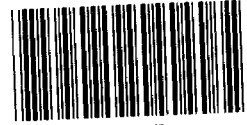


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Testimony

Before the Joint Committee on Printing,  
U.S. Congress



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DEFENSE MANAGEMENT

Printing Operations at the  
Department of Defense

Statement of Donna M. Heivilin, Director, Defense  
Management and NASA Issues, National Security and  
International Affairs Division



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Mr. Chairman and Members of the Committee:

We appreciate the opportunity to discuss today our work on the printing operations of the Department of Defense (DOD). Our testimony focuses primarily on a limited price comparison of printing and duplicating jobs completed in DOD facilities, as compared with the expected price for the same work commercially procured through the Government Printing Office (GPO).<sup>1</sup> We also will provide our preliminary observations on (1) the progress DOD has made in consolidating its printing-related operations, (2) DOD's adherence to congressional direction concerning its printing and duplicating operations, and (3) DOD acquisition of printing services under its Joint Computer-Aided Acquisition and Logistics Support (JCALS) program.

### BACKGROUND

In November 1990, the Deputy Secretary of Defense approved Defense Management Report Decision 998 that called for the consolidation of all DOD printing and duplicating services under a single manager. By consolidating these services, DOD expected to save about \$13.7 million in 1993 and about \$30 million annually beginning in 1994. Although the consolidation was originally expected to take effect in October 1991, it did not occur until April 1992 when the Defense Printing Service (DPS) was established as the single manager. Savings attributable to the consolidation have been difficult to identify. However, in the general downsizing of DOD, work loads are coming down, and resources (personnel, equipment, and facilities) are being reduced. In terms of the overall fiscal year 1993 DPS work load, DPS officials told us they expect to send about \$150 million to GPO and retain about \$213 million for in-house production.

We issued two reports and provided testimony on two occasions regarding DOD's plans to consolidate its printing operations under

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<sup>1</sup>"Printing," as defined in this analysis, includes work that (1) is completed on traditional printing equipment (such as, offset presses) or (2) exceeds the maximum limitations of 5,000 of a single page or 25,000 pages in aggregate for any one job, regardless of the type of equipment used to produce the work. "Duplicating" is work that is completed on duplicating equipment and is less than the 5,000/25,000 page criteria spelled out in the Joint Committee on Printing's Government Printing and Binding Regulations.

DPS.<sup>2</sup> During those reviews we raised a number of questions about the consolidation and expected costs and savings, particularly the validity of the assumptions underlying the expected annual savings. Our current review builds on that work, and we are continuing to examine the consolidation initiative as it progresses.

#### Scope, Methodology and Limitations of Comparative Price Analysis

The price analysis was performed by GPO using 259 DOD printing and duplicating orders that we selected from the October 1992 through March 1993 time period. The orders were selected on a judgmental basis from eight Defense printing facilities in the Washington, D.C., area. In selecting the orders, we used logs, where available, to obtain a mix of low to high dollar value printing and duplicating requisitions. The orders totaled \$193,470 for the six month period and represented about 2.9 percent of the dollar volume for all work in those facilities during that period; about 1.4 percent of the volume for all Washington, D.C., area facilities; and about 0.2 percent for DPS facilities nationwide. GPO used the printing specifications from these completed orders to estimate the price to contract out the same work with private firms, using existing contracts for printing and duplicating services. The GPO Inspector General's office assisted in the compilation of the price comparison data.

We reviewed the results of the analysis, the computations and the methodology employed, including the comparability of the quality level, turnaround time and categorization of the orders. Because it is not a statistical sample, it is not necessarily representative of DOD's nationwide printing work load and the results cannot be statistically projected. We recognize that a price analysis of this nature may be subject to debate and that potential savings can vary depending on assumptions made and contracts used to price out the work. Accordingly, we performed a number of verification tasks to help assure ourselves that the price analysis was fair and reasonable, given time and other constraints associated with performing the analysis.

#### RESULTS IN BRIEF

The GPO price comparison shows that DOD could have achieved substantial savings if it had commercially procured the printing and duplicating work in the sample through GPO rather than perform

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<sup>2</sup>Defense Management: DOD's Plans to Consolidate Printing (GAO/NSIAD-91-268, Aug. 1, 1991), Defense Management: DOD's Estimated Savings for Printing Consolidation (GAO/NSIAD-92-66, Dec. 31, 1991), DOD's Plans to Consolidate Printing (GAO/T-NSIAD-91-54, Sept. 24, 1991), and Defense Management: Consolidation of Printing (GAO/T-NSIAD-92-48, Aug. 4, 1992).

the work in DOD facilities. The comparison shows that 219, or 85 percent of the 259 orders, could have been more economically procured through GPO. DOD could have saved about \$116,000, or 60 percent of the \$193,470 spent to complete the sample orders in-house. Most of the savings were attributable to printing rather than duplicating orders. While the potential savings averaged about 61 percent for printing orders and about 50 percent for duplicating orders, the savings attributable to printing were about \$107,000 while the savings in duplicating were about \$8,900. We found that the sample included 40 high volume duplicating orders that we reclassified as printing orders in accordance with the Joint Committee on Printing's regulations. DPS officials explained that their accounting system does not separate high volume duplicating orders from other duplicating orders.

We are generally satisfied with the reasonableness of the methodology and pricing used by GPO in the price analysis. In addition, a number of price comparison studies have been done in the past, each with some degree of limitations. However, virtually all of these past studies have strongly indicated that commercially procured printing and, to a lesser extent, duplicating work was less expensive than doing the work in-house. Although the results of the current price comparison are not projectable, we believe the magnitude of the estimated savings in the current and past comparisons provide strong indications that savings can be achieved by making greater use of commercial sources.

DOD officials claim that 70 percent of their printing is being sent to GPO. Because their accounting system does not classify high volume duplicating orders (those orders exceeding the 5,000/25,000 page threshold) as printing, we believe this is an overstatement. However, we do not know the extent of this overstatement.

DPS officials have raised concerns over the fairness of the price analysis and the accuracy of the results. While they generally acknowledge that substantial savings can be achieved on printing orders, they generally disagree that duplicating work can be accomplished more economically through GPO. They point out and we agree that the sample is not representative of DOD's nationwide work load.

Regarding our other ongoing work, we have several preliminary observations which I would like to address at this time.

With respect to the consolidation of DOD printing, DPS has continued to downsize its operations since the consolidation took effect in April 1992. However, because of the sharp decline in printing demand and an associated decrease in revenue, DPS has excess capacity and has been unable to downsize quickly enough to avoid operating at a loss. As of May 31, 1993, fiscal year costs had exceeded revenues by about \$18 million. DPS officials believe that recent personnel reductions will help in improving this

situation, but our review found that DOD has made no determination of the core capacity it needs to handle its quick turnaround and sensitive requirements.

In its consolidation actions, DOD has not followed the direction referred to in the conference report accompanying the DOD fiscal year 1993 Appropriations Act. Most notably, in our opinion, DOD has not followed committee report language directing DOD to maximize the direct transmittal of printing and duplicating work from the military services to GPO. DOD's stated policy requires that the services and other DOD components channel their printing and publishing work through DPS.

With respect to the DOD's JCALS program, the Committee asked that our office review DOD compliance with current law. Based on an ongoing review of contract documents available to us, we understand that the Department has modified the JCALS contract to require the contractor to design and implement a system that will enable DOD to develop technical manual "reproducible masters." If the production of "reproducible masters" involves the procurement of printing as defined by law, the JCALS contract modifications would be inconsistent with Section 207 of the Legislative Branch Appropriations Act, 1993. We have not yet received the Department's written response concerning questions we posed regarding these issues. We will in any case continue our work on these issues and provide the Committee with a written opinion.

PRICE ANALYSIS RESULTS FAVOR  
COMMERCIAL CONTRACTING THROUGH GPO

The price analysis performed by GPO shows that for the sample of 259 DPS printing and duplicating orders we selected, DOD had the opportunity to save about \$116,000, or 60 percent, of the \$193,470 spent to perform this work in DPS facilities. About \$107,000, or 92 percent, of the savings was attributable to printing rather than duplicating orders. We reclassified 40 of DOD's high volume duplicating orders as printing orders in accordance with the Joint Committee on Printing's definition of printing. Overall, it would have been more economical to commercially contract for 219 of the 259 jobs in the subject sample. Most jobs that were less costly to complete in DPS facilities were low volume jobs, less than \$40 in price.

Table 1 provides a summary of the price analysis results. Table 2 provides additional detail for the printing orders at each of the DPS facilities in the sample. Table 3 provides similar detail for the duplicating orders at those same facilities.

Table 1: Price Comparison of All Sample Orders

Type of work	Sample size	DPS price	GPO estimated price <sup>a</sup>	Potential savings	Savings (in percent)
Printing	153	\$175,691	\$68,614	\$107,076	61
Duplicating	106	17,779	8,852	8,927	50
Totals	259	\$193,470	\$77,466	\$116,003	60

<sup>a</sup>Includes GPO surcharge of 6 percent (or \$10 minimum charge per order) and DPS surcharge of 1.83 percent (or \$10 minimum charge per order).

Note: Minor differences in some figures are due to rounding.

Table 2: Price Comparison of Sample Printing Orders, by Facility

DPS facility	Sample size	DPS price	GPO estimated price	Potential savings	Savings (in percent)
Andrews Air Force Base	19	\$14,306	\$ 5,205	\$ 9,101	64
Fort Belvoir	34	35,891	14,948	20,943	58
Indian Head	19	26,113	10,199	15,914	61
Navy Annex	7	5,078	1,823	3,255	64
Navy Yard	6	10,552	3,935	6,616	63
Pentagon	36	50,666	19,391	31,275	62
Quantico	29	30,733	10,748	19,985	65
White House	3	2,352	2,365	-13	-1
Total	153	\$175,691	\$68,614	\$107,076	61

Note: Minor differences in some figures are due to rounding.



Table 3: Price Comparison of Sample Duplicating Orders, by Facility

DPS facility	Sample size	DPS cost	GPO estimated cost	Potential savings	Savings (in percent)
Andrews Air Force Base	20	\$1,287	\$ 932	\$ 355	28
Fort Belvoir	15	3,861	1,760	2,101	54
Indian Head	25	4,674	2,265	2,408	52
Navy Annex	8	1,005	596	408	41
Navy Yard	5	445	241	204	46
Pentagon	10	2,426	859	1,567	65
Quantico	20	4,025	2,114	1,911	47
White House	3	57	85	-28	-49
Total	106	\$17,779	\$8,852	\$8,927	50

Note: Minor differences in some figures are due to rounding.

GPO PRICE ANALYSIS  
METHODOLOGY WAS REASONABLE

In our opinion, GPO generally employed reasonable methodology and estimates in its price analysis. In general, GPO procurement specialists used reasonable care in (1) interpreting customer requirements as specified on DPS printing orders, (2) selecting appropriate contracts to derive commercial price estimates, (3) computing charges from those contracts, and (4) tabulating final customer prices.

Methodology Description

The GPO methodology involved a series of sequential steps to arrive at the final price comparison. As a baseline for defining customer requirements, GPO used DPS printing and duplicating requisitions which we had gathered from DPS facilities. We initially provided GPO with 351 selected sample orders. In selecting the orders, we made an effort to obtain a mix of low to high dollar value printing and duplicating requisitions. The documentation consisted of the DPS requisitions and itemized prices for producing the jobs in-house. As we and the GPO procurement specialists reviewed the data, 92 of the 351 orders were discarded for a variety of reasons. Fifteen of the orders were neither printing nor duplicating orders, and 24 were for less than \$10. We reviewed the discarded orders to ensure that it was reasonable to discard them (see table 4).

Table 4: Rationale and Dollar Value for 92 Discarded Orders

Number of orders	Reasons orders were discarded	Dollar value (DPS price)
29	No existing GPO contracts were available to price order.	\$20,837
24	GPO was unable to clearly determine job specifications.	13,992
24	Orders were for very small amounts (less than \$10) and no existing GPO contracts were available.	129
12	Order was neither a printing nor duplicating job.	1,899
3	The DPS cost was missing.	a

<sup>a</sup>Not available

To arrive at estimated GPO prices for the DPS requisitions, GPO procurement specialists used 14 different contracts and two purchase orders. Ten of the 14 contracts were single-award contracts in which one contractor performs the necessary work. The remaining 4 contracts were multiple-award contracts in which several contractors (up to 24 in some cases) could be selected to perform the work. Where multiple-award contracts were used, GPO specialists were directed to select the contractor that would most likely be awarded the work if the requisition had actually been received at that time. GPO and DPS surcharges were then added to the contractor prices to arrive at the final estimated

prices to DOD customers. GPO adds a 6-percent surcharge to the contract price (or a \$10 minimum charge) to administer the contract, while DPS adds a 1.83 percent (or a \$10 minimum charge) to DOD customer requisitions routed to the GPO. The estimated GPO prices were then compared to the DPS prices to determine the final price differentials for the orders.

#### Methodology and Pricing Was Reasonable

GPO's price analysis methodology was generally reasonable, given the inherent constraints associated with the analysis. In this regard, GPO did not have the benefit of having (1) the original products submitted with the requisitions and (2) face-to-face discussions with customer representatives concerning the requests. Therefore, GPO had to make assumptions at times regarding the job specifications because the requisitions were not always clear. Our verification work included a number of tasks, such as:

- determining whether GPO reasonably interpreted the customer specifications on the DPS requisitions,
- determining whether GPO used suitable contracts to estimate prices for comparable work,
- determining whether the contract prices were accurate and in line with the terms of the contracts, and
- ensuring that price-related data was accurately compiled and that comparisons and related saving estimates were accurately computed.

During the verification process, we identified a variety of miscalculations and other errors. We brought these to the attention of GPO personnel, who made appropriate adjustments to the price analysis. We also performed other verification checks on the GPO work to assure ourselves that the analysis was fair and reasonable, within the given constraints. These tasks were done, in part, taking into account various concerns expressed by DPS officials. Following are examples of our verification checks:

- Because GPO contract price estimates were made subsequent to the October 1992 to March 1993 sample period, we requested that GPO reprice 174 of the jobs to this time period to ascertain whether significant price changes may have occurred. The repricing showed that contract prices between the two time periods varied by about one percent.
- DPS officials expressed concern that GPO personnel used one contract--a single-award duplicating contract--to estimate the costs for over 60 percent of the jobs in the sample. We

therefore requested GPO to reprice selected orders to ascertain (1) whether other contracts were available for pricing and (2) whether these contracts provided for comparable prices. GPO repriced 20 sample orders using five different available contracts and showed that the prices derived from these contracts averaged about five percent higher than those in the initial contract used in the analysis.

- We also reviewed GPO's methodology for selecting contractors for those orders where multiple-award contracts were used to ensure that GPO did not unfairly bias the selections by (1) choosing the lowest bidder in every case or (2) choosing contractors outside the Washington, D.C., area because they offered low prices. We believe GPO acted reasonably and did not bias the selections. For example, for the 76 orders where multiple-award contracts were used, GPO selected the lowest bidder in 10 cases; contractor selections for the remaining 66 ranged from the second through the thirteenth bidder. Further, GPO selected contractors from outside the Washington, D.C., area in only 22 of the 76 multiple-award cases and 6 of the remaining 183 single-award contract or purchase orders.

#### DPS CONSOLIDATION EFFORTS

DPS has had to manage the consolidation of printing under difficult circumstances. It has faced the challenges of consolidation at a time when DOD is downsizing and printing requirements have significantly decreased. At one time, for example, DPS was budgeting for an expected printing volume of about \$500 million for fiscal year 1993. That volume, however, has not materialized. Based on year-to-date experience, DPS now projects that its revenue for 1993 will be about \$363 million. This decrease in requirements and associated work load has had a significant impact on DPS operations and has left it with excess capacity. Combined with the decision not to increase customer printing prices for 1993, DPS is now operating at a loss within the Defense Business Operations Fund. Through May 1993, fiscal year losses had reached about \$18 million.

Nonetheless, DPS has made considerable progress in its consolidation efforts. DPS officials realize the need to downsize, but they are faced with the managerial challenge of doing so in a manner which is orderly and not overly disruptive to ongoing operations. DPS has reduced its staff by 891 from its initial staffing of 3,694 in April 1992; has closed or downgraded 19 printing plants and 22 reprographic facilities; and has identified about 651 pieces of excess printing equipment for disposal. According to DPS officials, these staff reduction actions alone are expected to save over \$34 million on an annual basis, but DOD has not determined the core capacity it needs to handle its quick turnaround and sensitive printing requirements.

In its consolidation actions, however, DPS has not followed the direction referred to in the conference report accompanying the FY 1993 Defense Appropriations Act. The Committees directed DOD to

- maximize the direct transmittal of procurable printing and duplicating orders from military service customers to GPO rather than process them through DPS,
- equip and staff Defense facilities to produce only work that could not be procured through GPO,
- acquire new printing and duplicating equipment only upon certification of the Public Printer of the United States and the Joint Committee on Printing that the equipment is justified by an analysis of the work load of the individual facility and the ability of GPO to meet such requirements, and
- comply with 44 U.S.C. 501 and cease the solicitation and production of non-DOD printing and duplicating work in DPS facilities.

#### Transmitting Orders to GPO

In our opinion, DOD has not maximized the direct transmittal of printing and duplicating work to GPO. DOD policy requires the military services to forward all requisitions to DPS, which is charged with deciding whether the work is retained in-house or sent to GPO. DPS adds a 1.83 percent surcharge to cover the administrative costs associated with sending orders to the GPO. Prior to October 1, 1992, that surcharge was 5.5 percent. DPS says that they need to manage and control all printing--both in-house and that procured through the GPO--to help ensure the overall success of the consolidation. Otherwise, activities could divert work load from DPS and defeat the purposes of the consolidation.

#### DPS Equipment and Staffing

DPS also is not following the committees' direction that specifies that Defense facilities be equipped and staffed to produce only that work that is not procurable by GPO. With respect to the printing work load, DPS officials contend they retain in-house that work which is either classified or sensitive, requires a short turnaround, or is needed for work load leveling purposes. DPS officials further told us they have intensified their efforts to send a greater percentage of their printing work to GPO. Historically, DPS officials stated they have sent about 70 percent of their printing work load to GPO. They established a goal in fiscal year 1993 to increase that percentage to 80 percent in two percent increments over the next 5 years. We believe, however, that DPS calculations overstate

the actual percentage of printing work sent to GPO. Our review showed that due to accounting system constraints, DPS does not include in its in-house calculations of printing, duplicating work that should be classified as printing because it exceeds the maximum page limitations in the Government Printing and Binding Regulations. We were unable to determine a more accurate percentage of the actual work sent to GPO because of DPS's cost accounting system limitations.

#### Acquisition of New Equipment

With respect to equipment acquisitions, DPS officials state they have continued to follow the past practice of notifying the Joint Committee on Printing of equipment acquisitions in accordance with the provisions of the Government Printing and Binding Regulations. In 1993, DPS's equipment purchases to date have been limited because the available funding for capital purchases was less than \$1 million. DPS has instead leased newer technology equipment which it believes is required to modernize its operations and save money in the long run. In this regard, DPS officials told us they have identified 651 pieces of excess equipment for disposal. This is an area that will require more study and we will continue to look at it.

#### Non-DOD Printing and Duplicating Work

With respect to the solicitation and production of non-DOD work in Defense facilities, DPS officials advised us that their policy is not to solicit or produce new non-DOD work in its facilities. They did, however, acknowledge that some non-DOD work is done in their facilities and that some new non-DOD arrangements have occurred, without their prior knowledge, after the consolidation in April 1992. DPS documentation provided to us showed that from October 1992 through December 1992, DPS performed \$373,950 of non-DOD printing work in its facilities and that all except \$22,333 was the result of arrangements that had been made prior to the consolidation in April 1992.

#### JOINT COMPUTER-AIDED ACQUISITION AND LOGISTICS SUPPORT PROGRAM

The Committee requested that we review the DOD's Joint Computer Aided Acquisition and Logistics Support program (JCALS), for compliance with current law. Specifically, we were asked to determine whether JCALS contract modifications requiring the design and implementation of certain technical manual capabilities violate section 207 of the Legislative Branch Appropriations Act, 1993, and section 501 of Title 44 of the United States Code. To assist us in making these determinations, we asked the Department in February 1993 for a written opinion concerning the applicability of these provisions. The Department

has not yet responded to our request. In the meantime, we have gone forward with our analysis.

The objective of the JCALS program--a \$700 million undertaking-- is to provide a system network of hardware, software, and communications to facilitate the receipt, handling, and processing of logistics information for the entire life cycle of a weapon system. The program includes standards for developing, storing, and communicating technical information. The initiative's goal is to get much of the engineering data and specifications for high-tech equipment on line so it can be retrieved and updated readily over the life of a weapon system.

Based on the contract documents available to us, we understand that the Department has modified the JCALS contract three times for a total of \$27 million. The modifications require the contractor to design and implement an integrated system for technical manuals that will enable DOD to produce "reproducible masters." A "reproducible master" can take various forms. Under JCALS, we understand it is the actual software that will provide the master.

Section 207 prohibits the executive branch from using appropriated funds to procure "any printing related to the production of Government Publications (including printed forms), unless such procurement is by or through the Government Printing Office." 44 U.S.C. 501 includes similar language. Section 207 defines printing as "the process of composition, platemaking, presswork, silk screen processes, binding, microform, and the end items of such processes". If the JCALS contract modifications involve printing as defined in the law, they would be inconsistent with section 207.

We understand that the Department's written response concerning these issues is forthcoming. We intend to continue our work and provide the Committee with a more complete, written response, in any case.

The Committee also asked about the availability of printing services to the various Computer-Aided Acquisition and Logistics Systems (CALs) through the Air Force's 902-S program, a proposed printing and publishing effort that was being contracted by GPO. On February 8, 1993, the Office of the Secretary of Defense directed the Air Force to withdraw this publishing effort with GPO and transfer it to DPS to determine the printing and publishing requirements of the program and how they would be filled. DPS is evaluating Air Force as well as Army printing requirements originally intended to be procured under the 902-S program.

You also asked us about DOD's Corporate Information Management (CIM) initiative as it relates to printing. While CALs and

subsequent JCALS initiatives are under the umbrella of the CIM initiative, the functional process improvement efforts in the logistics area have not yet addressed printing beyond the consolidation efforts described above.

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Mr. Chairman, that concludes my prepared testimony. We would be happy to respond to questions that you or other members of the Committee may have at this time.

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