisition Category I programs have two sub-categories: ID and IC. Acquisition Category IA programs also have two sub-categories: IAM and IAC.

Cost Activity. Cost activities are functional acquisition requirements within cost categories specified in DoD Regulation 5000.2-R.

Cost Category. Cost categories are major functional elements of the acquisition process, such as systems engineering, program management, logistics, departmental assessments, test and evaluation, and weapon-systems hardware and software acquisition, specified in DoD Regulation 5000.2-R.

Cost Driver. Cost drivers are requirements associated with cost categories in DoD Regulation 5000.2-R with which program offices must comply for managing and acquiring weapon-systems hardware and software and for accomplishing mission support, excluding departmental assessments.

Departmental Assessments. Departmental Assessments are congressional and other unbudgeted DoD costs. DoD commonly refers to the costs as "taxes."

Integrated Product Team. An integrated product team is a group of selected individuals representing multiple disciplines formed to produce a specific product or service. The individuals selected have mutual as well as individual accountability; contribute to integrated, concurrent decisionmaking; and are empowered within defined limits to decide and act to ensure the realization of the specific product or service.

Major Defense System. A major Defense system is a system that the Under Secretary of Defense for Acquisition and Technology estimated to require an eventual total expenditure for research, development, test, and evaluation of more than $135 million in FY 1996 constant dollars or for procurement of more than $640 million in FY 1996 constant dollars. A major system is synonymous with an Acquisition Category II program.

Negative-Unliquidated Obligation. A negative-unliquidated obligation is a disbursement transaction that has been matched to the cited detail-obligation; however, the total disbursement exceeds the amount of that obligation.

Obligation. An obligation is a duty to make a future payment of money. The duty is incurred as soon as the Government places an order or awards a contract.
Appendix B. Definitions of Technical Terms

for the delivery of goods and the performance of services. An obligation legally encumbers a specified sum of money, which will require outlays or expenditures in the future.

Unmatched Disbursement. An unmatched disbursement is a disbursement transaction that an accounting office received and accepted; however, the accounting office cannot match the disbursement to the detail obligation. Unmatched disbursements also include transactions that the accounting office rejected and sent back to the paying office or central-disbursement-clearing organization.
Appendix C. DoD Regulation 5000.2-R Requirements

This appendix provides the DoD Regulation 5000.2-R requirements associated with the cost drivers cited in this report. The related DoD Regulation 5000.2-R paragraph is cited in parentheses.

Acquisition Logistics (4.3.3.). The program manager will conduct acquisition logistics management activities throughout the system development to ensure the design and acquisition of systems that can be cost-effectively supported and to ensure that the systems are provided to the user with the necessary support infrastructure for achieving the user's peacetime and wartime readiness requirements.

Acquisition Strategy (3.3.). Each program manager will develop and document an acquisition strategy that will serve as the roadmap for program execution from program initiation through post-production support. A primary goal in developing an acquisition strategy will be to minimize the time and cost of satisfying an identified, validated need, consistent with common sense and sound business practices. The acquisition strategy will evolve through an iterative process and become increasingly more definitive in describing the relationship of the essential elements of a program. Essential elements in this context include, but are not limited to, sources, risk management, cost as an independent variable, contract approach, management approach, environmental considerations, and source of support. The program manager will also address other major initiatives that are critical to the success of the program.

Affordability (2.5.). These procedures establish the basis for fostering greater program stability through the assessment of program affordability and determination of affordability constraints.

- Individual program plans and strategies for new acquisition programs will be consistent with overall DoD planning and funding priorities.

- Affordability will be assessed at each milestone decision point beginning with program initiation (usually Milestone I).

- Cost Analysis Improvement Group reviews will be used to ensure that cost data of sufficient accuracy are available to support reasonable judgments on affordability for Acquisition Category I programs.

- DoD Component Heads will consult with the Under Secretary of Defense for Acquisition and Technology or the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence), as appropriate, on program objective memorandums and budget estimate submissions that contain a significant change in funding for, or reflect a significant funding change in, any program subject to review by the Defense Acquisition Board or Major Automated Information Systems Review Council.
Appendix C. DoD Regulation 5000.2-R Requirements

Cost Management Incentives (3.3.4.2.). Requests for proposals will be structured to incentivize the contractor to meet or exceed cost objectives. Whenever applicable, risk reduction through use of mature processes will be a significant factor in source selection. For industry, competition to win business, along with attendant business profit, is by far the most powerful incentive. Therefore, competition will be maintained for as long as practicable in all acquisition programs.

Environmental Compliance (4.3.7.2.). Environmental regulations are a source of external constraints that must be identified and integrated into program execution. To minimize the cost and schedule risks that changing regulations represent, the program manager will regularly review environmental regulations and will analyze the regulations and evaluate their impact on the program's cost, schedule, and performance.

Human Systems Integration (4.3.8.). A comprehensive management and technical strategy for human systems integration will be initiated early in the acquisition process to ensure that: human performance, the burden that the design imposes on personnel and training, and safety and health aspects are considered throughout the system design and development processes.

Integrated Product Teams in the Oversight and Review Process (5.4.). Integrated product teams are an integral part of the Defense acquisition oversight and review process. For Acquisition Category ID and IAM programs, generally two levels of integrated product teams exist: the overarching integrated product team and working-level integrated product team. Each program will have an overarching integrated product team and at least one working-level integrated product team. Working-level integrated product teams will focus on a particular topic, such as cost/performance, test, or contracting. An integrating integrated product team, which is a working-level integrated product team, will coordinate working-level integrated product team efforts and cover all topics not otherwise assigned to another integrated product team. Membership in integrated product teams is the primary way for any organization to participate in the program.

Joint Program Management (3.3.6.3.). Any acquisition system, subsystem, component, or technology program that involves a strategy that includes funding by more than one DoD Component during any phase of a system's life cycle will be defined as a joint program. Joint programs will be consolidated and collocated at the location of the lead Component's program office, to the maximum extent practicable.

Operational Support (1.4.5.1.). The objectives of operational support are the execution of a support program that meets the threshold values of all support performance requirements and sustainment of them in the most life-cycle cost-effective manner. A follow-on operational testing program that assesses performance and quality, compatibility, and interoperability, and identifies deficiencies will be conducted, as appropriate. Operational support will also include the execution of operational support plans, to include the transition from contract to organic support, if appropriate.
Phase III: Production, Fielding, Deployment, and Operational Support (1.4.5.). The objective of the Production, Fielding, Deployment, and Operational Support phase is to achieve an operational capability that satisfies mission needs. Deficiencies encountered in developmental test and evaluation and initial operational test and evaluation will be resolved and fixes verified. The production requirement of this phase does not apply to Acquisition Category IA acquisition programs or software-intensive systems with no developmental hardware components. During deployment and throughout operational support, the potential for modifications to the deployed system continues.

Quality (4.3.2.). The program manager will allow contractors the flexibility to define and use their preferred quality management process to meet program objectives. Third-party certification or registration of a supplier's quality system will not be required. The quality management process will include the following key quality activities:

- establishment of capable processes,
- monitoring and control of critical processes and product variation,
- establishment of mechanisms for feedback of field product performance,
- implementation of an effective root cause analysis and corrective action system, and
- continuous process improvement.

Software Engineering (4.3.5.). Software will be managed and engineered using best processes and practices that are known to reduce cost, schedule, and technical risks. DoD policy is to design and develop software systems based on systems engineering principles, to include:

- developing software system architectures that support open system concepts; exploit commercial off-the-shelf computer systems products; and provide for incremental improvements based on modular, reusable, and extensible software;

- identifying and exploiting software reuse opportunities, Government and commercial, before beginning new software development;

- using the Ada programming language to develop code for which the Government is responsible for life-cycle maintenance and support;

- using DoD standard data;

- selecting contractors with the domain experience in developing comparable software systems, a successful past performance record, and a demonstrable mature software development capability and process;
using software metrics to affect the necessary discipline of the software development process and assess the maturity of the software product; and

- ensuring that information warfare risks have been assessed.

Support Resources (4.3.3.4.). Support resources, such as operator and maintenance manuals, tools, support equipment, and training devices for major weapon system components, will not be procured before the weapon system and the component hardware and software design stabilizes. The program manager will consider the use of embedded training and maintenance techniques to enhance user capability and reduce life-cycle costs. Where they are available, cost-effective, and can readily meet the user's requirements, commercial support resources will be used.

Systems Engineering (4.3.). The program manager will ensure that a systems engineering process is used to translate either operational needs or requirements, or both, into a system solution that includes the design, manufacturing, test and evaluation, and support processes and products. The systems engineering process will establish a proper balance between performance, risk, cost, and schedule, employing a top-down iterative process of requirements analysis, functional analysis and allocation, design synthesis and verification, and system analysis and control.

Test and Evaluation (3.4.). Test and evaluation programs will be structured to integrate all developmental test and evaluation, operational test and evaluation, live-fire test and evaluation, and modeling and simulation activities conducted by different agencies as an efficient continuum. All such activities will be part of a strategy to provide information regarding risk and risk mitigation, to provide empirical data to validate models and simulations, to permit an assessment of the attainment of technical performance specifications and system maturity, and to determine whether systems are operationally effective, suitable, and survivable for intended use.

Test and Evaluation Strategy (3.4.1.). Test and evaluation planning will begin in Phase 0, Concept Exploration. Both developmental and operational testers will be involved early to ensure that the test program for the most promising alternative can support the acquisition strategy and to ensure the harmonization of objectives, thresholds, and measures of effectiveness in the operational requirements document and the test and evaluation master plan. Test and evaluation planning will address measures of effectiveness and measures of performance with appropriate quantitative criteria, test event or scenario description, and resource requirements (for example, special instrumentation, test articles, validated threat targets, validated threat simulators and validated threat simulations, actual threat systems or surrogates, and personnel), and will identify test limitations.
Appendix D. Departmental Assessments

This appendix shows congressional and DoD assessments by appropriation for the 10 major Defense programs that we reviewed. The amounts are in percents.

**Program A**

<table>
<thead>
<tr>
<th>Appropriation</th>
<th>Congressional</th>
<th>DoD</th>
<th>Total Deduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement</td>
<td>1.37</td>
<td>0.11</td>
<td>1.48</td>
</tr>
<tr>
<td>RDT&amp;E</td>
<td>0.20</td>
<td>0.01</td>
<td>0.21</td>
</tr>
<tr>
<td>Subtotal</td>
<td>1.57</td>
<td>0.12</td>
<td>1.69</td>
</tr>
</tbody>
</table>

1Congress assessed funds to reduce DoD funding of Federally funded research and development centers and non-Federally funded research and development centers. Congress also assessed program funds to fund a Presidential request for anti-terrorism, counter-terrorism, and security enforcement.

2The Army assessed program funds for counter drug-terrorism, for small business innovative research, and for general reductions to procurement and research and development appropriations.

3Acronym for research, development, test, and evaluation.

**Program B**

<table>
<thead>
<tr>
<th>Appropriation</th>
<th>Congressional</th>
<th>DoD</th>
<th>Total Deduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement</td>
<td>0.38</td>
<td>10.71</td>
<td>11.09</td>
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<tr>
<td>RDT&amp;E</td>
<td>1.62</td>
<td>0</td>
<td>1.62</td>
</tr>
<tr>
<td>Subtotal</td>
<td>2.00</td>
<td>10.71</td>
<td>12.71</td>
</tr>
</tbody>
</table>

4Congress assessed program funds for a general reduction in procurement appropriations.

5The program executive office assessed program funds to acquire joint-Service hardware support for other weapon-system platforms to enable Program B to have a joint-Service mission capability.

**Program C**

<table>
<thead>
<tr>
<th>Appropriation</th>
<th>Congressional</th>
<th>DoD</th>
<th>Total Deduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement</td>
<td>0.53</td>
<td>0.26</td>
<td>0.79</td>
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<tr>
<td>Subtotal</td>
<td>0.53</td>
<td>0.26</td>
<td>0.79</td>
</tr>
</tbody>
</table>

6Congress assessed program funds for a general reduction in procurement appropriations.

7The Army assessed funds for program executive office support.
## Appendix D. Departmental Assessments

### Program D

<table>
<thead>
<tr>
<th>Appropriation</th>
<th>Congressional</th>
<th>DoD</th>
<th>Total Deduction</th>
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</thead>
<tbody>
<tr>
<td>Procurement</td>
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<td>RDT&amp;E</td>
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<td>0.05</td>
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<td>Subtotal</td>
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<td>1.14</td>
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</tbody>
</table>

8Congress assessed funds to reduce DoD funding of Federally funded research and development centers and to adjust annual program office inflation projections downwards. Congress also assessed program funds to fund small business innovative research and small business technical transfer and for general reductions to procurement and research and development appropriations.  
9The Army assessed program funds for program executive office support and reprogramming needs.

### Program E

<table>
<thead>
<tr>
<th>Appropriation</th>
<th>Congressional</th>
<th>DoD</th>
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<tr>
<td>Procurement</td>
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<td>Subtotal</td>
<td>2.22</td>
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10Congress assessed program funds for counter drug-terrorism, the Defense Business Operations Fund, a killing facility, and general reductions to procurement and research and development appropriations. Congress also reduced program funds to adjust annual program office inflation projections downwards.  
11The Navy assessed funds for small business innovative research and reprogramming needs.

### Program F

<table>
<thead>
<tr>
<th>Appropriation</th>
<th>Congressional</th>
<th>DoD</th>
<th>Total Deduction</th>
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</thead>
<tbody>
<tr>
<td>Operations and Maintenance</td>
<td>0.96</td>
<td>2.06</td>
<td>3.02</td>
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<tr>
<td>Procurement</td>
<td>1.20</td>
<td>0.31</td>
<td>1.51</td>
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<tr>
<td>RDT&amp;E</td>
<td>2.12</td>
<td>0</td>
<td>2.12</td>
</tr>
<tr>
<td>Subtotal</td>
<td>4.28</td>
<td>2.37</td>
<td>6.65</td>
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</table>

12Congress assessed funds to reduce DoD funding of Federally funded research and development centers, non-Federally funded research and development centers, the acquisition work force, the National Defense Stockpile Fund, information resource management, and the Pentagon Reservation Fund. Congress also assessed program funds to fund Bosnian relief efforts, small business innovative research, the Defense Business Operations Fund, and a Presidential request for anti-terrorism, counter-terrorism, and security enforcement; to adjust annual program office inflation projections downwards; and for general reductions to research and development appropriations.  
13The Navy assessed program funds for reprogramming efforts, to fund the Chief of Naval Operations Reserve, and for program executive office support.
### Appendix D. Departmental Assessments

#### Program G

<table>
<thead>
<tr>
<th>Appropriation</th>
<th>Congressional</th>
<th>DoD</th>
<th>Total Deduction</th>
</tr>
</thead>
<tbody>
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<td>Operations and Maintenance</td>
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<td>Procurement</td>
<td>4.84</td>
<td>4.73</td>
<td>9.57</td>
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<td>RDT&amp;E</td>
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<td>0.71</td>
<td>2.50</td>
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<tr>
<td>Subtotal</td>
<td>7.71</td>
<td>5.46</td>
<td>13.17</td>
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</table>

*Congress assessed funds to reduce DoD funding of Federally funded research and development centers, non-Federally funded research and development centers, and information resource management. Congress also assessed program funds to fund a Presidential request for anti-terrorism, counter-terrorism, and security enforcement; adjust annual program office inflation projections downwards; and fund small business innovative research.*

#### Program H

<table>
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<th>Appropriation</th>
<th>Congressional</th>
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<th>Total Deduction</th>
</tr>
</thead>
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<td>1.07</td>
<td>1.44</td>
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<td>RDT&amp;E</td>
<td>3.83</td>
<td>0.97</td>
<td>4.80</td>
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<td>Subtotal</td>
<td>4.20</td>
<td>2.04</td>
<td>6.24</td>
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</table>

*Congress assessed funds to reduce DoD funding of Federally funded research and development centers and non-Federally funded research and development centers. Congress also assessed program funds to fund force protection, Bosnia relief, and small business innovation research and to adjust annual program office inflation projections downwards.*

#### Program I

<table>
<thead>
<tr>
<th>Appropriation</th>
<th>Congressional</th>
<th>DoD</th>
<th>Total Deduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement</td>
<td>1.95</td>
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<td>1.95</td>
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<tr>
<td>RDT&amp;E</td>
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<td>Subtotal</td>
<td>3.47</td>
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<td>4.13</td>
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</table>

*Congress assessed funds to reduce DoD funding of Federally funded research and development centers and non-Federally funded research and development centers. Congress also assessed program funds to fund small business innovative research, general reductions to research and development fund appropriations, and a Presidential request for anti-terrorism, counter-terrorism, and security enforcement.*

*The Air Force assessed funds for long-range planning and systems program office support.*
Appendix D. Departmental Assessments

Program J

<table>
<thead>
<tr>
<th>Appropriation</th>
<th>Congressional</th>
<th>DoD</th>
<th>Total Deduction</th>
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<td>RDT&amp;E</td>
<td>2.45</td>
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<tr>
<td>Subtotal</td>
<td>2.45</td>
<td>1.25</td>
<td>3.70</td>
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</tbody>
</table>

\(^{20}\)Congress assessed funds for small business innovative research and rescinded program funds for an unmanned air vehicle.

\(^{21}\)The resource sponsor reprogrammed funds for integration and support.
Appendix E. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition and Technology
  Deputy Under Secretary of Defense (Acquisition Reform)
  Deputy Under Secretary of Defense (Logistics)
  Director, Acquisition Program Integration
  Director, Program Analysis and Evaluation
  Director, Defense Logistics Studies Information Exchange
Under Secretary of Defense (Comptroller)
  Deputy Chief Financial Officer
  Deputy Comptroller (Program/Budget)
Assistant Secretary of Defense (Public Affairs)

Department of the Army

Assistant Secretary of the Army (Research, Development, and Acquisition)
Auditor General, Department of the Army

Department of the Navy

Assistant Secretary of the Navy (Financial Management and Comptroller)
Assistant Secretary of the Navy (Research, Development, and Acquisition)
Auditor General, Department of the Navy

Department of the Air Force

Assistant Secretary of the Air Force (Acquisition)
Assistant Secretary of the Air Force (Financial Management and Comptroller)
Auditor General, Department of the Air Force

Other Defense Organizations

Director, Defense Contract Audit Agency
Director, Defense Logistics Agency
  Director, Defense Contract Management Command
Director, National Security Agency
  Inspector General, National Security Agency
Inspector General, Defense Intelligence Agency
Appendix E. Report Distribution

Non-Defense Federal Organizations and Individuals

Office of Management and Budget
Technical Information Center, National Security and International Affairs Division,
General Accounting Office

Chairman and ranking minority member of each of the following congressional committees and subcommittees:

- Senate Committee on Appropriations
- Senate Subcommittee on Defense, Committee on Appropriations
- Senate Committee on Armed Services
- Senate Committee on Governmental Affairs
- House Committee on Appropriations
- House Subcommittee on National Security, Committee on Appropriations
- House Committee on Government Reform and Oversight
- House Subcommittee on Government Management, Information, and Technology,
  Committee on Government Reform and Oversight
- House Subcommittee on National Security, International Affairs, and Criminal Justice, Committee on Government Reform and Oversight
- House Committee on National Security
Part III - Management Comments
Department of the Air Force Comments

DEPARTMENT OF THE AIR FORCE
WASHINGTON, DC
Office of the Assistant Secretary

MEMORANDUM FOR OAIG-AUD (Acquisition Management Directorate)
Inspector General, Department of Defense
400 Army Navy Drive
Arlington, VA 22202

FROM   SAF/AQXR
1060 Air Force Pentagon
Washington DC 20330-1060

SUBJECT: Audit Report on the Use of Funds Appropriated for Major Defense Systems
(Project No. 8AF-0015)

We appreciate the opportunity to review the subject draft audit report. Although not required, we offer the attached comments to provide additional information regarding the cost category you refer to as "Departmental Assessments" on pages 4 through 6 of the report.

Based on our data, the numbers cited in your draft report are not completely representative of our recent experience with "taxes" imposed on the modernization accounts managed in SAF/AQ. We understand your report is based on ten selected DOD programs and therefore would not necessarily be representative across the board. Accordingly, we hope this additional information provides further insight into the actual impact these reductions have on acquisition programs.

If you have any questions regarding these comments, please contact Maj Rob Roberts, SAF/AQXR, (703) 588-7252/DSN 425-7252.

BRADLEY W. BUTLER, Col, USAF
Chief, Program Integration Division
Assistant Secretary (Acquisition)

Attachment:
Comments on Draft IG Report

32
Comments on
Draft DOD IG Report
Use of Funds Appropriated for Major Defense Systems
4 Sep 98

Reference: Cost Category - "Departmental Assessments" (pages 4-6)

The attached spreadsheet shows the FY97 and FY98 "taxes" against the three SAF/AQ managed appropriations (Aircraft Procurement, Missile Procurement, and RDT&E). We track these reductions in two categories: (1) "Undistributed Reductions" otherwise referred to as Congressional General Reductions (CGRs) and (2) Omnibus Reprogramming Sources.

The average percentage cut cited in the IG report (4.96%) for the ten audited programs is very close to our average percentage cut: (9.1% in FY97, 5.5% in FY98). However, the percentage cuts cited for procurement (2.37%) and RDT&E (1.82%) are considerably lower than the actual cuts against our FY97 and FY98 AQ appropriations (see table below)

<table>
<thead>
<tr>
<th>Appropriation</th>
<th>FY97</th>
<th>FY98</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aircraft Procurement (3010)</td>
<td>2.36%</td>
<td>4.73%</td>
</tr>
<tr>
<td>Missile Procurement (3020)</td>
<td>9.22%</td>
<td>4.22%</td>
</tr>
<tr>
<td>RDT&amp;E (3600)</td>
<td>5.58%</td>
<td>6.03%</td>
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</tbody>
</table>
### FY97 Undistributed Reductions (SK)

<table>
<thead>
<tr>
<th>APFN</th>
<th>AFS</th>
<th>CASS</th>
<th>FFRDC</th>
<th>Sec 279</th>
<th>Sec 812</th>
<th>Results</th>
<th>SBIR</th>
<th>All Reductions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amt</td>
<td>%</td>
<td>Amt</td>
<td>%</td>
<td>Amt</td>
<td>%</td>
<td>Amt</td>
<td>%</td>
</tr>
<tr>
<td>3000</td>
<td>11,499,600</td>
<td>11,737</td>
<td>0.03%</td>
<td>11,665</td>
<td>0.09%</td>
<td>253,973</td>
<td>0.0%</td>
<td>11,940,600</td>
</tr>
<tr>
<td>TOTAL</td>
<td>19,565,973</td>
<td>11,737</td>
<td>0.03%</td>
<td>11,665</td>
<td>0.09%</td>
<td>253,973</td>
<td>0.0%</td>
<td>12,213,973</td>
</tr>
</tbody>
</table>

### FY97 Omnibus (SK)

<table>
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<th>AFS</th>
<th>CASS</th>
<th>FFRDC</th>
<th>Sec 279</th>
<th>Sec 812</th>
<th>Results</th>
<th>SBIR</th>
<th>All Reductions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amt</td>
<td>%</td>
<td>Amt</td>
<td>%</td>
<td>Amt</td>
<td>%</td>
<td>Amt</td>
<td>%</td>
</tr>
<tr>
<td>3020</td>
<td>5,237,385</td>
<td>5,237</td>
<td>1.01%</td>
<td>5,237</td>
<td>1.01%</td>
<td>5,237</td>
<td>1.01%</td>
<td>5,237,385</td>
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<tr>
<td>TOTAL</td>
<td>10,474,770</td>
<td>5,237</td>
<td>1.01%</td>
<td>5,237</td>
<td>1.01%</td>
<td>5,237</td>
<td>1.01%</td>
<td>16,652,685</td>
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### FY98 Undistributed Reductions (SK)

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<th>Sec 279</th>
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<th>All Reductions</th>
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<tbody>
<tr>
<td></td>
<td>Amt</td>
<td>%</td>
<td>Amt</td>
<td>%</td>
<td>Amt</td>
<td>%</td>
<td>Amt</td>
<td>%</td>
</tr>
<tr>
<td>3020</td>
<td>5,234,287</td>
<td>5,234</td>
<td>1.01%</td>
<td>5,234</td>
<td>1.01%</td>
<td>5,234</td>
<td>1.01%</td>
<td>5,234,287</td>
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<tr>
<td>TOTAL</td>
<td>10,474,570</td>
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<td>1.01%</td>
<td>5,234</td>
<td>1.01%</td>
<td>5,234</td>
<td>1.01%</td>
<td>13,281,875</td>
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### FY98 Omnibus (SK)

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<th>Results</th>
<th>SBIR</th>
<th>All Reductions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amt</td>
<td>%</td>
<td>Amt</td>
<td>%</td>
<td>Amt</td>
<td>%</td>
<td>Amt</td>
<td>%</td>
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<tr>
<td>3020</td>
<td>5,234,287</td>
<td>5,234</td>
<td>1.01%</td>
<td>5,234</td>
<td>1.01%</td>
<td>5,234</td>
<td>1.01%</td>
<td>5,234,287</td>
</tr>
<tr>
<td>TOTAL</td>
<td>10,474,570</td>
<td>5,234</td>
<td>1.01%</td>
<td>5,234</td>
<td>1.01%</td>
<td>5,234</td>
<td>1.01%</td>
<td>15,952,165</td>
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Appropriated amounts were taken from their respective Conference reports.
Audit Team Members

The Acquisition Management Directorate, Office of the Assistant Inspector General for Auditing, DoD, prepared this report.

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INTERNET DOCUMENT INFORMATION FORM

A. Report Title: Use of Funds Appropriated for Major Defense Systems

B. DATE Report Downloaded From the Internet: 12/28/99

C. Report’s Point of Contact: (Name, Organization, Address, Office Symbol, & Ph #): OAIG-AUD (ATTN: AFTS Audit Suggestions)
Inspector General, Department of Defense
400 Army Navy Drive (Room 801)
Arlington, VA  22202-2884

D. Currently Applicable Classification Level: Unclassified

E. Distribution Statement A: Approved for Public Release

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DTIC-OCA, Initials: __VM__ Preparation  Date 12/28/99

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